



## Tertiary Education for the Knowledge Society

*Summary in English*

*Tertiary Education for the Knowledge Society* provides a thorough international investigation of tertiary education policy across its many facets – governance, funding, quality assurance, equity, research and innovation, academic career, links to the labour market and internationalisation. Its specific concern is policies that ensure that capabilities of tertiary education contribute to countries' economic and social objectives. The report draws on the results of the OECD Thematic Review of Tertiary Education, a major OECD review of tertiary education policy conducted over the 2004-08 period in collaboration with 24 countries around the world. The report is intended to:

- provide an international comparative analysis of tertiary education policy issues;
- draw attention to effective policy initiatives in participating countries;
- suggest a comprehensive framework to guide tertiary education policy development;
- identify priorities for follow-up work at national, regional and international levels; and
- propose policy directions.

All documents produced for the Thematic Review of Tertiary Education are available at: [www.oecd.org/edu/tertiary/review](http://www.oecd.org/edu/tertiary/review).

## The growing focus on tertiary education

Tertiary education policy is increasingly important on national agendas. The widespread recognition that tertiary education is a major driver of economic competitiveness in an increasingly knowledge-driven global economy has made high-quality tertiary education more important than ever before. The imperative for countries is to raise higher-level employment skills, to sustain a globally competitive research base and to improve knowledge dissemination to the benefit of society.

The scope and importance of tertiary education have changed significantly. Over 40 years ago tertiary education, more commonly referred to then as higher education, took place in universities. It largely covered teaching and learning requiring high level conceptual and intellectual skills in the humanities, sciences and social sciences, the preparation of students for entry to a limited number of professions such as medicine, engineering and law, and disinterested advanced research and scholarship. These days, tertiary education is much more diversified and encompasses new types of institutions such as polytechnics, university colleges, or technological institutes.

Substantial reforms are taking place in tertiary education systems, mainly aimed at encouraging institutions to be more responsive to the needs of society and the economy. This has involved a reappraisal of the purposes of tertiary education and the need for governments to set new strategies for the future. It has also involved more flexibility for institutions combined with more clearly defined accountability to society. The tertiary sector is expected to contribute to equity, ensure quality and operate efficiently.

## Main trends within tertiary education

Although not all countries are in the same position, a number of trends have emerged within tertiary education:

- *Expansion of tertiary education systems*

The expansion of tertiary education has been remarkable in recent decades. In 2004, 132 million students were enrolled in tertiary education around the world, up from 68 million in 1991. Average annual growth in tertiary enrolment over the period 1991-2004 stood at 5.1% worldwide.

- *Diversification of provision*

Expansion of tertiary education was accompanied by a diversification of provision. New types of institutions emerged, educational offerings within institutions multiplied, private provision expanded, and new modes of delivery were introduced.

- *More heterogeneous student bodies*

The rise of female participation has been the most noteworthy trend affecting the composition of student bodies in tertiary education. A second prominent development is the growing participation of more mature students leading to a rise in the average age of student bodies. In addition,

in most countries, tertiary student bodies are increasingly heterogeneous in terms of socio-economic background, ethnicity and previous education.

- *New funding arrangements*

A number of trends are also discernible in funding arrangements for tertiary education. First, there has been a diversification of funding sources. Second, the allocation of public funding for tertiary education is increasingly characterised by greater targeting of resources, performance-based funding, and competitive procedures. Third, a number of countries are expanding their student support systems.

- *Increasing focus on accountability and performance*

The development of formal quality assurance systems is one of the most significant trends affecting tertiary education systems over the past few decades. Starting in the early 1980s, quality became a key topic in tertiary education policy. The expansion of tertiary education has raised questions about the amount and direction of public expenditure for tertiary education. In addition to fiscal constraints, increased market pressures have also fostered the growing focus on accountability in tertiary education.

- *New forms of institutional governance*

Over the past few decades, important changes have also occurred in the leadership of tertiary education institutions, including the emergence of new perspectives on academic leadership and new ways of organising decision-making structures. Academic leaders are increasingly seen as managers, coalition-builders or entrepreneurs.

- *Global networking, mobility and collaboration*

Tertiary education is becoming more internationalised and increasingly involves intensive networking among institutions, scholars, students and with other actors such as industry. International collaborative research has been strengthened by the dense networking between institutions and cross-border funding of research activities.

## **Main policy directions**

In the governance of tertiary education, the ultimate objective of educational authorities as the guardians of public interest is to ensure that public resources are efficiently spent by tertiary institutions in the best interests of society. Most countries face the challenge of simultaneously raising tertiary education participation rates, improving quality and achieving a sustainable level of financial support. Many countries are also now in a transition from a focus on quantity to a greater emphasis on the quality, coherence, and equity of tertiary education. To meet these challenges, a number of policy options are suggested. Table 1 summarises the main policy directions.

**Table 1. Main Policy Directions**

Policy Objective	Main Policy Directions
<b>Steering tertiary education: setting the right course</b>	<ul style="list-style-type: none"> <li>Develop a coherent strategic vision for tertiary education</li> <li>Establish sound instruments for steering tertiary education</li> <li>Ensure the coherence of the tertiary education system with extensive diversification</li> <li>Build system linkages</li> <li>Strengthen the ability of institutions to align with the national tertiary education strategy</li> <li>Build consensus over tertiary education policy</li> </ul>
<b>Matching funding strategies with national priorities</b>	<ul style="list-style-type: none"> <li>Develop a funding strategy that facilitates the contribution of the tertiary system to society and the economy</li> <li>Use cost-sharing between the state and students as the principle to shape the funding of tertiary education</li> <li>Publicly subsidise tertiary programmes in relation to the benefits they bring to society</li> <li>Make institutional funding for instruction formula-driven, related to both input and output indicators and including strategically targeted components</li> <li>Improve cost-effectiveness</li> <li>Back the overall funding approach with a comprehensive student support system</li> </ul>
<b>Assuring and improving quality</b>	<ul style="list-style-type: none"> <li>Design a quality assurance framework consistent with the goals of tertiary education</li> <li>Develop a strong quality culture in the system and put more stress on internal quality assurance mechanisms</li> <li>Commit external quality assurance to an advisory role as the system gains maturity but retain strong external components in certain contexts</li> <li>Align quality assurance processes to the particular profile of tertiary education institutions</li> <li>Avoid fragmentation of the quality assurance organisational structure</li> </ul>
<b>Achieving equity</b>	<ul style="list-style-type: none"> <li>Assess extent and origin of equity issues</li> <li>Strengthen the integration of planning between secondary and tertiary education systems</li> <li>Consider positive discrimination policies for particular groups whose prior educational disadvantage is well identified</li> <li>Provide incentives for tertiary education institutions to widen participation and provide extra support for students from disadvantaged backgrounds</li> </ul>
<b>Enhancing the role of tertiary education in research and innovation</b>	<ul style="list-style-type: none"> <li>Improve knowledge diffusion rather than strengthening commercialisation via stronger intellectual property rights</li> <li>Improve and widen channels of interaction and encourage inter-institutional collaboration</li> <li>Use the tertiary education sector to foster the internationalisation of R&amp;D</li> <li>Broaden the criteria used in research assessments</li> <li>Ensure the shift towards project-based funding is monitored and provide a mix of funding mechanisms</li> </ul>
<b>Academic career: adapting to change</b>	<ul style="list-style-type: none"> <li>Give institutions ample autonomy over the management of human resources</li> <li>Reconcile academic freedom with institutions' contributions to society</li> <li>Improve the entrance conditions of young academics</li> <li>Develop mechanisms to support the work of academics</li> </ul>
<b>Strengthening ties with the labour market</b>	<ul style="list-style-type: none"> <li>Coordinate labour market and education policies</li> <li>Improve data and analysis about graduate labour market outcomes</li> <li>Strengthen career services at secondary and tertiary educational levels</li> <li>Enhance provision with a labour market orientation</li> <li>Include labour market perspectives and actors in policy development and institutional governance</li> </ul>
<b>Shaping internationalisation strategies in the national context</b>	<ul style="list-style-type: none"> <li>Develop a national strategy and comprehensive policy framework for internationalisation</li> <li>Improve national policy coordination</li> <li>Encourage tertiary education institutions to become proactive actors of internationalisation</li> <li>Create structures to promote the national tertiary education system</li> <li>Develop on-campus internationalisation</li> </ul>
<b>Implementing tertiary education policy</b>	<ul style="list-style-type: none"> <li>Establish ad-hoc independent committees to initiate tertiary education reforms and involve stakeholders</li> <li>Allow for bottom-up policy initiatives to be developed into proposals by independent committees</li> <li>Recognise the different views of stakeholders through iterative policy development</li> <li>Favour incremental reforms over comprehensive overhauls unless there is wide public support for change</li> </ul>

## Common policy themes

Despite the major differences and traditions across countries, the 24 countries that participated in this review share some common policy priorities.

### *Establishing a grand vision for tertiary education*

A first priority for countries should be to develop a comprehensive and coherent vision for the future of tertiary education to guide future policy development over the medium and long term in harmony with national social and economic objectives. Ideally, it should result from a systematic national strategic review of tertiary education and entail a clear statement of strategic aims. It would require reflection, debate and consensus-building.

Extensive and flexible diversification may provide countries with a wider capacity to address varied national needs in terms of research and innovation, the development of a skilled workforce, social inclusion and regional development. Thus, countries might want to assess how much diversification, of what sort and in which regions is best-suited to meet the strategic goals of the system. The mission and profile of individual institutions would need to be clearly defined in accordance with this diversification strategy.

### *Ensuring that the capabilities of tertiary education contribute to countries' economic and social objectives*

In all the sets of policy suggestions, strong emphasis is placed on the need to ensure an outward focus of tertiary systems and tertiary education institutions. This entails strong educational links to employers, regions and labour markets; effective university-industry links for research and innovation; participation of external stakeholders in system and institutional governance and in quality assurance; a significant share of external funds in institutional budgets; and a broad internationalisation policy portfolio.

One simple way to encourage institutions to contribute more deliberately to the goals of the tertiary system would be for the tertiary education authorities to require all institutions receiving public funding to prepare and regularly update strategic plans aligned with the national tertiary education strategy. It would also be important to review options to widen the scope of institutional autonomy to allow for greater responsiveness to students, stakeholders and regions and more efficient operations. At the same time, it would be important to establish a legal framework that provides institutions with the opportunity to establish a local governing body comprise internal and external stakeholders which would operate at a strategic level and be supported by a senior management group.

### *Devising sound instruments for steering tertiary education*

As tertiary education authorities divest some responsibilities such as the direct administration of academic institutions and take on others in terms of policy steering and performance evaluation, they need to change their competencies and organisation. An evaluation of their staff expertise and current skill needs may be useful to identify potential mismatches and to develop professional development and training programmes to keep pace with changing demands. Instruments could be developed to

achieve accountability and also permit wide scope for institutional autonomy. Possible ways of meeting these two goals and optimise quality, efficiency and system responsiveness include, for example, instruments such as performance contracts or performance-related funding and the collection and dissemination of more and better information, for system monitoring, policy development and information to stakeholders.

### *Developing a funding strategy that facilitates the contribution of the tertiary education system to society and the economy*

The overarching foundation for any funding strategy is that public funds steer the tertiary education system in a way that facilitates its contribution to society and the economy. A guiding basis is to design a funding approach to meet the policy goals sought for the tertiary education system (e.g. expansion, quality, cost effectiveness, equity, institutional or system capacity).

A number of principles should govern the funding of tertiary education. To begin with, there are good arguments to support cost-sharing between the state and students (and their families). In light of the evidence of the private benefits of a tertiary degree, graduates could bear some of the cost of the services offered by tertiary institutions. The case is stronger when limitations in the public funding of tertiary education lead to the rationing of the number of students, the decline of instructional quality or the limited availability of funds for supporting disadvantaged groups.

Another basis for funding tertiary education is the principle of allocating public funds in relation to the relevance to society at large. In ideal terms this would translate into the public funding of activities which generate educational externalities to the benefit of society as whole – irrespective of the nature of the provider – and levels of public funding which reflect the magnitude of educational externalities relative to private benefits.

Another fundamental pillar is a comprehensive student support system. It facilitates access by reducing liquidity constraints faced by students. A mixed system of grants and loans would assist students in covering tuition fees and living costs, alleviating excessive hours spent on part-time work or disproportionate reliance on family support. In many countries student support systems need to be expanded and diversified and need to place extra-emphasis on the financial need of students.

### *Emphasising quality and relevance*

To build a national commitment to quality, It is important that the aim of the quality assurance system be clear and that expectations be formulated in alignment with the tertiary education strategy. A well co-ordinated quality assurance system might be expected to ensure that: each student is provided with quality and relevant education; the overall system is contributing to the social and economic development of the country; the activities of tertiary education institutions foster equity of access and outcomes; quality assurance contributes to the improvement of co-ordination and integration of the overall tertiary system. There is also a balance to be struck between accountability and quality improvement. From an accountability point of view, it is important that quality assurance systems provide information to various stakeholders, but quality assurance also needs to be/become a mechanism to enhance quality rather

than simply force compliance with bureaucratic requirements.

The development of the quality assurance system needs to be seen as an ongoing process. There is a clear need and rationale for external quality monitoring during the early stages of development to fulfil the need for accountability and ensure that baseline standards of quality are met throughout the system, but this rationale is likely to fade over time. It is therefore important – once baseline standards are met – that external quality assurance evolves towards an advisory role to enhance improvement.

### *Raising the profile of equity within national tertiary policy agendas*

Clearly, issues of equity in tertiary education in many countries need to become more prominent in national debates and policy making. A coherent and systematic approach to equity would, in the first instance, assess where equity problems arise, whether they are related to income constraints faced by families and insufficient student support, inequity of opportunities at the school level, admissions issues or other barriers such as the lack of knowledge about the benefits of tertiary education.

Key ingredients in an equity agenda include career guidance and counselling services at the school level, the integration of planning between secondary and tertiary education systems, opportunities to enter tertiary education from any track in upper secondary school, a varied supply of tertiary education to accommodate a more diverse set of learners, alternative types of provision to account for the cultural diversity of the population, the expansion of distance learning and regional learning centres, positive discrimination policies for particular groups whose prior educational disadvantage is well identified and incentives for tertiary education institutions to widen participation and provide extra support for students from disadvantaged backgrounds.

### *Positioning national systems in the international arena*

It is important for countries to develop a national strategy or master plan for internationalisation in light of their national goals in the tertiary education sector, but also beyond education (human resources development, research and innovation etc.). Obviously, this strategy needs to adapt to country-specific circumstances, building upon natural advantages and acknowledging constraints. There is no ideal internationalisation strategy other than maximising the benefits of internationalisation in the national context.

While the national/sector level has an important influence on the international dimension of tertiary education through policy steering, funding, programmes, regulatory frameworks and cross-departmental policy coordination, internationalisation activities are pursued at the institutional level, and within tertiary education institutions at the discipline level. Given the diversity of tertiary education institutions, the principal potentials for national policy lie more in creating the framework conditions for them to become proactive actors of internationalisation.

### *Implementing policy successfully*

The process of policy design involves a number of challenges to yield sound results. Ideally, policy would need to be based upon informed policy diagnosis, drawn on best practice, backed up by adequate research evidence, and consistent – both intrinsically and with policies in other areas of public action. Of equal importance is consensus-



building among the various stakeholders involved or interested in tertiary education.

In order to build consensus, it is important that all stakeholders see proposed tertiary education policies within the broader policy framework and strategy. Indeed, individuals and groups are more likely to accept changes that are not necessarily in their own best interests if they understand the reasons for these changes and can see the role they should play within the broad national strategy. There is therefore much scope for government authorities to foster the chances of successful policy implementation by improving communication on the long-term vision of what is to be accomplished for tertiary education as the rationale for proposed reform packages.

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