

SUBMISSION TO THE REVIEW OF HIGHER EDUCATION FINANCING AND POLICY

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The Society represents approximately 550 people in the disciplines of physiology and pharmacology. APPS members are involved in teaching and / or research in Universities, Research Institutes and Hospitals.

The submission will focus on the Review's proposals for research and the interface between teaching and research. It relates mainly to Theme 4 "financing higher education teaching and research training" and to Theme 5 "funding of higher education research".

1. The nexus between research and teaching

There is a strong argument that the quality of University teaching is directly related to research and scholarship. At one level this means that the research and scholarly activities of individual academics ensures that their teaching is up to date, that it maintains their enthusiasm for the subject and that the maintenance of research skills is transmitted to the students. This is not to say that all academics who engage in research are necessarily good teachers and those who do not are poor teachers, but the general relationship is well accepted.

There are various ways in which students benefit from studying and learning in a research orientated environment. At one level they will have enthusiastic teachers discussing and challenging them with knowledge that is the latest available. At another, and more subtle level, the research training forms part of the undergraduate training. Within science it is common for students at third year level to do project based work in small groups, either in the teaching laboratories under the close supervision of a member of staff or within the research laboratory of that staff member. This is important, not just because it brings students closer to the cutting edge but because of the specific generic skills that are acquired within the process. It can be seen as the start of the process of turning science students into scientists.

When the student advances to a fourth year Honours program the research component occupies a greater proportion of their time which strengthens their research skills and enhances the associated generic skills. For those students who wish to and are capable of doing so their progression to research based higher degree study is facilitated.

Such a progression is essential for the development of scientific skills - but it can only occur where departments and academics are adequately supported to pursue research and scholarship both directly through project grant support and indirectly through the infrastructure of libraries, quality computer facilities and provision of high quality experimental animals for biomedical research.

2. Infrastructure funding

APPS would support the conclusion of the Committee (p.25) that the "funding for research infrastructure is out of step with research activity currently undertaken". It is self-evident that without, for example, appropriate journals and monographs, computing facilities and animal breeding and holding establishments then Australian research will cease to be internationally competitive.

There would appear to be only two solutions; more money for infrastructure or restriction of research activity to a few institutions. The latter proposal would not be acceptable.

3. Project grant funding versus block research grants

We have concern about the statement (p. 26) “that the balance between project grants and block research grants appears to have tipped to far in favour of project funding”. No evidence is provided, either on p. 26 or in the Appendices to support this statement. Project grant funding based on peer assessment is a bit like democracy (to paraphrase) it may be imperfect but its the best we have.

There are serious risks in increasing the proportion of funding distributed via block research grants, the most significant being that ultimately it places the distribution of money in the hands of the University administrative structure and not necessarily within a rigorous peer review process, unless stringent requirements are imposed on the conditions for redistribution of such money. A further issue is that it will add inertia to the system and ensure that those institutions that are presently well funded will remain well-funded. This is acceptable provided they maintain their productivity and commitment. On this issue the Committee may well wish to examine the outcomes within the NHMRC system of project grant funding versus institutional block grant funding.

The APPS has serious reservations about any proposal to shift the present funding arrangements towards block grants. The “low impact” model (p. 38) should be maintained. Project grant funding must be maintained at the same or a higher level compared with block grant funding.

4. Public funding of undergraduate courses

On p. 32 it is stated that “at present the study of science is implicitly valued higher than the study of arts”. We feel this is a misinterpretation of the situation. The primary reason that science (and engineering and medicine etc.) is funded at a higher level is that it is more expensive on the basis that it involves laboratory based teaching with the associated requirements for equipment and materials. Science subjects could be taught without a laboratory component (thereby reducing the cost), however, we and I am sure others in the scientific community would argue that this would diminish the learning experience for students and greatly reduce the capacity for students to acquire essential generic skills.

There may be merit in differential funding according academic level (also p. 32). It is probably true that the equipment and material requirements for students at first year level are significantly less than at third or fourth year. However, this should not be to the detriment of universities being able to provide quality laboratory based teaching or the equivalent for first year students.

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