

Economic Development Committee **EDC 11-01(p4a)**
Economic Development Minister's response to Higher Education review



Ysgrifennydd y Cynulliad - Assembly Secretary
Cynulliad Cenedlaethol Cymru
The National Assembly for Wales

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Cynog Dafis AM
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30 April 2001

Dear Cynog,

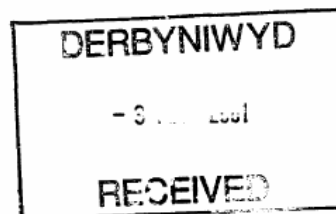
**THE REVIEW: IMPORTANCE OF FIRST CLASS HIGHER EDUCATION INSTITUTIONS
TO ECONOMIC DEVELOPMENT IN WALES**

As the Minister with economic development responsibilities I have been following with interest the HE review which you are co-ordinating on behalf of the National Assembly's Education and Lifelong Learning Committee. I know that you and many of your academic colleagues appreciate the vital importance of first class higher education institutions to successful economic development in Wales as we move into the era of the global knowledge economy. However, I am not sure whether the in-depth culture in Welsh HEI's fully reflects that importance, particularly in respect of the colleges' rewards and values systems which still appear to be very orientated to success in teaching and research, rather than the so-called 'third mission' economic development activities.

From my perspective, it is very important that this review leads to a vision of HE in Wales in 2010 which reflects the need for our institutions to be exemplars of best practice not only in teaching, research, use of ICT and producing people with the skills required by our growth orientated companies, but also in working with as many companies in Wales as possible to help them achieve their technological and skills development ambitions, without which Wales will not generate the wealth which is a prerequisite of economic success.

I have therefore taken the liberty of providing in the attached some responses to the key questions which you posed at the beginning of the review. I hope you find these comments useful.

Tom



DEPUTY FIRST MINISTER RESPONSES TO HIGHER EDUCATION REVIEW

Q1.1

Within the context of the growing globalisation of HE, is diversity of admission still a desirable feature?

All colleges should have a strong economic development 'third mission' strategy, whatever the associated teaching and research policies of the individual institution. Clearly the 3rd mission strategies will be different for a teaching university, whereby the focus could well be very much on technology transfer and entrepreneurial education, compared to that for a research university, which might well be able to catalyse the creation of radically new high technology business clusters, as with biotechnology and Dundee University. This 3rd leg should be strongly supported by a distinct and identifiable funding stream.

Q1.2

What is the role of partnerships, collaboration and mergers in the implementation of any vision of the future of HE in Wales? What are the various models for a future HE sector in Wales and the advantages and disadvantages of each model?

There appears to be no evidence one way or another that partnerships, collaboration or mergers between institutions with strong 3rd mission strategies have any strong effect on the latter. One notable exception might be in respect of collaboration between colleges in respect of specific high tech business cluster development. Successful new business clusters often need to be associated with a HEI focus

Q1.3

How can HE demonstrate it is dynamic and responsive to change?

By fully following in the footsteps of universities such as Stanford and MIT and spinning off a whole range of exciting new businesses. This clearly has an impact on the locality but also raises the profile of the institution to prospective students and high quality staff. Also if colleges participate in programmes like Foresight to provide some insight into the future, both in respect of socio-economic changes and enabling technology developments such as nanotechnology, wireless systems, biotechnology, machine intelligence and ICT generally, this will significantly benefit both the college and our economy: especially if the colleges are prepared to co-operate with exciting ideas including ideas-mining/exploitation pathfinding projects such as the national technology institute which is currently being explored within the NEDS framework.

Q1.4

How can HEI's in Wales be made more attractive to Welsh students?

There is no doubt that colleges which have strong entrepreneurial reputations and have a wide range of company sponsored bursaries/scholarships available, are attractive to students generally. As would be a college which was active in the change agendas discussed in the previous question

Q2

Learning and teaching.

The experience of Cambridge and leading edge American institutions, indicate that close liaison between colleges and enlightened companies, especially those which are based on exploiting new technologies, may lead to the development of first rate learning and teaching packages based on modern information and communication technologies.

The development of appropriate vocationally relevant programmes need to be taken forward in partnership between the colleges, ELWa and the WDA, with the appropriate input from the proposed new Economic Policy Board.

Q3.1

How can we demonstrate the economic benefits that an internationally competitive higher education sector brings to Wales?

Economic success depends on a strong technology base and the availability of talented, well qualified and motivated people at all levels within companies. In practice, it will probably be impossible for any economy to be successful (other than those with tremendous natural resources of one kind or another) without it having a strong higher education sector. Wales needs to move forward more rapidly than other parts of the UK in order to bridge the prosperity gap. Third mission funding is therefore essential to the future prosperity of Wales.

Q3.2

How best can the sector respond effectively to the diverse needs of public, private and voluntary sectors for innovation and knowledge at local and regional levels?

Effective response in reality depends on three key factors. First the colleges having strong 3rd mission strategies which encourage and reward their staff for interacting with these external sectors.

Second, there needs to be a first rate field force acting as facilitator between the colleges and external sectors, including individual businesses. Without these human bridges, the interactions will remain weak. Best practice is embodied in programmes such as the Teaching Company Scheme and the WDA centres of excellence programme.

Third, participation in ideas mining and commercial exploitation systems which have the potential to generate new companies with great growth potential. In some ways BTG has shown the way at the UK level but we need a new model for Wales in the

21st century- hence the exploration , on top of programmes such as Help Wales, the Know How Wales and Top spin funds, of the idea of a new highly commercial exploitation focused, national technology institute.

Q3.3

What measures should HE be taking to help combat social exclusion and meet the needs of the economy by widening access to higher education?

Human facilitators are required to overcome the distrust of any sectors of society to colleges. Second, technologies such as ICT should be used to the full to ease access for the socially excluded.

Q3.4

To what extent should HE institutions act as local, regional and national cultural centres?

If college staff, through their professional activities are working closely with companies and communities, HE institutions will naturally act as focal cultural centres.

Q3.5

In what ways can HE contribute to the development of bilingual capacity within Wales?

Since one of the major problems with students losing their Welsh language faculties, is often associated with working in a totally English speaking environment after leaving school, colleges which offer a Welsh speaking education medium, will clearly be important. In addition they can act as fiscal cultural centres.

Q4.1

What are the barriers to developing a robust, high-quality research base in Wales?

A high-quality research base is entirely dependent on high-quality research staff. These will only be attracted to vibrant colleges which provide these staff with an appropriate infrastructure and base from which to capture significant research monies. The research assessment exercise clearly identifies the quality researchers who are already here (but also increases the likelihood of them being poached) and more monies need to be available to attract new high-quality teams of researchers. Clearly all such pots will be limited and ways need to be used to prioritise allocation. Clearly enabling technologies, socio-economic paradigm shifts and the key sectors identified in the National Economic Development strategy will be important in any prioritisation process. Also, initiatives such as Foresight need to be used to ensure we prioritise looking forward rather than looking back. The idea of a Wales science council, following in the steps of north west England, or other initiatives with similar outcomes should also be explored to ensure we maximise UK Research Councils income in Wales

Q4.2

Should there be differentiation of research missions between institutions?

In practice, history will dictate some variation in research missions. But these should not be set in stone and it must be recognised that some colleges strengths and research missions will be more appropriate for attracting internationally mobile R&D inward investment whilst some will be better at helping develop smaller indigenous companies. Also different colleges will be better able to act as new business cluster focal and support points for different clusters.

Q4.3

To what extent should institutions become involved in commercialising the outcomes of research activity?

This is a critical contribution to the economic prosperity of Wales, and should be encouraged through the 3rd mission funding stream. All the evidence indicates that while academics themselves are not very good at maximising the commercialisation potential of research outcomes, specialist units, either within or without the college, staffed by business people with appropriate authority, can help maximise commercialisation both for the benefit for the surrounding economy and the college itself. Some industrial liaison operations within colleges, often working with bodies such as Know How Wales, are showing the way and, for the most exciting commercial opportunities, the previous comments concerning the national technology institute refer.

KEF provides a strong opportunity for commercialisation. It now needs to be matched with funding to kick-start the entrepreneurial collaboration which is an essential part of the mix if success is to be maximised.

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