
SFC Draft Corporate Plan 2009-12

Institute of Physics response to the Scottish
Funding Council Draft Corporate Plan
2009-12

A full list of the Institute's responses and
submissions to consultations can be found at
<http://www.iop.org>

6 March 2009

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Corporate Plan Consultation
Scottish Funding Council
Donaldson House
97, Haymarket Terrace
Edinburgh
EH12 5HD

IOP Institute of Physics

Dear Sir/Madam

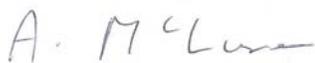
Scottish Funding Council: Draft Corporate Plan 2009-12

The Institute of Physics is a scientific charity devoted to increasing the practice, understanding and application of physics. It has a worldwide membership of over 36,000 (2,500 in Scotland) and is a leading communicator of physics-related science to all audiences, from specialists through to government and the general public. Its publishing company, IOP Publishing, is a world leader in scientific publishing and the electronic dissemination of physics.

The Institute welcomes the opportunity to respond to Draft Corporate Plan 2009-12. The attached annex highlights the Institute's response to the outcomes.

If you need any further information on the points raised, please do not hesitate to contact me.

Yours faithfully



Alison McLure
National Officer (Scotland)

Scottish Funding Council: Draft Corporate Plan 2009-12

The Institute of Physics agrees with the mission and vision outlined in the draft corporate plan and looks forward to working with the Scottish Funding Council in order to achieve these aspirations.

Outcome 1 - Employability and Skills

While the Institute agrees with many of the actions to achieve this outcome, we have concerns that the focus is on specific skills for the workforce. The reason education at the higher education level is better than training is because the primary need is for flexible people with good skills in communication, mathematics, IT, problem solving, and teamwork. Every effort should be made to improve these already high standards. One should resist the temptation to concentrate higher education on training in current technology as opposed to more general skills. There needs to be a balance between developing the individual learner and producing workers for the economy.

Outcome 2 - Access, Inclusion and Progression

The Institute agrees with the aim to develop more flexibility in teaching programmes in order to accommodate the changing demography of learners. In particular, there is likely to be more demand for part-time learning, as mature students return to education. Allowing entrance and exit points at different SCQF levels are welcomed by the Institute. Degrees with progression routes and emphasis on graduate skills are also welcomed, particularly in terms of increasing participation in higher education. We are aware that there is a shortage of qualified technicians in the university sector and industry, and more flexibility could help to increase supply. However, in a sector where all those who attend university aspire to become honours graduates, the marketing of SCQF levels to attract sufficient numbers of students presents a challenge. Further to this, we note that flexible qualifications will only succeed if there is an employment market.

The Institute agrees that “appropriate levels of financial support should be found for those who require it” and does not favour a funding system that in any way discourages students from families of modest means participating in higher education if they have the ability to benefit from it. The Institute is in favour of grants for poorer students. In addition, it is essential that there is a system of charging that is not financially disadvantageous to those who study subjects like medicine, engineering and laboratory-based sciences such as physics and chemistry. In addition, for subjects like physics, chemistry and engineering a significant fraction of the undergraduate cohort is enrolled on five-year courses, so further financial pressures exist.

Outcome 3 - Knowledge Exchange

The Institute agrees that knowledge exchange is very important to the successful delivery of a knowledge-led, science-based economy, alongside a vibrant science base which is well funded. While it is important that the economic impact of science research can be considered during funding applications, there is a danger that basic research in more speculative areas could be neglected. Basic research delivers three clear benefits: the development of new, breakthrough technologies; the excitement and inspiration that attracts young people into science; and the enhanced capacity of UK researchers to

meet new challenges through innovation. But its eventual economic impact – however large – is almost always unforeseeable. Thus, too strong a focus on identifying economic impact in funding applications risks penalising the basic research which could in the end make a much more significant economic contribution. In other words, a long-term view needs to be taken. Striking the right balance between the two approaches is clearly vital to wealth creation in any developed economy.

The Institute welcomes the aspiration to deliver “easy access to facilities and services for small and medium sized enterprises (SMEs)”, but we are concerned that there is no specific action point to implement the aspiration. In particular, action should be taken to ensure that the universities have the facilities and desire to respond to that demand.

Outcome 4 - Specialism and Diversity

The Institute agrees with the development of funding arrangements for subject specialisms. Funding decisions should take into account the contribution to the economy from graduates of the subjects. For example, while physics is an expensive subject to teach, the return on the government’s investment is much higher for the UK economy but this is not reflected in university funding. Also, laboratory-based sciences are intensive in both teaching staff and laboratory facilities, and require the greatest injection of funds in order to provide adequate infrastructure. As industry’s demands for graduates with a high degree of technical knowledge and expertise increases, it is incumbent upon universities to have modern instruments and equipment. Allowing for increasingly rapid depreciation, the cost of providing modern equipment has risen at a faster rate than inflation. Funding for these subjects should take these factors into account. HEFCE has already acknowledged this point and has announced £25m per annum for high-cost subjects on a recurrent basis until it works out the actual price of teaching. Scottish physics departments might find it difficult to compete against English ones with this level of funding.

Outcome 5 - Collaboration

The Institute agrees with the commitment to deliver collaboration in different forms. In particular, the success of research pooling initiatives, such as SUPA, should be built on by an appropriate increase in funding.

Outcome 6 - World-class Research

The Institute agrees that a key priority for optimising the Scottish university sector should be to ensure that Scotland remains one of the best places in the world for science, research and innovation. One proven method of achieving excellence in research and innovation is to encourage and finance collaboration between university research groups, such as the successful Scottish Universities Physics Alliance (SUPA). SUPA should continue to be supported with sufficient funding to carry out its excellent work, which was recognised by the RAE2008 physics sub-panel.

Outcome 7 - Effective colleges and universities

No comment.

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