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THE OECD/JAPAN SEMINAR

KEY REPORTS THAT ADDRESS THE FUTURE OF UNIVERSITIES

- **Atkins, D., K. Droegemeier et al. (2003) Revolutionizing Science and Engineering Through Cyberinfrastructure: Report of the National Science Foundation Blue-Ribbon Advisory Panel on Cyberinfrastructure.**

The report presents the findings of the panel of experts of the National Science Foundation (NSF), and the recommendations on how research communities should be build on the cyberinfrastructure in the future, and its implications for education. The emerging vision is that the research communities and education become interactive and functionally complete in terms of people, data, information, tools, and instruments, and that computational, storage, and data transfer capacity/management are ensured.

To realize the vision, the panel proposes to establish a large-scale, comprehensive, interagency and internationally coordinated Advanced Cyberinfrastructure Programme (ACP) to create, deploy, and apply cyberinfrastructure to empower all scientific and engineering research and allied education. The ACP should interoperate across institutions and disciplines, and should make easily available data and software, and should enhance collaboration over distance, time and disciplines. The panel believes this will motivate research communities and broaden participation in the research communities.

Education may also benefit significantly from the collaboration where people can work with others despite differences in age, experience, rage, or physical ability. Furthermore, the new tools, resources, human capacity building and organizational structures emerging from the activities will also have even broader impact on the future of education at all levels, and on all types of educational institutions, in the end.

If new environments to empower more people and more disciplines on the cyberinfrastructure are not to be built quickly, opportunities lost will be critical such as fragmentation and balkanization of the research communities, system-building activities, lack of synergy among IT research, the IT industry, and domain science users, and loss of leadership to other countries and a falloff of research and economic vigor, etc.

http://www.communitytechnology.org/nsf_ci_report/report.pdf

- **The Australia Department of Education, Science and Training (2003). Higher Education Report for the 2003 to 2005 Triennium.**

The report serves main three purposes in order to plan for the next two years. It first provides an overview of the higher education sector in 2002. It includes new Government

policies and initiatives and recent developments in the sector. Secondly, it reviews the performance of higher education institutions in delivering funded student places and outcomes in 2002. Third, it describes the allocation of funding for the 2003 to 2005 triennium.

The purposes of higher education in Australia for future are geared toward: the personal growth and fulfillment of individuals; advance knowledge and understanding and its application to the benefit of economy and society; the individuals' adaptation to the knowledge-based economy; and the realization of the democratic civil society. To fulfill the purposes, the Government aims to plan policies for higher education: to expand opportunity; to assure quality of higher education: to improve universities' responsiveness to varying needs of students and industries; to advance the university contributions to national innovation; and to ensure public accountability for the cost-effectiveness.

http://www.dest.gov.au/highered/he_report/2003_2005/pdf/triennium2003_2005.pdf

- **Commission of the European Communities. (2003) Communication from the Commission: The role of the universities in the Europe of knowledge.**

The paper seeks to start a debate on the role of universities within the knowledge society and economy in Europe and on the conditions under which they will be able to play that role effectively in order for European systems of education to become a 'world reference' by 2010.

The European university landscape is depicted with two trends: convergence and divergence. As for the organisation and structure, convergence is emerging to establish a more coherent and compatible European framework to enhance readability and competitiveness. Regarding the models, the trend is away from the traditional models toward greater differentiation with the emergence of more specialised institutions.

It identifies a number of areas that need reflection and action. The new challenges are identified such as: the increased demand for higher education, the internationalisation of education and research, the need for co-operation between universities and industry, the reorganisation of knowledge, etc. And, the paper poses a series of questions for the debate. They are organised under three themes: ensuring sufficient and sustainable resources, consolidating the excellence, and broadening the perspective. The sub-themes concern: financial and human resources, the centers and networks of excellence, long-term strategic planning, management, interdisciplinary capacities, a broader international perspective, local and regional developments, etc.

http://europa.eu.int/comm/education/doc/official/keydoc/2003/univ_en.pdf

- **Harry, B., J. Huisman, et al. The Center for Higher Education Policy Studies of the University of Twente (2002). Academia in the 21st century.**

The paper is geared toward policy- and decision-makers and presents the future vision of the academia. It analyses trends and perspectives in higher education and research with a selective literature review on the different views on academia's future. It identifies, as major trends or driving forces of change: the development of ICT, marketisation, globalisation, internationalisation, localisation, networking (consortia, strategic alliances, etc), an advancing knowledge society, demographical changes, and socio-cultural trends. It further explains that some of these trends are inter-related, and cross-cutting topics over

these trends exist. They are: differentiation at the system and at the organisational level; excellence and diversity; and the role of universities in a knowledge society.

<http://www.awt.nl/nl/pdf/as28.pdf>

- **The Japanese Ministry of Education, Culture, Sports, Science and Technology. (2002) A New Image of National University Corporations. (Atarashii 'kokuritsu daigaku hojin'zou-ni tsuite¹).**

The report aims to serve one of the fundamental reforms of higher education in Japan; i.e. incorporation of national universities. It presents a new image of national university corporations, which should serve the humanitarian and international society through the transmissions and innovations of knowledge in the 21st century.

The points for discussions are centered around: financing, organizational structures, human resources management, strategic management, and disclosure of information and evaluation, in order for national university corporations to promote international competitiveness, and to maintain academic autonomy.

http://www.mext.go.jp/a_menu/koutou/houjin/index.htm (in Japanese).

- **Newman, Frank. The Future Project: Policy for higher education in a changing world, Brown University (2000). Saving higher education's soul.**

The report identifies, as major trends of higher education today, the increasingly competitive climate, the looser reins of governments, and market-driven decision making. It explicates some concerns of the consequences of the drive for efficiency and revenue, which tends to focus only on the short-term gain and for-profit activities. It argues that HE must pursue the longer-term goals, three attributes of higher education being: 1) bridging the students to the community, to the society, and the world of work, 2) ensuring social mobility through fair access to HE, and 3) secure faire scholarship and a place of dialogue to pursuit truth.

<http://www.futuresproject.org/publications/soul.pdf>

- **Newman, F. and L. Couturier. The Future Project, Brown University (2001). The new competitive arena: Market forces invade the academy.**

The report analyses the forces which accelerate the increasing competition for higher education institutions. They are identified as: more students are acting/treated as 'customers', the rating systems of universities, the entry of new (for-profit, virtual) competitors, the blurred difference between for and non-profit institutions, and ICT. As a consequence of the competition, the paper speculates the traditional teaching model, i.e. large lectures, will suffer most and traditional models will change, if not disappear. Implications for policy makers are: better communication lines, less bureaucracy, more incentives for the use of ICT, establishment of the measures for learner outcomes, more participation from the less advantaged, and more entrepreneurship cultivated in institutions. It argues that institutions should react to such policies by developing strategies to compete, finding their specific niche, and foster leadership, otherwise serious problem will occur such as loosing academic values and less variety in course ware.

http://www.futuresproject.org/publications/new_competitive_arena.pdf

¹ The original text is in Japanese. The English version can be found at:

<http://www.mext.go.jp/english/koutou/index.htm>

- **The New Zealand Ministry of Education (2002). Tertiary Education Strategy 2002-2007.**

The paper sets new directions for the tertiary sector in New Zealand in five years ahead. It presents the Government's broad vision for the nation's economic and social development, having 'relevancy', 'connectivity', and 'excellence', as the key elements. It further outlines the key priorities and six strategies to achieve the development concerning capability and quality, research, their knowledge society, social participation in the knowledge society, and Māori and Pacific peoples' development. Each strategy sets out a vision in 2007 and lays specific objectives to achieve the vision with significant progress.

The objectives are, however, not specific enough, or prescriptive. In conclusion, the paper explains that it is with intention due to the unpredictable nature of a complex, modern economy for future development. With respect to tertiary policy, it mentions the increasingly important involvement of a 'whole-of-Government' collaboration for tertiary policy in order to national development goals.

http://www.minedu.govt.nz/web/downloadable/dl7128_v1/tes.pdf

- **The UK Department for Education and Skills (2003). The White Paper: The future of higher education.**

The paper addresses the need for reform of higher education in UK, and proposes some schemes to increase investment in higher education, to enhance quality of research and teaching, to strengthen the collaboration between universities and business, to expand participation, to promote fair access, and to better manage organizational finance and governance. It discusses how higher education has a crucial role to play in the country's economic prosperity and civic societal values.

It presents concrete ideas in short-term, medium term, and long-term strategies. For instance, to respond to the demographic change (more mature students, more students studying while at work, etc.) and the skills demand change in the future, it states that as a consequence, universities must meet the interests of people with different demands and commitments in more flexible ways of learning; e.g. e-learning, part-time studies, more work-focused foundation degrees, credit accumulation network, compressed two-year honours degrees, etc.

<http://www.dfes.gov.uk/highereducation/hestrategy/>

- **The UK National Committee of Inquiry into Higher Education (1997). The Report of the National Committee.**

The report presents a major programme of change for higher education with a vision of 20 years towards a learning society. It identifies the overall aim of higher education as 'to sustain a learning society.' It documents the current situation of HE in UK and addresses some concerns such as the consequences of short-term pressure, cost-effectiveness, funding, quality assurance, provision of education to meet the more and varied students, the use of ICT, competition in the global market, and the changing requirements of the labor market in an ever more complex and fast-changing world. It gives detailed recommendations to various actors in higher education towards that vision; such as the Government, funding bodies, institutions and their governing bodies, student' unions, employer representative bodies, franchising partners, quality assurance agencies, research councils, etc.

<http://www.leeds.ac.uk/educol/ncihe/>