Fostering and Measuring ‘Third Mission’ in Higher Education

This document has been prepared by a partnership of Universities funded by the European Commission under the Lifelong Learning scheme. The project was entitled: European Indicators and Ranking Methodology for University Third Mission. The objectives of the project were:

- To improve the quality, efficiency and effectiveness of education and training systems in Europe;
- To encourage and improve Higher Education Institution’s contribution to society;
- To foster the creation of a European area of higher education; and
- To stimulate excellence and improve the visibility of university activities focused on services to society and industry.

This paper captures much of the learning achieved on the project, and has to do with the kinds of beneficial impact universities can have on their host societies, and the circumstances that influence the ability of universities to deliver those impacts.

It is presented in the form of a policy Green Paper targeted at people whose positions allow them to influence these factors, in:
- National, regional and local governments;
- University leadership and administration;
- Academic posts in universities;
- Interface posts between universities and society.

The paper is intended to stimulate informed debate, and in relevant cases to stimulate alternative courses of action. In some quarters, where universities are already thoroughly effective at engaging their resources and capabilities for the benefit of society, the paper will represent little that is new. In many other areas, however, we believe the messages in this paper represent hopeful, productive and progressive ideas with the potential for significant beneficial social and economic impact.

Finally the paper is intended to encourage the next necessary piece of development work on “Third Mission Indicators”, explained in the body of the text.

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Draft Green Paper: Fostering and Measuring ´Third Mission´ in Higher Education

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Introduction – what is Third Mission and why has Third Mission risen up the agenda?

The relationship between higher education and society is frequently referred to as the Third Mission of universities. It encompasses a wide range of activities involving the generation, use, application and exploitation of knowledge and other university capabilities in the service of society. We will argue that it is integral to the traditional university missions of teaching and research.

We have adopted a classification of this ‘Third Mission’ into activities related to research (technology transfer and innovation, etc.), to teaching (lifelong learning/continuing education, etc.), and to social engagement (public access to museums, concerts and lectures; voluntary work and consultancy by staff and students, etc.) – a variety of activities that involves many constituent parts of universities and that requires a suitable culture and mindset; different people with specialised skill-sets; and supporting structures and mechanisms, for it to achieve its potential.

The time when universities could assume that they will be funded, no questions asked, is long past. All governments are studying the balance sheet to see whether the universities they fund offer more overall value than they cost. In this cash-strapped world, entrepreneurship will be required at every level, both institutional and individual, in order to ensure institutional survival, and hugely important also, to ensure that universities have the resources to continue to pursue high-quality scholarship where there is no conceivable prospect of immediate or instrumental socio-economic impact.

In the era of the ‘knowledge society’, University Third Mission activities have received substantial policy attention, as universities have been asked to optimise their roles as key players. This has been difficult for some institutions that have hitherto seen themselves as somehow apart from the society they serve. However, funding problems have combined with the Third Mission agenda to encourage most, if not all institutions and governments, to see the merits of an entrepreneurial spirit and optimisation of private income. Arguably, most of the highest profile universities in the world have learned to engage with the society they serve and upon which they ultimately depend. In the process they have optimised their Third Mission portfolios. It is time to recognise this vast development, and devise ways to monitor and report on it.

Third Mission activities:

- provide benefits of many kinds – enhanced research opportunities and outcomes; generation of ideas, jobs and companies; a much broader group of students of the university; enhanced engagement with the community; and they can bring in additional money (though little to the University centrally). Such benefits serve as positive factors for the development of the more traditional missions of universities: teaching and basic research.

- help to develop research that is more focused on social needs. It is obvious that in the long perspective, basic research is inalienable from universities. Applied research will be more adapted to social needs if the final or intermediate users of the outcomes from this research are involved in the process.

- help to develop teaching and learning modes that address the needs of much a broader range of learners, indeed that engage with the societal need for lifelong-learning more generally, than the narrow band of school-leavers universities have traditionally restricted themselves to teaching.

- facilitate development of graduates that are well suited to participate in professional life, and aware of their social context.
Decisive Factors

Institutional policy and governance issues

The form taken by Third Mission activities depends on contextual factors at different levels, and there are few entirely common approaches across the sector and across countries. The list of factors that might be thought to determine success, and that therefore needs to be thought about in any study of metrics and indicators, is long and contestable; these matters are developed further below:

- The style of governance and leadership within the institution plays an important role in the development (successful or otherwise) of Third Mission activities.
- A climate of institutional autonomy, flexibility and trust are necessary conditions. When institutional flexibility is limited because of national regulations, Third Mission activities can nevertheless still flourish through the agency of external institutions, sometimes even wholly-owned by the university. However when individual flexibility is tightly limited by institutional rules (especially about entrepreneurial earnings) Third Mission activity is likely to remain rather meagre.
- Continuity is important both in policy and in funding; chops and changes in policy and programmes will severely discourage performance.
- Successful Third Mission development requires mutual trust and commitment between the University and its leadership on the one hand, and local/regional authorities, enterprises and the community in general, on the other. This does not come easily to a university that has traditionally stood apart from its community. It may require university leaders to revise their public relations priorities.

We conclude that the determining factor is the extent to which individuals within a university (academic staff particularly but also certain other key ‘administrative’ staff about whom more later) are themselves motivated and enabled, in the sense of entrepreneurs, openly to initiate and pursue activities that benefit society. The importance of this link to society cannot be over-estimated; it is after all society, through the general taxpayer, that supports the university.

A university’s commitment to ‘Third Mission’ should be articulated at the highest possible level, so that it is maximally general and permissive – in the university’s Mission Statement, for example, rather than in mechanistic and specific enactments. A general recognition in the Mission Statement - that the University exists to serve society through teaching, research and related activities - enables and permits activity at the interface with society quite generally, thus giving free rein to individual staff members’ and students’ creativity; whereas selective definition of specific university-led programmes can be seen as a constraint, resulting in less than full-hearted support. In some universities (where for example there is a top-down style of management, or a residual civil service culture) it may be important that the University give explicit mention of Third Mission activity in its strategy documents and action plans, but again these would ideally not be too prescriptive. The territory needs air to breathe; scope for entrepreneurship.

Third Mission does not constitute a separate and new set of activities tacked on. It is simply a shorthand for teasing out and trying to evaluate the ways in which the University serves society, other than in the traditionally core areas of academic scholarship and mainstream teaching.

- How does the University achieve some impact within society from its research?
How is the university’s expertise used to extend the education of non-traditional learner groups and to solve problems generally within society?

How does the University exploit, in the service of society, the fact that it constitutes a very large group of fit, creative and intelligent people, who could contribute in the local community specifically, but also nationally and internationally, to problem-solving and development on a massive scale, if they were so minded?

This is not to say that all research is amenable to questions of immediate impact. Some high quality research has value in and of itself. Sometimes research outcomes can realize enormous impact decades after their publication.

University leadership needs to reflect upon why it is important, if indeed it is important, to develop a Third Mission profile: might it help the institution develop its profile and performance in teaching and research, for example? Then they need to ask how this might translate into reasons why individuals might want to direct a portion of their time and effort to bringing about such improvement. It is a much more compelling proposition to offer personal advantage than the abstract notion that an activity will benefit the University. Academics will perform best in Third Mission activity if they are doing it because they want to. They will want to do it, if it helps meet their other objectives (recognition of excellence and impact in teaching and research; remuneration and promotion).

The emphasis here has deliberately been on permissiveness and enablement. We are persuaded that Third Mission activity does not benefit from being tightly managed, or indeed from being over-supported in a paternalistic top-down way. But it does need to be explicitly encouraged by the University leadership, and it needs to be generally valued and recognised for making the real contribution it does, when opportunities arise for celebrating or evaluating individual and group performance and contribution. In some cases an important sign of institutional recognition can be seen in the appointment of a vice-Rector with specific responsibility for leading Third Mission activities across the institution.

**Institutional finance issues**

Funding mechanisms are another key issue in the development of a successful Third Mission portfolio. There may be a transition between government-stimulated start-up, through to an internally financed sustainable steady state. Stability of funding is crucial. Attitudes and mechanisms to allow academics to participate financially, and to take a suitable share in intellectual property, are also critical. In institutions where achievement of targets play an important role in determining levels of funding, it is important that these include suitable Third Mission targets, for the institution as a whole, and perhaps also for its component parts.

In a mature system a university may need a variety of permanent specialized ‘offices’, whether centralized or located within particular faculties or departments, handling one or other of the functions described in this paper. Their task is to support the academic community of staff and students in the third Mission aspects of their work, and in this capacity they will need suitable freedom of action (running budgets; employing staff; negotiating contracts and payments; conducting needs analyses; etc.). In lifelong-learning and technology transfer they may be able to cover their direct costs as well as channeling funding to the participating staff members, but they should never be seen as a significant source of income for the university itself, as this would deflect them from the mission of serving society.

**Institutional communication issues**

Effective communication of Third Mission activities is important. Good communication helps enhance the status of such activity in those universities where it is insufficiently focused. It also helps fight against the typical reluctance of academic cultures to be active in fields other than narrowly defined teaching
and research. Both for keen and reluctant structures and individuals, it is an instrument to encourage awareness of the various ways in which the institution fulfills its obligations to the society that supports its existence. At the same time, communicating these activities externally is important to encourage public awareness of the university’s contribution. This latter aspect will become increasingly important as funding decisions become more difficult, and the University is more explicitly competing to maintain its priority for funding.

Good communication facilitates the politics that determine adequate internal funding of Third Mission activities; the attribution and maintenance of organizational autonomy to different structures and individuals pursuing those of activities; and the provision of light but sufficient governance and oversight.

Institutional human resources issues

The number and quality of administrative staff devoted to Third Mission activity should be adequate to the aim, and here frequently lies a serious barrier to successful performance. In some universities there is an assumption, whether implicit or explicit, that only academic staff should be empowered to take significant decisions that bind the institution. Successful Third Mission work requires an adjustment to such attitudes, and the development of sophisticated and trusting teamwork between academic staff and skilled specialized ‘administrative’ staff who handle often highly entrepreneurial interface functions. Inadequate or inadequately empowered staff in these roles can be a potent brake to the development of Third Mission activities. It should always be remembered that a bridge can also become a bottleneck!

The quality and impact achieved through participation in Third Mission activities should be taken into account for career development and resources allocation, both of academics and administrative staff. A proper acknowledgment in this field can be considered an important factor for promoting and improving Third Mission activities.

Issues relating particularly to individual motivation

No single issue splits opinion as this one does, with managed institutions on one side and institutions that are, in one way or another, academic-led, on the other. In respect of the first category, the issue is relatively straightforward: one of good leadership and management. In respect to the latter, arguably more complex organizations, Third Mission activities are, and in our view should in the main remain, voluntary, both for academic staff and for students. Efforts to facilitate and measure them may initially be greeted with mistrust, but if trust is established, then much of the previously hidden activity will be revealed and can be celebrated and reported. Considerable space should thus be left for individual motivation, judgment and entrepreneurship; fostered and strongly supported where possible (by senior management and by the professional ‘offices’ mentioned above), but only loosely managed. This is not to say that academic-led institutions might not at the same time have broad-brush strategies for the growth and development of Third Mission activity that stop short of prescription at the individual level.

Critical incentives include:

- Taking into consideration the quality and impact of academic staff involvement in Third Mission activities (including the status they may achieve through their activities beyond the university’s walls) for their assessment, promotion and academic recognition;
- Mobility, intellectual property regulations and overheads play a role in stimulating or hindering Third Mission activities;
- Most initiatives are to a great extent based on individuals or networks of people with an entrepreneurial vision and attitude, both to their academic work and to the exploitation of results. In most cases the key person is an individual with academic prestige and leadership, but who is also able to develop a strong network with local authorities and business people. Only after reaching a certain stage of development can the individual initiatives become institutionalised, but even in this case, they need a strong leader who speaks the language of the
external world, is respected in academia, and is competent in networking. Throughout the evolution of an initiative, possibly over several years, to the point where it can be institutionalised, with the lead academic’s blessing, the administrative units mentioned above (human resources issues) need to work, and be allowed to work, with great subtlety, supporting the initiative ‘in the right way’ whatever that way may be.

How to measure Third Mission? - Indicators and Ranking

Third Mission activities are difficult to identify and to track within universities, not least because administrations may, in the past, have unwittingly driven such activity underground. There has until recently been little call to collect and display data to track Third Mission activities. This project has had as its objective to make a start on this agenda.

We have stood back from specifying a ranking methodology for use to produce a league table of Third Mission performance, though any of the established ranking methodologies could be used to do that for selected groups of institutions that are broadly comparable. To do so generally would fall foul of the extraordinary diversity and variability in mission, profile and quality evident among the universities on the continent of Europe, let alone the rest of the world. We imagine that governments might come, in time, to seek scorecards from the universities they fund that give a comprehensible account of their Third Mission impact. This would form part of the Balance Sheet - an increasingly explicit part of the social contract between state and institution – we fund you, but you must deliver impact and value for money, as well as academic high-culture.

We are much more convinced of the potential benefit of well-chosen metrics and indicators, than we are of ranking. Good indicators can serve to provide a handle on things that were previously hard to grasp; they render such activities monitorable and to an extent influenceable. But therein also lie dangers. The temptation, once one has an indicator, is to start to believe things about what it is saying – things that may not be true. If funding is ever attached to a metric then its visibility is immediately increased, often resulting in severe distortions. But good indicators, well and responsibly handled, can offer a dashboard for the first time, allowing managers to take informed decisions. They can allow previously largely hidden work to achieve more prominence, and perhaps, once measured, to attract funding. They can allow strategic planners to work with other institutions, and to learn from each other. General rankings, on the other hand, can move attention from the impact one is achieving as an institution, to competing, perhaps superficially in metrics and indicators rather than in substance, with those other institutions.

No account of indicators, however summary, would be complete without mention of the extreme difficulty (familiar to economists) of measuring the impact of any particular university activity (it is nearly impossible to attribute causation; impacts are realized haphazardly over space and time; etc.). All that is possible is to select relatively reliable and robust activity indicators as proxies for impacts. It has to be accepted that such indicators cannot of themselves measure quality. Such reservations apply to most metrics in most walks of life – the important is to be aware of the limitations and to hold back from unreasonable reliance upon them. Well-chosen proxies can become reliable guides to performance in a broad area, as their limitations become known and widely recognised.

In an annex to this paper we present a diagram that shows the full range of processes and activities we have identified as being arguably ‘Third Mission’; a much smaller selection chosen as suitable to support a metric or indicator; and a proposed basket of just four indicators that we consider might serve as proxies for performance across the entire broad country of ‘Third Mission’ in an institution.
Conclusion

This project does not complete this work – rather it seeks to start an intelligent debate by offering a conceptual framework and a set of indicators that have been subjected to a high degree of scrutiny and contestation. The time has come for these to be debated and contested in wider fora. We are convinced that it will be routine, in several decades’ time, to record and measure Third Mission activity, while coordinating and facilitating it lightly. Progress should not be hurried as it could be more damaging to measure the wrong thing than not to measure anything at all. All measurements generate unintended consequences, particularly if they are used to drive funding. The process should be taken moderately and intelligently forward, nonetheless, and despite the risks, because the prize for getting it right will be considerable – more self-confident and productive universities, more thoroughly engaged in the cultural and economic development of their host societies.

Recommendations

1. The Third Mission should be explicitly mentioned in the strategy plans of universities, not as a new fashionable addition to teaching and research, but as integral to the tradition of universities to serve and be useful in the society that funds and succors them.

2. At the institutional level, it is important to develop Third Mission policies and practices within a flexible internal framework that enjoys continuous commitment at the highest level and a high degree of trust and external autonomy. The importance of founding the essential qualities of flexibility and autonomy on mutual trust, within the institution and with external partners, rather than rigid policies and regulations, cannot be over-stated.

3. To develop Third Mission activities: initiative, motivation and commitment of individual academics and students are the most important factors. Policies should promote and permit the implementation of innovative projects under arrangements of adequate but light governance. Universities should only attempt to ‘institutionalise’ such entrepreneurial projects, with the principals’ agreement, once they reach a fairly advanced level of development.

4. Human Resources Services should be flexible and dynamic to enhance entrepreneurial activity.

5. An active and effective communication policy is needed to celebrate success and thus to encourage public awareness of the university’s contribution to society.

6. Universities and policy makers should consider how far current rankings show what universities do for the benefit of society. The social engagement of universities should be a commitment rather than a competition. Well-chosen metrics and indicators can provide effective tools for decision-making, based on each institution’s strategic goals rather than a global conception of what an excellent university should be. The commitment of many socially-engaged universities is needed, working together on metrics, rankings and the PR-front rather than in competition, to create the conditions for the true extent, value and impact of the university-sector’s contribution to society truly to be appreciated by policy-makers and the public.
Annex

At the end of a long analysis process, the E3M Project produced a set of 54 indicators covering most aspects of Third Mission activity. These (or a selection of them to suit particular purposes) will be useful for management and oversight at an operational level. For strategic purposes, this set is of course excessively wide; information needs to be selected and presented in a different way. Accordingly a sparse Strategic Set of 3M Indicators has been defined, that, while being highly selective, tries to give a quick and relevant strategic view of the place of Third Mission work in a Higher Education Institution’s overall profile.

Four indicators form the Strategic Set of Third Mission Indicators:

- one that gives a general indication of the explicit engagement of the HEI with its ‘Third Mission; and
- one from each of the 3M Dimensions (Continuing Education, Technology Transfer and Innovation, and Social Engagement). These latter are all essentially volume measures, but they serve as a reasonable proxy for the extent of the commitment of the HEI to Third Mission service in each area.

The Strategic Set of Third Mission Indicators are:

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<tr>
<th>General</th>
<th>Institutional commitment to 3M</th>
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<tbody>
<tr>
<td></td>
<td>Acknowledgement in some recognizable form that the institution exists to serve society, in its formal Mission or Strategy (1= weak; 5= strong).</td>
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<tr>
<th>Continuing Education</th>
<th>Presence of CE</th>
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<tr>
<td></td>
<td>Proportion of CE in the total teaching activity (Full Time Equivalent Students; percent).</td>
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<tr>
<th>Technology Transfer</th>
<th>TTI revenues</th>
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<tbody>
<tr>
<td></td>
<td>Proportion of HEI total turnover derived from research/development contracts, collaborative projects with non-academic partners, commercial TTI activity, etc. (Euros; percent).</td>
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<th>Social Engagement</th>
<th>Value delivered through social engagement</th>
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<tr>
<td></td>
<td>Average value, per person, of the time donated in delivering services to the external community (Euros per staff and student member, calculated at national minimum hourly wage, or equivalent).</td>
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