## Development of third stream activity: lessons from international experience Sachi Hatakenaka

1. 'Third stream'<sup>1</sup> activities in the UK universities have come a long way. Significant cultural change is beginning to take place. And yet, everyone in the sector thinks that cultural change has only begun – and that it has some way to go. The third stream still deserves some protected status – and in that sense, it has not yet reached a steady state. This means that the next phase has to be another one of dynamic change, with another and further transition in the longer term expected before it reaches a steady state.

2. HEFCE and OST are proposing to create a permanent funding stream based on a formula to provide a sustained incentive and support for third stream activities. This is a welcome change, as most observers (both inside and outside the sector) see the need for stable funding for further development of third stream activities.

3. However, public funding support for third stream activities is not easy to design. 'Third stream activities' need to remain very diverse as each university should respond to external needs in its own way, and so it is vital that government support should not lead to straitjacketing or even to narrowing its focus. Many third stream activities can also lead to additional income for universities, and it is not obvious how public funding should support such activities. Policy objectives in the short term may be different from those in the long term – leading to different rationales for funding.

4. The purpose of this analysis is to provide a framework for thinking about the purpose of third stream funding, to help generate debate and to reach a clarity of understanding, both about the short and the longer term.

<sup>&</sup>lt;sup>1</sup> Third stream activity is activity that higher education institutions undertake, beyond teaching and academic research, in pursuit of relations with and services to industry and the wider community. It can take any number of forms ranging, for example, from technology transfer to student volunteering.

5. This analysis argues that the policy goal for third stream activities for universities should remain broad: to enhance the economic and the social impact of universities. It is not just to promote scientific innovations to help develop new technologies or industries; nor is it just to ensure universities are helpful to the existing industries; nor even just to assist specific regions with economic development agendas. The goals – and so the incentives - have to be broad enough to encompass all three.

## 6. The overarching policy objective should be to instil economic and social impact as 'values' within universities,

rather than more crudely just to promote a specific set of third stream activities. This is because economic and social impacts take a long time to materialize. The level of impact also depends critically upon *how* the so called third stream activities are undertaken and how well linked they are to universities' teaching and research agendas. It is critically important that universities develop a capacity to make qualitative judgements about the effectiveness of all their activities in terms of economic and social impact.

7. The first step in this respect must be to internalise economic and social impact as end goals in the institutional, and individual, thinking. Without that, third stream activities risk being seen as no more than income generating opportunities, and institutions would simply maximize their own revenues rather than worry about the wider economic and social impacts. In contrast, some of the best US universities have a culture that means they would choose 'openness' over patenting if that was a more effective route for generating public benefits.

8. It is a critical point that these third stream values are part of the fabric of the operations of prestigious US universities such as MIT or Stanford, but it will require a culture change in the approach of many UK universities.

9. The most important consequence of integrating third stream values is that many third stream activities would then be naturally embedded into the activities of teaching and research, and become natural extensions of them. For universities that are

concerned about economic and social impact (such as MIT), neither the institution nor its academics consider it good enough for their research results to be academically valued; they care that their research has an impact on society. Similarly for teaching, institutions that embrace the goal of social and economic impact automatically include questions of relevance in their reviews of teaching – and other third stream activities can also provide a critical feedback for teaching.

10. There are three implications of having such a policy goal at the institutional level:

a. **Integration of third stream values**. It is not enough that a small group of academics or administrators are engaged in specific third stream activities. Institutions must internalize the values so that institutional judgements can infuse all activities and influence decisions about what activities to pursue and why.

b. **Differentiation**. Institutions should develop a diverse set of third stream activities to reflect not only the diverse needs of their respective environments, but also their core strengths.

c. **Sustaining third stream through diverse funding sources.** Institutions should seek funding from diverse sources to support their third stream activities, such funding being both a key driver for their engagements but also an indicator of the relevance of their activities.

11. Integration of third stream activities into the whole university is also important because one significant benefit is the difference they can make to the educational experience of students. Student learning can be more relevant to the needs of the society when taught by academics who are themselves working with real world issues. PhD students who are trained through industrially relevant research will know how to take into account industrial needs in their future research and are likely to be more employable for industry. Experience of observing the impact of science on technology at close quarters, or of working on community projects as part of their social science programs are likely to help develop such relevant skills in their students. The students are one of the

most direct mechanisms through which universities can influence the future society.

12. It is important to recognize that different institutions will embrace third stream values in different ways and to different degrees, and that different disciplines would interpret such values differently. Diversity of response will be important for the society whose needs are also diverse.

13. To inculcate the cultural change to internalise third stream values is a vital rationale for providing third stream public funds to institutions. At the institutional level, one way of helping to bring about the change would be for institutions to have internal dedicated funds for experimentation so that more academics can participate in and experience third stream activities first hand.

14. There are two additional reasons for providing public funds for third stream activities. The first is to provide **demand-side funding in areas where 'markets' do not work,** to promote economically and socially important activities, such as support to SMEs or local communities, which are unlikely to be paid for by user communities. The second is to provide **pump-priming** for starting and experimenting with new activities; public funding is needed to enable institutions to jump-start activities including some for which the user communities are unlikely to pay; in turn, this should also help to implement cultural change.

15. In the short term, HEFCE/OST's block grants to institutions can be justified in terms of all three rationales.

16. In the medium term, however, the public sector more generally (i.e. not just HEFCE) ought to develop a wider range of **demand-side funding** involving other agencies so that different activities can be supported through specific evaluation criteria developed to reflect particular user needs. This might take two forms: diverse funding programmes targeting specific user communities such as SMEs or local communities to work with universities; and multiple government bodies may engage in research funding to meet future needs related to their respective fields.

17. In the longer term, once the cultural change has been achieved, the rationale for 'centralized' HEFCE funding would become limited to one of pump-priming brand new activities.

18. The current HEFCE/OST proposal is to introduce formulabased funding for third stream activities that would be based on a capacity related component as well as on performance metrics such as external income. This analysis **cautions against the simplistic use of such performance metrics** in a formula. The most fundamental reason for not using such simple metrics at this stage in the development of third stream activities is that the approach would not be likely to help inculcate the culture change that needs to pervade the institution. In fact there is a risk of the very reverse: encouraging the establishment of separate 'third stream' units focused on meeting the metrics, which would shield the academic community from the very culture changes that need to be made.

19. There are also three more practical reasons for not using simplistic metrics at this stage in the development of a third stream culture:

a. Third stream activities are still at an early stage of development; best practices have not yet been established and the real impacts are poorly understood. It is too early to begin to reward some types of activities, but not others, on the basis of simple quantitative metrics.

b. Third stream activities are meant to be diverse and so the HEFCE/OST should not reward a certain subset of activities over the others.

c. Most performance metrics are too crude to reflect true impact and cannot function effectively as incentives for institutions. For instance, the volume of external income is likely to vary widely depending on the kind of user communities: large international companies are likely to be able to pay larger sums than small local firms or communities.

20. One alternative would be to determine an initial level of funding solely on the basis of potential capacity (such as x% of core funding for research (QR in the English context), y% of contract research, and z% of funds obtained for teaching, to reflect

the third stream potential through fundamental research, applied research and teaching), and to conduct performance evaluation through light touch qualitative reviews. Performance metrics – particularly to reward successes in cultural change (such as proportions of academics engaged in third stream activities) – could then be introduced gradually over time.

21. Such qualitative reviews would be both light touch – to avoid an onerous process which could become a burden to the sector – but also effective in ensuring accountability to the public. For example, qualitative desk top reviews could be undertaken on annual reports submitted from all institutions, with a small number of site visits conducted to recommend corrective actions in problem cases and to learn lessons from the best performers. The required documentation would be an institution's plans and reports reflecting its own values, plans and strengths on third stream activities: these would be reports of the kind that institutions would wish to develop in any case, with or without government support.

22. It is clear that the sector is going through an important transition in third stream activities. The initial period of experimentation is over. In the new phase, institutions should become increasingly strategic about third stream activities. Institutions will need to make decisions in the future about how to allocate resources for third stream activities, and they will make different decisions depending on their own policy intensions and expectations. It is critically important that any changes in funding by HEFCE recognise the extent of the culture change needed and so are introduced with a collective understanding about the end goals and with clarity about the transitions expected in the future. It is suggested that the goals should be concerned with achieving a change of culture, and embedding third steam activity, throughout the institution and in all that the institution does.