

Australian Academy of Science

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President Professor Sir Gustav Nossal
AC, CBE, PresAA, FRS, FTS

15th December, 1997.

Mr Roderick West
Higher Education Committee
Department of Education,
Employment and Youth Affairs
Mort Street
BRADDON ACT 2600

Dear Rod,

I thought I should officially send you the Academy's overview about the Discussion Paper as well as a digest of my summary of the events of the 8th December. I wish you well in this next, difficult stage of finalising the Report.

Kindly note that Professor John White, the Secretary Science Policy of the Academy, is tidying up the material he sent to Doreen Clark and I want you to know that when this is forwarded to you it will be a further official communication from the Academy.

Yours sincerely

GJV Nossal

National Academies Forum - 8th December 1997

Australian Academy of Science's View and Sir Gustav Nossal's Summary of the Meeting

The Australian Academy of Science found much to like in "Learning for Life". It applauds the strong defence of the role of universities in the first chapter. It finds the concept that every Australian should have access to 5 years of some kind of post-secondary school educational experience at some time of life novel, ambitious and appealing. It strongly supports the courageous statement that the commitment of Government funding to higher education should increase or at least stay the same. This is a useful counterpoint to calls for reduction in Government funding. The Academy has no problem with increased student empowerment, greater autonomy of universities, or the Review's strong support of the HECS scheme. Indeed, the significant degree of differentiation between universities which would arise is absolutely in line with the Academy's various submissions to the Review. The Academy considers that the West Committee has made a substantial and lasting contribution to a vitally important debate.

The Academy would have liked to see more emphasis placed on the "public good" aspect of universities rather than the near exclusive concentration on the "private good" gained by individual students. The scholarly function of universities as living repositories of the storehouse of knowledge and wisdom gained over 6 millennia of civilisation; as critics of and irritants to accepted norms; as places where the human spirit can soar, need greater analysis. Furthermore, most of the fundamental research in universities constitutes additions to knowledge that are not immediately appropriable. I venture to suggest that 40% of university funding should be primarily related to scholarship and research and should be more sharply differentiated from the "cost per student" style arguments.

The Academy has submitted separately to a group headed by Dr Doreen Clark a submission related to what it sees as the deficiencies of the discussion paper in relation to research. We see this area as seriously "under-cooked". In particular, we would urge caution about too much emphasis on strategic planning, foresight exercises and a strong dirigiste element creeping into ARC, which must primarily continue to be concerned with excellence. The Academy believes a greater proportion of the total university "cake" should go to ARC and the Research Quantum, and we would wish the NH&MRC, funded out of a different pot, to keep pace. The Academy has a special concern for younger academics. While cutoff points for ARC large grants remain at 20%, the chances for younger academics competing on an equal footing are slight. The Academy wishes the West Committee to give more attention to the very real morale problems and career worries of younger academics, particularly those aspiring to become the research leaders of tomorrow. Losing too many of these overseas would be a national tragedy.

The Academy understands the huge potential of the Internet, and of information and communications technology generally, for the future of education. Nevertheless, it believes the emphasis which the Committee placed on the electronic revolution as controlling costs is overdone. Moreover, the inspirational value of a good academic interacting with fine young minds is most important. The point was well made in the Academy's submission to Dr Clark's meeting, by Professor John White. He says: "The costs cannot be escaped by technology. Education is that process of "leading forth", ("educere") a student at leisure, to comprehension and intellectual excitement. It has a collective and social dimension

related to students being together and with scholars obtaining an understanding. It is a costly but irreplaceable aspect of the highest quality education".

Professor Margaret Clunies Ross started the meeting by defining the aspirations of the National Academies Forum. This seeks to be the peak body of all of Australian academia, coming together as required to address issues of major national significance. It is also in order to congratulate Professor Paul Bourke for his initial stewardship of NAF over its first two years. The present occasion where the discussion paper "Learning for Life" is being reviewed by all four Academies is perhaps the most important NAF function to date.

Professor Paul Bourke warned about some of the exaggerated hopes for the digitised revolution contained in Appendix 11 of the discussion paper. Indeed, he expressed some scepticism about scenario-building in general and expressed himself in some pithy phrases in this regard:

"Jeremiad green papers"

"Digital diploma mills"

"Commodification of education"

"Colonisation by international junk purveyors"

"Dirigiste managerialism"

Perhaps the most memorable phrase was: "Don't just regurgitate the marketing brochures of the technology companies!"

The message that electronic information would have to be dealt with carefully in the universities of the future was well and truly received!

Professor Bourke also made the point that there may have to be some "clumping" of research endeavour within the 40 Australian universities, as it was inconceivable that every department in every university would be empowered to do significant research right across the board.

Professor Peter Sheehan crafted his paper around an eloquent plea for excellence within the Australian higher education system. He articulately captured the feeling of threat and low morale within the university sector at present. He applauded the discussion paper's advocacy for deregulation of the higher education system and greater autonomy for individual institutions. He was very worried, however, about a possible reduction of funding and quoted certain passages of the paper which suggested that indeed reduction in central Government funding could be a possibility for the more distant future. In discussion of his paper, however, it was pointed out that the West Review consistently pleads for a maintenance of the current level of Government funding or an increase. This aspect deserves to be strengthened considerably in the final version.

Professor Sheehan was convinced that the capacity to maintain any reasonable quality in the higher education system would be difficult if not impossible if Government funding were reduced further. He said that quality was not just about the absence of obvious defects in a system. While technology has its place, it is not sure to improve teaching but he has encountered examples where it can actually produce nightmares. Professor Sheehan does not favour the huge mega-universities that appear to be lauded, at least in part, by Global Alliance in Appendix 11.

Professor Sheehan argued that excellence may have different meanings for different universities. He was worried that excellence in research, valued by and important to some of the universities, would be threatened if peer group review were reduced and the block funding component of research were increased.

Professor Sheehan worries that vouchers could favour "prestige" universities good at promoting their own status. He sees a tension between the various visionary statements of the discussion paper and the consistent note of economic rationalism. It will be difficult to weld these two apparently opposing elements together in the final report. Professor Sheehan believes that looking at education as an industry diminishes the importance of scholarship and learning. Moreover, an industry approach does not favour the development of a sense of citizenship, or the building of trust in society, functions of universities which he considers to be critically important.

Professor Peter Karmel addressed the question of whether an exclusive focus on the 15-20 years, which (because of its Terms of Reference) the Committee appeared to see as its chief task, might not be counterproductive if the next 3 or 4 years were not addressed as well. The next 15 years begin with the next year and in discussion there was a broad general feeling that Professor Karmel has made a very good point.

Professor Bruce Chapman finds aspects of the discussion paper easy to agree with and others which occasion him concern. He agrees with the brave principle of universal access to some form of higher education for almost all Australians. He agrees that the TAFE sector should be brought into the same conceptual umbrella as the university sector, in much the manner that the West Committee has sought to do. He very strongly agrees with the discussion paper's strong endorsement of the Higher Education Contribution Scheme (HECS) as the method by which students make their contribution to their higher education. There should be no problem about equity and access given that HECS is a payment scheme that does not cut in until a person is earning approximately \$400.00 per week and furthermore that it allows payment over a period at a relatively gentle rate.

Professor Chapman worries that too free a pricing structure within the universities and a total fiscal autonomy within them might carry with it some dangers. He referred to fiscal parsimony - temptations for vice-chancellors to impose salary cuts resulting in able people leaving the system. He also worried about the possibility that universities might set fees so high that some graduates would be incapable of repaying their HECS debt, even over a working lifetime. He believed that such a danger was real at about the level of a HECS debt of \$100,000.00. As a nightmare scenario, there could be so much defaulting under the HECS scheme that Governments would begin to question the whole system, thereby of course endangering a key principle of the West Committee's thinking. He therefore thought that universities should be enabled only to edge cautiously into fee differentials, with some limit, perhaps 25%, being put into what universities could charge above some standard, agreed norm.

In answer to questions, however, Professor Chapman said that the "whole of life" earnings differential between a university graduate and a non-university graduate was of the order of \$1 million. It was pointed out in discussion that, seen in that light, \$100,000.00 was not such an enormous sum. Furthermore, in the real world, it was believed that no university would set its fees so high as to endanger later Government action to limit or destroy the HECS system. It was argued in discussion that the market itself would look after this and would suitably punish universities who attempted to set their fees too high.

Professor Vicki Sara gave a commendably concise and clear definition of the Australian Research Council's goals. She stated that the core business of ARC was basic research with excellence as the only criterion. This repeats a position that the Australian Academy of Science has frequently urged on Government, and one which must not be undermined but rather strongly supported by the West Committee. A secondary role for ARC would be the support of strategic research but here it is more a question of coordination, catalysis, the identification of emerging areas of research, and the support of multidisciplinary areas. In discussion it emerged that the National Health and Medical Research Council (not sufficiently stressed in the discussion paper) in its support of strategic mission-oriented research also used excellence as the overwhelmingly most important criterion, but also had a strategic role in identifying gaps in areas of national health importance.

The third purpose of ARC which Professor Sara mentioned was the stimulation of flows between key players in research and development, namely the universities, the public research institutes and industry. Flows would be both of information and ideas but also of people. Professor Sara believed there was a delicate balancing trick needing to be performed in order to equilibrate the interacting areas of political decisions, academic excellence and commercial demand. There is a certain creative tension here, and Government could well do with the kind of independent advice that ARC could present.

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On the matter of priority setting, Professor Sara believed the ARC should use a light hand. She reiterated the comments of the Stocker Report where structural priorities were seen as most important, with ARC playing a great role; whereas thematic priorities should be addressed only in areas of major need. In discussion, the question was raised as to whether ARC might become too powerful or whether there was a conflict between the ARC's role as a disburser of funds and its role as a policy instrument. In answer to that, it should be recalled that the ARC's budget is relatively small when compared with the total of approximately \$4.4 billion of Government funding of R&D and the nation's overall expenditure of approximately \$8 billion.

Further points that emerged in discussion of Professor Sara's important paper were a very strong support for the plea that ARC should achieve independent status, and a vehement denial of the consultants who complained about the high opportunity costs of the ARC research grant writing and evaluation procedure. It is clear that the strategic thinking which precedes committing a grant request to writing is a most important discipline focusing the mind on where research is heading. While there is a good deal of grumbling within the academic community about the time taken to write grants and also to review them, academics in more reflective moments clearly recognise the discipline of writing the grant and the great learning experience involved in reviewing a series of grants.

Professor Trevor Cole rightly emphasised the importance of the universityindustry interface and praised the emphasis of the report on diversity within the university system. The audience was struck by his metaphor in which he said the universities were to the 21st century what the coal mines were for the Industrial Revolution.

Professor Ian Davey highlighted the differences between globalisation and internationalisation. He saw globalisation as having the capacity to engender homogenisation and perhaps even a westernisation of higher education. While recognising some of the advantages of very high quality electronic teaching materials, given the dominance of the United States, he worried about its increasing and perhaps

eventually overarching influence. Internationalisation, on the other hand, retained a capacity to focus on the nation state as a still important object of humanity's interest and concern. He feels that the discussion paper does not sufficiently engage the particular character of Australia. He sees a need to develop a subtext - that of the Australian identity, strategic alliances between Australia and our near neighbours, cooperation in education within our region. He sees a huge importance in retaining uniquely Australian universities (and other institutions) as tools of international competitiveness. He sees the universities as having a critical role in research and education, and he believes the degree to which the universities are integral to the success of this nation has not been sufficiently emphasised in the discussion paper. He questions the value of Appendix 11, and indeed of Tokyo-based input into an Australian problem area. He very much echoes Professor Sheehan's concerns re quality within the higher education system.

Professor Eric Wainwright leapt to a spirited defence of Appendix 11, the only speaker to do so throughout the day. He says Appendix 11 shakes us out of our complacency. He believes electronic technology will have a major impact on the universities. He cites the value of Internet-based learning for rural and isolated students. He believes in a high profile for teaching materials delivered via the World Wide Web as leading to increased access and increased choice.

Professor Wainwright gently castigated the universities for not using advanced techniques to achieve greater collaboration between the universities already. This was particularly in relation to information infrastructure, that is in the general field of libraries.

Professor Wainwright has four key reasons for defending an increased involvement of information technology within the higher education sector:

1. Marketing - both focused on the student customers of the Australian universities and on the international marketing which universities are increasingly engaged upon.
2. The re-engineering of university administrations, particularly the less glamorous "back office" functions.
3. Research collaboration.
4. Student learning (as is naturally the main focus of the discussion paper and as is extensively canvassed in Appendix 11).

Indeed, Professor Wainwright believes that if we are really to deliver substantial post-secondary education to 80% of Australians, we cannot really avoid a much higher profile for information technology. He recognises that there will be high up-front costs, and wonders whether these have been adequately canvassed in the discussion paper. He believes that both students and academics will need training to benefit from the information revolution, it is not good enough to act on the assumption that students will have gathered the necessary skills in schools, this might be true for a proportion of students but will not be true for many with disadvantaged backgrounds.

He made the final interesting point that if we are prepared to have a high electronic information content within our courses right here in Australia, the extra costs of internationalisation of the teaching endeavour would not be that great, which he cites as a further advantage.

I will not attempt to summarise Professor Ian Chubb's paper. Suffice it to say that it challenged the intellectual underpinnings of the whole exercise to date. His presentation was already a compressed summary of views which he has put to the Committee more extensively elsewhere and I could not do them justice by attempting to compress them still further.

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