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Roadmap for Employment - Academic Partnerships

Margaret Linehan

School of Humanities, Cork Institute of Technology, Cork, Ireland, margaret.linehan@cit.ie

Irene Sheridan

Extended Campus, Cork Institute of Technology, Cork, Ireland, irene.sheridan@cit.ie

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partnerships for progress

HIGHER EDUCATION INSTITUTIONS AND EXTERNAL ENGAGEMENT

Conference Proceedings 2010



*Edited by Dr Margaret Linehan
and Irene Sheridan*



Roadmap for Employment
– Academic Partnerships

The REAP Project is a Strategic Innovation Fund Project



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Partnerships for Progress

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www.reap.ie



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Contents

Page

Foreword	1
Irene Sheridan, Head, Strategic Innovation Projects Unit, Cork Institute of Technology	
Opening Address	2
Seán Haughey, TD, Minister for Lifelong Learning, Department of Education and Skills.	
Session 1: Motivation for, and Potential Range of, External Engagement Activities	3
Keynote Address: Mike Devane, Chair, American Chamber - Research and Development Working Group, Business and Industry Consultant, Quilly.	
Panel and Open Discussion	9
Session 2: Organisational Structure and Management to Support Partnership Activities	16
Keynote Address: Prof. Eamonn Murphy, Director, Enterprise Research Centre, University of Limerick.	
Panel 2 and Open Discussion	20
Session 3: Measurement of Success in External Engagement Activities	28
Keynote Address: Prof. José-Ginés Mora, Institute of Education, University of London.	
Panel 3 and Open Discussion	32



Dr Brendan Murphy, President, CIT; Minister for Lifelong Learning, Seán Haughey TD; and keynote speakers: Mike Devane; Prof. José-Ginés Mora; and Prof. Eamonn Murphy.



Foreword



This publication is derived from the presentations and discussions at the Partnerships for Progress Conference on Higher Education Institutions (HEIs) and External Engagement organised by the Roadmap for Employment-Academic Partnership (REAP) project in Farmleigh House, 23 September 2010. The Conference aimed to explore the potential scope for external engagement activity and the motivation for partnership as well as how that activity can be supported and managed and how success can be measured and rewarded.

The REAP project is funded through the Higher Education Authority (HEA) Strategic Innovation Fund Cycle 2. The Project is led by Cork Institute of Technology (CIT) and includes Athlone Institute of Technology, Dublin Institute of Technology, Institute of Technology, Sligo, Institute of Technology Tallaght, National University of Ireland Galway, University College Cork and Waterford Institute of Technology as partners.

The project aims to develop a model and roadmap for partnership and engagement between HEIs and employers and enterprises. This partnership approach is seen as especially relevant in the context of a dynamically changing economic and demographic environment. The partnership concept is extended to include and value all forms of interaction including learning, research and development and to recognise that the various engagement activities can be interrelated and built upon. By exploring existing examples of good practice throughout the project consortium and identifying enablers and barriers, a toolkit will be developed to facilitate engagement across the spectrum of potential partnership activities. The impact will be twofold – both HEIs and enterprises will be encouraged to seek out opportunities to engage and to identify any barriers to engagement within their systems and processes. Through the REAP project it is intended that enterprises will view HEIs as key service providers and strategic partners. Some of the literature on partnership reports barriers in terms of perceived inaccessibility and inflexibility of the HEI in dealing with enterprise needs. However, the experience of successful partnerships, reviewed through the project, has provided ample evidence that these barriers can be overcome.

The preliminary work of the REAP project consortium has led to a consideration of how HEIs organise themselves to support and develop their external relationships. This well-attended Conference and the provoking and varied contributions added significantly to the discourse and will inform the work of the project team as we continue towards our goals.

On behalf of the project team I would like to express our sincere appreciation to Minister Seán Haughey TD, our keynote speakers, our panellists, session chairs and all of the attendees for their frank and valuable contributions. An event such as this is always the result of a team effort and a particular word of thanks must go to our partners in DIT who were responsible for much of the organisation of the day.

We look forward with renewed enthusiasm to continuing the project work.

Irene Sheridan

Head,
Strategic Innovation Projects Unit,
Cork Institute of Technology.

Opening Address

Seán Haughey, TD, Minister for Lifelong Learning, Department of Education and Skills



This is a very important and timely conference. We live in very challenging economic times, and now, more than ever, the third level sector and higher education generally and its engagement with the wider community – both business and workplace learners – has a key role to play in getting us out of our current economic difficulties and returning us to economic growth and creating jobs again. The theme of your conference Partnerships for Progress is very timely, very important and I wish you well in your deliberations.

Today's conference is being held under the Strategic Innovation Fund project, REAP. It is a collaborative project involving eight HEIs, all represented here today. It is aimed at developing and validating a model and roadmap for partnership and engagement between the higher education sector, employers, and enterprises. The programme builds on the work of an earlier Strategic Innovation Fund project, Education in Employment, which focused on making the learning provision more relevant to workplace learners, something in which I'm very involved as Minister for Lifelong Learning and the through the implementation of the National Skills Strategy.

The Strategic Innovation Fund has been at the forefront of reform and transformational change in higher education in recent years. It has fostered a climate of collaboration and sharing and has challenged providers to address meaningful and effective cooperation, by exploring, identifying, and disseminating good practice. The Strategic Innovation projects seek to bring about a change in the culture and internal structures and business processes within institutions to ensure tangible results. The reward for these efforts will be the enhanced relevance and responsiveness of our HEIs, something for which I know you are all striving.

Here in Ireland, we are starting from a strong base, where relationships between the worlds of business and higher education are well established. This conference will assist in exploring how we can continue to maintain and further enhance these partnerships as well as how the higher education sector can develop their role as key service providers to enterprises, organisations and workplace learners. Government certainly recognises the huge importance and value of the full range of contributions made by our HEIs to so many aspects of community, social and economic development. The mission of community engagement and partnership with enterprise is not peripheral but is central to the operation of the higher education sector. Engagement with the wider community ensures that the institutions are in a position to adapt and respond to the needs of the full range of potential learners across society. This means increasing flexibility, accessibility, and diversity of provision, recognising that the learners bring their own unique experience and that the workplace itself can be a rich source of learning and knowledge. Today, in an environment where organisations are being challenged to respond to the rapidly-changing economic and market realities, it is imperative that they have access to the critical knowledge set to support them.

I know that the higher education sector in Ireland has an unparalleled record of quality in teaching and learning and in research and innovation. Our challenge is to ensure that the unfolding learning and knowledge are effectively transferred into the wider community for the good of everyone. Close cooperation between higher education and business has benefits for everyone, it promotes the relevance and attractiveness of higher education programmes, it provides business with the skilled people it needs and it gives assurances to graduates around the relevance and marketability of their skills. In this regard, a continuous process of two-way communication is vital. I think that is what this conference is setting out to explore and develop – that process of two-way communication. This relationship is more important now than ever before. I welcome this event and wish you well in your deliberations.

Session 1 and Keynote Address:

Motivation for, and Potential Range of, External Engagement Activities

Mike Devane, Chair, American Chamber – Research and Development Working Group, Business and Industry Consultant, Quilly.

I would like to begin by sharing with you what I have learned about partnerships over the years. First, all partnerships need unity of purpose. Second, interdependence, is there an interdependence in the partnership? Third, honesty, all partners have to deal very honestly with the realities that need to be faced at any point in the partnership.



Before I start talking about the theme for this morning which is *Motivation for, and Potential Range of, External Engagement Activities*, I want to say that I have experience in dealing with both HEIs and with industry in trying to build partnerships - sometimes seeing partnerships not going the way they were supposed to go and then trying to fix that. So, I know the terrain and I also understand that a lot of people in the system – both in business and in education – have tried things and have had some isolated successes. But the problem is that we have never been able to have a sustained development of partnership between the two, and that's a point I'm coming back to. The motivation for partnerships in our country today is very clear, we have a challenge to create jobs. When we talk about creating jobs we are talking about creating jobs in an international context, and therefore, our competitiveness becomes the primary issue. When we look at competitiveness, it immediately focuses us on the skills base and the cost of that skills base and the urgent need to transition the workforce. I think, therefore, the reality that we have to deal with, is that we have to do a lot more for a lot less.

If we quickly examine the need for job creation – my own view is that we have to create a hundred thousand export-led jobs, and we have to do it in a very short timeframe. We have to do it in a five-year period, and that is a very tall order. It is equivalent to the number of jobs that we currently have in the multinational foreign direct investment sector. If it took us forty years to put those 100,000 jobs there, then, this is a significant challenge that we are facing. But, it is the only way of turning around this economy. We have to have scale; there is no point in fooling ourselves. In order for us to do this, there are two things that I think we absolutely have to do, particularly from a large industry perspective. We have to consolidate our existing industry base, understanding that our base has been significantly eroding, since 2000. We have lost an entire manufacturing sector. A large portion of the ICT sector (with the exception of a small segment with a significant capital base), is gone. Currently, the medical devices sector is under the same threat and is eroding in a similar way. We have got to stop that erosion and the only way to stop that is to be competitive.

The second thing that we need to do is to have some new form of enterprise creation. We need to recognise that the form of enterprise creation that we have had for the last ten years is not working. It is not giving us enterprise of scale, and we have to have enterprise of scale. It certainly needs to be indigenously based, but most likely internationally invested in. In terms of global competition, the scenario here is very simple. A recent competitive review (which included a number of large multinational companies) completed by the American Chamber of Commerce showed that there is a need for a significant reduction in our operating and labour costs. Something in the order of a 30% reduction is required just to enable us to compete for higher value work. If we can place our labour cost 30% below US labour cost, it should enable Irish subsidiaries to attract higher value work from the US and establish new mandates for those subsidiaries in Ireland. That is the reality of what has to be achieved.

In order to get that competitive labour base, and maintain it at a competitive level, education plays a big part. Competitiveness can be achieved when there is an abundance of the right skills at the right place at the right time, and currently that is not what we are able to do. In re-engineering our education systems to meet that need we should consider that education and development is itself an export industry, providing another export service opportunity.

In terms of our workforce – we have 450,000 people on the live register. That does not include other people seeking employment that do not make it to the live register for one reason or another. So, we are looking at a situation where up to a third of our workforce need employment. This is the significant problem that we must deal with. This scale of unemployment clearly shows that we have an immediate challenge to re-profile that workforce to benefit from future opportunities that will present themselves. Achieving a new competitive level (operating costs 30% lower than the US) and having the requisite skills in quantity will require significant up-skilling in new technologies on a scale greater than we have ever considered.

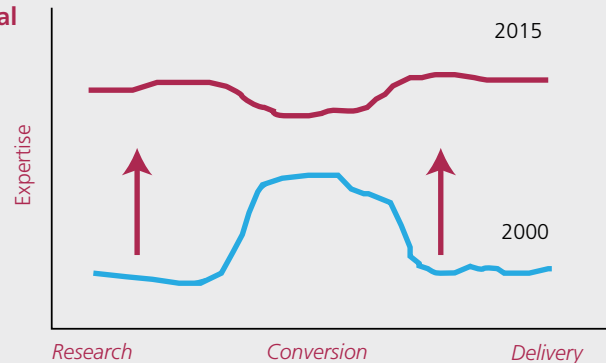
The education system needs to focus on recycling the current working population and developing a realistic and flexible adult learning model. If we are going to meet the challenge that is ahead of us, we need to take a significant volume of people (some of whom may have no third level education background), and put them back into the system. Clearly, we need some form of apparatus to plan this; we do not have a planning system currently and it is a major gap, and without it we cannot be successful.

A related point is that we must be honest with ourselves and face the reality that we have to do more for less. The 30% reduction target that I talked about is the challenge that we have to start with. In the private sector there is already a certain level of correction that will be market driven – indications suggest that we may already experience a reduction of up to 15% in labour costs. However, how are we going to correct the public service costs that determine many of the other costs including utility costs? This is something we have to think about, because it has to be corrected. So, from my perspective that is why we have to do what we have to do and it is the motivation for working together.

In terms of being honest with ourselves, there are a couple of critical questions I want to explore so that we can think about them and discuss them.

Investing in Knowledge Capital

The need to change the level and focus of skill investment has been well known for over ten years - so why has so little happened to change it?



This is a standard chart that basically indicates that we started off with a manufacturing industry base and have developed significant competence in manufacturing and conversion activities. It also indicates that we have fewer competencies on the research and development side and equally fewer competencies on the sales and marketing and customer side.

The blue line notionally represents the base that we had back in 2000 and we all agreed back then that we needed to address the competency deficit to the left and right and in general we need to raise the overall bar. The question I pose is, why, in good times, in the last ten years, did we not change it? We have made incremental changes here and there, but, we have not made any significant shift, we are still pretty much as we were. We really have to ask ourselves, why did we not do that? What caused us not to change? If we cannot answer these questions, then we cannot talk about how we are going to fix today's problems.

Over the years I have heard a lot of the higher education institution people talk about how difficult it is to interface with industry and have a partnership with industry. The question I would like to pose here is, why this is the case? Generally, with business, it is in its DNA to partner. Business must do this because there is an interdependence between it and its suppliers, its customers, between other parties, and with sources of education. So, again the question is, why have we not been able to do that? It's not that the need is not there, because it certainly is. Perhaps we must go back to my original observation and examine if we had unity of purpose and if the requisite interdependence existed for the partnership to work.

The next issue I would like to focus on is our ability to sustain partnerships. We have recognised for a long time that we are in a knowledge society. We want to build knowledge capital as high knowledge capital creates value. We also know because we are an open economy that this capital has an economic value in the international marketplace. Over the years we have had many types of partnership between academia and industry, for example, there were a number of partnerships focused on development of the skill base of new employees, making sure that international companies could establish themselves in Ireland and be successful. In most of those cases, we were not able to sustain the relationships. Frequently, we abandoned all attempts at building these partnerships and we were unable to actually build relationships that allowed us to get closer to those corporations and jointly build an education business specifically for them. So, I think we need to deal honestly with why these partnerships did not develop.

Finally, I want to talk about the areas of engagement that I think are important. Again, bear in mind that unity of purpose must underpin such engagements. Unity of purpose at a macro level and a real understanding of the shared objectives and interdependence of one partner to another is crucial in each area of engagement.

Potential Range of Engagement

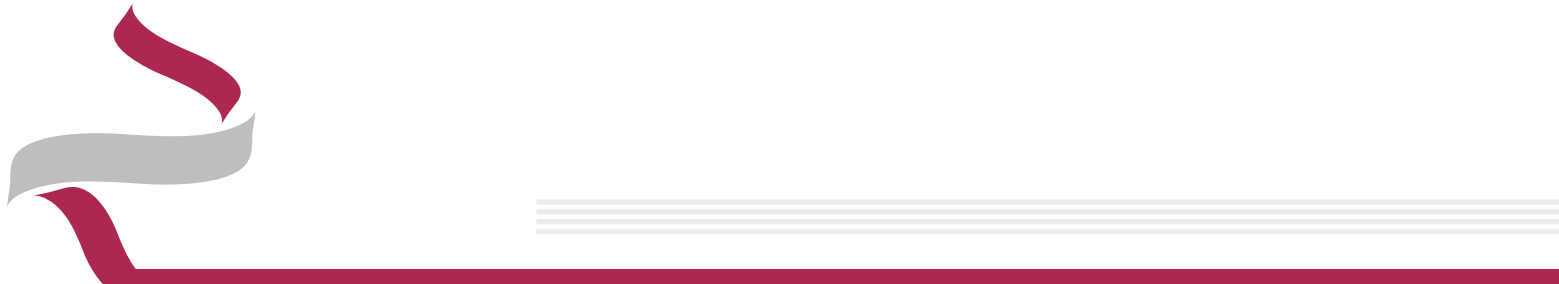
- Integrated Planning and Alignment
- Investing in the Current Workforce
- Workforce Transition and Activation
- Research and Innovation
- Corporate Education and Development

This is not a complete list of engagements, it is my list and I recognise fully that there are lots of other opportunities that could be included. I would like to examine a few of those and offer them as a basis for the discussion later. At the top of my list I have integrated planning and alignment because I think that is the most important. Achieving an integrated planning and alignment process will take time. It is going to take more than a couple of years to do what we want to do, i.e. look at the skills deficit that we have and match that deficit with output from the system. About five or six years ago, I was involved in a project to establish an effective university and industry interface. At the start it had a very simple goal to find out where an estimated 60,000 professionals (3rd level graduates) that were in the ICT industry had gone to when the industry had off-shored. We could not figure it out, and we used different methods to try to get our information, but, apart from anecdotal evidence we had no information. There is no planning system, and no way of telling how this migration and workforce transition occurs, but, we absolutely need an integrated planning system for both workforce and skill planning. We need a system that is state-led and managed, and that is inclusive of all parties engaged in the development and employment people.

The second thing we need to do is, to rid ourselves of the notion that if we fail to plan then this is alright because we can go to another country and bring in the skills from that country. This has already been done with the financial services sector. It has been done with the research and development investments that we have made. It is a solution of sorts but it is not the answer. We have to deliver the new resource base for new/higher value work from the existing labour pool, and if we are not doing that then we are not being successful.

We need a change in our thinking around the current workforce. We need to look at workforce transition and activation, particularly in terms of critical new competencies and the scale of that transition. We need to examine areas such as research and innovation to ensure that we understand the complementary set of competencies that are required to effectively exploit the total investment. Indeed, we need to examine lateral opportunities such as the development of a new export service on the back of successful corporate education and development programs. Again, to emphasise, that this workforce transition must be achieved by investing in our current workforce, and I am including in the current workforce the people who are currently not working but would like to be back in the workforce.

Our objective must be to get an effective investment and training development system that provides the requisite skills from the existing labour pool without any significant dependence on new labour inflow. To do this we must revisit our concept of lifelong learning and adult learning. We must consider a new model for lifelong learning in the context of creating employment for 100,000 people. We also need to be serious about workforce transition and activation. We need a system where HEIs and industry can get together and have meaningful transition programmes, particularly in areas where we know that skills can be transferred. We also need to consider within



the context of a lifelong learning model, how the investment is made. Investment in individuals/career that is not specific to the employer must be cost-neutral to the business. HEIs need to extend their capabilities to support the scale of lifelong learning now required and it must do this without additional costs. Participants/individuals need to be encouraged to invest their own time and be supported through new schemes and incentives in the form of forward credits or rewards that allows them to participate. This will require serious consideration and discussion.

In terms of the corporate opportunity, I think that every corporation realises that an amount of the skill base erodes each year. I suggest here that a number greater than 10% can be expected, however some experts suggest that in heavily technology-based industries this could be as high as 30%, but, all companies know they need to continue to invest in the development of their workforce and to spend a significant amount doing that. A lot of companies invest significant amounts of money not just in the development of their own skill base but in that of their customers.

Lastly, on the research and innovation side, I think that the work we have done in research and innovation in the last number of years is significant. We can look back over the last ten years and say we did a really good job. But, we also need to recognise that we need to take that research and innovation somewhere. We need to take it to a place where it has value for the economy, where it allows us to create new technologies, develop new innovative products and services that can create enterprises. We have not been able to do that.

We also need to recognise that there is a significant international market for research, and companies do invest in research. We must get companies to invest directly in our state funded research programmes and not depend entirely on state funding through Science Foundation Ireland or the European programmes. If we want to attract industry funding I think we need to build on our level of credibility and be more broadly recognised, and to do that we need to go back and decide what we want as a fourth-level system. We need to create applied institutes of research that are recognised globally that can contract and interact with industry on a basis that is recognised as best practice. We do not want the baggage that comes from the third-level system stopping us from doing the things that we need to do. It calls for a new candid engagement between industry and the HEIs to figure out what are the unique research and innovation opportunities and how best to organise to exploit these. We have to make the connection between investing in science and innovation and investing in the employees of enterprises and if we cannot make that connection and have a coherent plan, then I think we have a big question to answer.

To conclude I think there is a significant need and ample opportunity to work together. We need to articulate our unity of purpose and understand the need for and the benefit of interdependence. As with all engagements and partnerships we need to work together *openly* and honestly in pursuit of our common goal. It is clearly an opportunity for the higher education system to lead in this next phase of economic growth.

What HEIs must do

- Leadership – for change
- Education – integration & flexibility
- Research and Innovation - focus
- Do *More with Less* – practical steps

We need leadership from the sector, and it does not necessarily come from the presidents of the third-level institutions. It can come from within the system. In a period of transformation and change, we all know that the existing structures are also subject to change. The old structures do not stand up and new structures emerge. It is

an opportunity for people to lead change in the system. In the education system itself, integration is important. We have a multiple of third-level institutions. We need to pool our resources. We need to consolidate and benefit from this consolidation. I believe if we can consolidate we can create at least 40% more capacity without any significant increase in spend. We need to be flexible, and we need to integrate. Over many years we have discussed a modular approach to the delivery of third level programmes – we are still talking about getting one college to recognise what another college is doing – we need to cut through that nonsense, we need flexible delivery. Institutes of technology, in particular, that are regionally-based, need to be able to respond to regional needs to be able to do that in a flexible way. We need to focus on those areas of research and innovation that drive the future and there are three key areas: nanotechnology, biotechnology, and communication or internet technology. Most importantly, we need to pool our resources. Transformation is the secret to all of that. In industry, we constantly focus on transformation in order to remain competitive. We now have to embrace transformational change in the public sector, in the HEIs in order to create new capacity and be competitive.

And lastly, it is mindset: the mindset is *“More for Less”*. That is all it is, mindset. It is not hardship, it is not the end of the world, it is just mindset. If everybody gets the notion that they have to do *“More for Less”*, then I believe we can create significant capacity in the system. There are a lot of things that we tried to do before, which we can revert to and be successful with this time.



Michael Delaney, Vice President for Development, CIT; Dr Terry Maguire (ITTD); Jennifer Van Aswegen (ITSligo); and Irene Sheridan, Head, Strategic Innovation Projects Unit.



Panel 1:

Motivation for, and Potential Range of, External Engagement Activities

Úna Halligan, Chair, Expert Group on Future Skills Needs,

Michael Kelly, Chairman, Higher Education Authority,

Anne Forde, Principal Officer, Higher Education and Skills Section, Department of Education and Skills.

Summary of the initial panel contributions:

The panel contributions considered why partnerships are formed between HEIs and industry, why this is important, the motivation for such partnerships, and what those engagements should be and need to be. Different perspectives were offered in terms of the drivers, the requirements and some of the enablers and deliverers for such engagement.

One observation from the panel was that enterprise was not very well represented at the conference. It was suggested that this was a concern because if there are to be partnerships between HEIs and industry it is necessary to have close contact and open discussion between the two partners.

The value of *applied* partnership was highlighted, such as short term learning opportunities for employees to enhance their skills within the workplace setting. This was described as a 'win-win' for everybody as the students received practical knowledge which they brought back to the workforce.

A further observation was made that many institutes of technology are regionally-based outside of the major cities, it is important that they are aware of the regional and local needs of industry, in particular, indigenous industries. In many rural areas, there are not multinationals 'on their doorstep', it is the small to medium-sized enterprises that will make the difference in providing local employment. There is a genuine need to examine what could actually be done by HEIs to serve the learning and research needs of small to medium-sized enterprises. This suggests that the current and future skills needs of regions need to be closely considered and well understood, and the Expert Group on Future Skills Needs provides valuable input, in conjunction with third-level institutions. Panel members believed that third-level institutions are well situated to facilitate the transfer of applied knowledge.

It was observed that third-level graduates with strong critical thinking, problem solving abilities and team-work capacities, who are self-driven and can 'hit the deck running' as well as having competence in their chosen disciplines are highly sought by enterprise. It was agreed by panel members that there is also a need for more engagement, at both undergraduate and post-graduate levels, with real-life problems or research questions. This engagement should be embedded throughout the undergraduate and postgraduate cycles. It was perceived that in order for this type of real engagement to happen there is a need for ongoing two-way dialogue between HEIs and industry.

An example of the need for this dialogue could perhaps be best illustrated by an example from the manufacturing industry sector. Both multinational and indigenous manufacturers have agreed that there are many challenges facing this sector, and in particular, two of the immediate challenges are to increase productivity and upskill the workforce. Greater engagement would ensure that HEIs could make a meaningful contribution to the increases in productivity sought as well as working closely with the sector to provide opportunities to upskill in response to emerging needs.

There is also a pressing need for HEIs, in conjunction with the work of the Expert Group on Future Skills Needs, to engage with enterprises to re-skill those who have lost their jobs. The higher education system has a very strong role to play in upskilling people and there is certainly a willingness and interest to engage in this type of activity.

There is, however, a real opportunity for the higher education sector to develop a better service model in that space. Clearly the collaboration between providers and enterprises can ensure that the learning and development provision is focused on real and emerging needs. There is a shared responsibility to ensure that upskilling and learning developments offer real sustainable employment opportunities and that cannot be achieved by either party in isolation.

These engagements, between HEIs and industry have to occur at different levels, some have to happen at a local level and some of the policy and drivers will be required at the national level. One of the recurring messages from the panellists to the higher education providers was:

You've got to talk to enterprise, whether it's SMEs or multinationals, you guys have got to knock on the door and say, we're here, what can we do for you?

Open Discussion Session:

Arising from the panel presentations, a number of questions and comments were posed by delegates. Extracts from the comments of the general assembly are summarised in bold below with relevant responses and discussion following where appropriate.


How will the need for investment to upskill, retrain, and develop the existing workforce be shared between employers and the Government?

HEIs may need to adopt different strategies when they're dealing with SMEs and multinationals. The nature of the organisation and the ability and readiness to engage will impact on the process.

In response to the issue of costs the example of 'practice learning' in the form of an internship which adds to the skillset of the unemployed was described. It was suggested that this might be scalable and could be applied to postgraduates allowing companies to absorb the costs and gain some benefit from the 'placement', and HEIs could support the upskilling of these people. It is not clear yet what scale this could be done at, but, the ideal scenario would be for industry to absorb a certain amount of the costs and have the benefits, and perhaps allow individuals some form of tax credit to make that choice. It was also pointed out that in the last couple of years, when utility costs, such as electricity, here in Ireland went way over the European average, companies that were able to use the lean techniques which they had acquired, were able to reduce costs which helped to consolidate their base. Examples such as this of the direct impact of training and development on the financial bottom line help in the arguments to share costs where appropriate.

A really important facet of the business/education interface is speed. If a business has a research or development need they approach a higher education provider who may respond that a PhD could be completed on the question in three years. This is not the answer that industry needs.

Speed is key right across the industry base. Right now there is a company here in Dublin that is going to hire a hundred engineers that they cannot find in Ireland. There is a company in the west of Ireland looking for a similar kind of resource, maybe not a hundred but they are going to hire fifty if they can get them. There are going to be other situations where people in the multinational sector in the USA are looking for new mandates, who are trying to find new things they can do. If they are lucky enough to engage – and the only reason they'll engage, by the way, is because the corporate needs that resource now.



So that is the opportunity, but you have to be able to deal with the now; everybody can deal with it in 12 months' time. Speed becomes the critical thing here; we have got to be able to respond. The relationship between the industry and the higher education sector needs to be such that a phone call can be made at 12 midnight between an executive of a company who is sitting in the United States with an opportunity that they are going to chase after, and the president of a higher education institution and say, can we do this? That is the speed we are talking about.

There is huge motivation from the institutes of technology and the university sector to deliver on these types of situations which are being discussed. So, it is now more important than ever to have these general discussions and go through a process of understanding the dynamics and the requirements of both sides. All HEIs in the country want to engage and respond to industry. All researchers in HEIs are aware of answers being needed quickly, but, a communication and response structure needs to be put in place with industry partners. If there is a call for high quality research within a certain short time frame, it cannot be expected if it is not funded properly, it needs appropriate investment. There is also a need for a discussion around the funding issues of full-time and part-time students. The industry landscape has been transformed by research, but, that research has required additional significant funding from other sources such as Science Foundation Ireland (SFI) or the Programme for Research in Third Level Institutions (PRTL) or elsewhere. The higher education sector may have got caught up on how to fund programmes, so for example, if industry approaches a third-level institution and wants a particular module or programme developed for a number of students, a business relationship needs to be entered, and industry will have to realise that they will have to pay for this.

HEIs also need to be flexible in their modes of delivery of programmes. It would be beneficial for industry to have programmes which could be delivered in various ways, for example, over the web. In general, industries are anxious to assist to have their employees' upskilled as it is more cost effective to have people upskilled rather than to pay large redundancy payments and then have to pay recruitment costs for other people to fill those gaps.

The system of engagement at the moment is significantly driven by intellectual property requirements, and it is not flexible enough and it is not scalable enough. So, the intellectual property rules and drivers are actually preventing an appropriately rapid reaction:

We are trying to rework the system at the moment because the system of engagement significantly driven by intellectual property requirements is not flexible enough; it's not scalable enough.

Intellectual property is a principal blocker in addressing that phone call which may come from the United States at midnight. We need to be very aware that we are not addressing the given industry need in the days and weeks after that phone call. Again, looking at intellectual property and whole notion of technology transfer, there are a number of technology transfer offices now where people spend endless hours going through these licensing contracts. And everybody is doing this work separately. We just need one contract; we don't need all these people doing this. If we're going to have a conversation about technology that we're transferring, the only conversation we should be having with them is, how do you think it's going to work? Do you think we're going to be able to do something with this? Can we make a change with it? That is the conversation we want, not about who is going to get something at the end. We want to do something with it, if you give technology to a corporation; they are going to be more worried about that agreement than the third-level institution. Not because they want to take it away from the higher education institute but because they want to be sure that it does not contaminate their own intellectual property - so a nice, clean agreement that works for everybody is needed:

But, it has to be funded appropriately; you can't expect high-quality response and high-quality answers for no investment.

Taking into account all of the above, however, it is now time to engage. Companies have to transform to survive,

and the lean operational excellence space is ripe for exploitation. At the moment, the only way companies will survive in the current environment is to greatly enhance their productivity and efficiency, and that means breakthrough enhancements as opposed to just chipping at the edges. Again, it is important to emphasise that the third-level institutions do have the skillsets and the people, and also the flexibility to provide assistance to help train and to improve the whole skillset within individual enterprises. The best place for that to happen is at the local level, or at the level of the enterprise, because only when you have meaningful interaction with an enterprise will things work. Third-level institutions can make policy statements, they can talk about funding, they can talk about facilitation, but, where engagement actually works is at the level of the enterprise.

There are a number of points of engagement that a third-level institution can have with an enterprise, it can start at the top, at high-end research; or at the developmental level, or at the operational level, or at the upskilling and training level, but wherever the engagement starts, it is important to develop the relationship. If that relationship is developed it can then be exploited and it can go on to better and greater things, and you can actually have a real interchange of knowledge between the enterprise and the institute.

One of the key issues in relation to a lot of what has been happening is communication, and letting people know what is going on:

The enterprise sector is certainly in quite a difficult place at the moment, and many companies are to some extent punch-drunk trying to respond to the threats which the global economic environment is presenting to them, so don't expect companies to come knocking on your doors because I don't think they will, they don't have the time ... it's not that they don't have the motivation but that they are in crisis mode.


A likely outcome of the Higher Education Strategy Development process is a rationalisation of provision:

We are duplicating activities at the moment; we actually need to stand back as a system – it is internal to institutions but it's also as a system, we need to stand back from it and say, are we using, in the best way we can, what we are currently putting into the system. And I'll go further: we're tricking round at the moment with various value for money initiatives on procurement, shared service and so on. The elephant in the room in all of this is the way we use our human resources, and we really need to take hold of that as a sector and do something with it. And that is thinking radical.

Academics and the senior management in HEIs do not have much discretion in how they organise or structure or use resources because the biggest element in expenditure is always going to be wages and the related HR issues of conditions of employment, flexibility, etc. So if you are asking the HEIs to be flexible and to come up with the sort of response that industry is demanding, you've got to give them the autonomy under which to do that, and that is not happening under our current centralised system.

I think once you give that flexibility and autonomy you have also got to ensure accountability, and that we will have some sort of framework where academics are given the performance indicators that are related to national economic targets but are also then given the flexibility and autonomy under which to deliver those.

A more general comment I would like to make relates to developing a closer relationship between higher education and business – and we shouldn't be surprised that this is difficult because business and higher education actually exist for different purposes and have different objectives. This manifests itself in very different cultures, and we have already had a discussion on one manifestation of culture: time.



The need for employability, however, needs to be broadened out into the academies to ensure that courses are designed to embed employability skills, and that's around pedagogy, the learning environment, and assessment, in a way that's not inimical to academic values, and I think it's possible to do both.

However, enhancing the employability skills takes a partnership approach:

I had experience with an internship programme for many years; one of the problems we have had with placing students in companies was simply getting the time from people in a company to engage with the student, and sometimes that hasn't worked very well and we've had to take people out of companies. So that's one of the things people need to recognise, that we need to make time and space in what we do, and I think maybe we could do a better job in that regard.

The World Bank addressed the higher education authority in terms of the deficits and the future of higher level education, and one of the main points coming out of that World Bank presentation was that students coming out of higher education in the Western world, including Ireland, are wonderful at subject skills but lack the personal skills that are necessary to integrate effectively and quickly into the work environment. They lack the soft skills – problem-solving, negotiation, communication, working in multi-disciplinary teams, and I think we need to re-develop our students along those lines in order to facilitate that. I believe that this can be done without spending too much money, in terms of adopting some pedagogies that are already in existence, for example in the United States for the last 15 years, and that's the whole concept of service learning. Service learning is a pedagogy that is very low-cost. It does require a change in attitude within the universities, within the institutes of technology, but it is possible to use this learning opportunity to enhance students' employability skills.

Another point worthy of mention is the transformation of our indigenous workforce and the impact of access courses and also the impact of the labour market activation programmes. I would hope this is just a start and that the investment in these programmes will continue and perhaps increase. However, there are fundamental changes that have to happen within the labour market activation approach, and that involves more joined-up government departments in terms of the thinking and a more focused requirement for delivery.

Recognition of prior learning in many third-level institutions is regarded as the 'Cinderella' of the institutions, and very rarely gets an outing.

We may need to rethink our programmes and we may need to rethink the time we have students in classrooms versus doing something practical. I fully agree with an earlier point the service learning can be a really important part of any programme, as service learning is very practical learning. We need to produce people who have much more practical and applied activities from the programmes we offer, rather than having them sitting in a class for three or four years.

It is important to note that all third-level institutions are doing more with less, very much so, particularly for the last two years. In all cases, we have significantly more students and less resources.

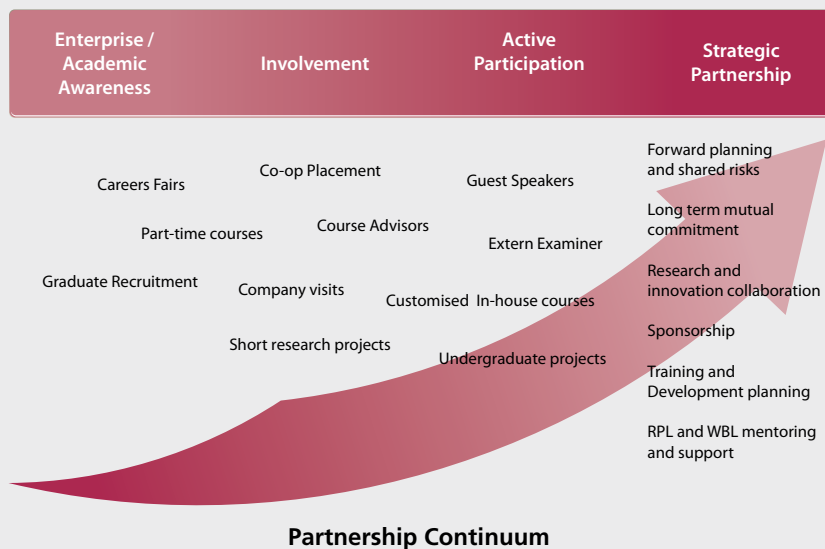
I have to respond to all of the HEIs and say yes, you have taken a huge increase in student numbers over recent years; there has been an average salary reduction of 15% across the public sector, and there has been a 6% drop in staff numbers over two years. The bad news is, it's not getting any better.

We know the demand is growing, we know we've got to do a lot more on flexible learning, and the model that has been spoken about earlier - win-win-win, for student, for employer and for the institution or the state. It is likely that a three-way distribution of cost is necessary.

Another thing we need to look at within the higher education sector generally, but maybe specifically in the university sector, is the reward and recognition system we have, which is driven to a large extent by what people need to do to get promotion. Much emphasis is placed on university rankings, which doesn't necessarily help us in our engagement with industry if we are rewarding and recognising people because of their publication record in international journals.

We also need to talk about reskilling and upskilling and people in the higher education sector who have to re-educate themselves into the new world of work and transform education. We can't be expected to upskill and reskill people without upskilling and reskilling ourselves. So maybe, we should look into our own hearts and ask: *have I got what is needed for the Ireland Inc. of tomorrow, and for the new students of tomorrow?*

So, finally how do we get started on external engagement? Well, in the conference brochure there is a very good graphic that goes from quite passive positioning by HEIs to something much more active that is called Strategic Partnership. It shows a sample of the types of activity that can form the basis for developing strong collaborative bonds that can flexibly meet developing needs.



Two other factors from the enterprise side could include: becoming clearer in stating what is needed and becoming open to things like work placements. It is clear from all of the discussions that there is a strong motivation for engagement. The enablers are there, and the REAP work is touching each and every one of those, as are some of the other SIF projects and the Flexible Learning project. The issue of the recognition of prior learning is critical in the lifelong learning space. I know that there is work being done within the REAP project on that. There is also work for FÁS and NQAI around the recognition of prior learning. If the recognition of prior learning system could be taken and developed as a priority, it could usefully feed into the next section which is how to build on the relationships between higher education and industry. It is a partnership; there are two people in this partnership and certainly from a system perspective we are committed to facilitating that in whatever way we can, but those engagements need to be taking place locally, regionally, and nationally. The real message is to build visibility around what you're already doing and what your needs are and try to bring that closer together.



Session 1: Key Insights:

- Partnerships need *unity of purpose, interdependence* and *honesty* and need to be embedded in a system where HEIs and industry can work together for mutual benefit across a spectrum of engagement;
- Engagement is needed to help to increase productivity and to upskill the workforce in order to anchor and maintain manufacturing industries and consolidate our skills as there is an immediate challenge to re-profile the workplace to benefit from future opportunities;
- There is a particular issue around serving the needs of the small and medium enterprise sector as opposed to large multi-national corporations;
- Consideration must be given to whether enterprise, the higher education provider, the government, or the learner is going to pay for the upskilling of the workforce;
- Upskilling must take into account the existing skill base and be offered in flexible ways including, for example, recognition of prior learning, flexible and blended learning and inclusion of experiential learning through practice and service learning;
- Flexibility and speed of response are really important facets of the business/education interface. These are impacted by structures and management in HEIs, for example in relation to intellectual property, institutional commitment to engagement, staff promotional structures and staff development;
- Companies need to enable engagement by becoming clearer in stating their needs and by working with providers on activities such as work placement, though many companies in crisis mode may not have time to articulate their needs and to invest effort in engagement activities. It should be recognised that organisations of different sizes and within different sectors may differ in their ability and readiness to engage.

Session 2 and Keynote Address: Organisational Structure and Management to Support Partnership Activities

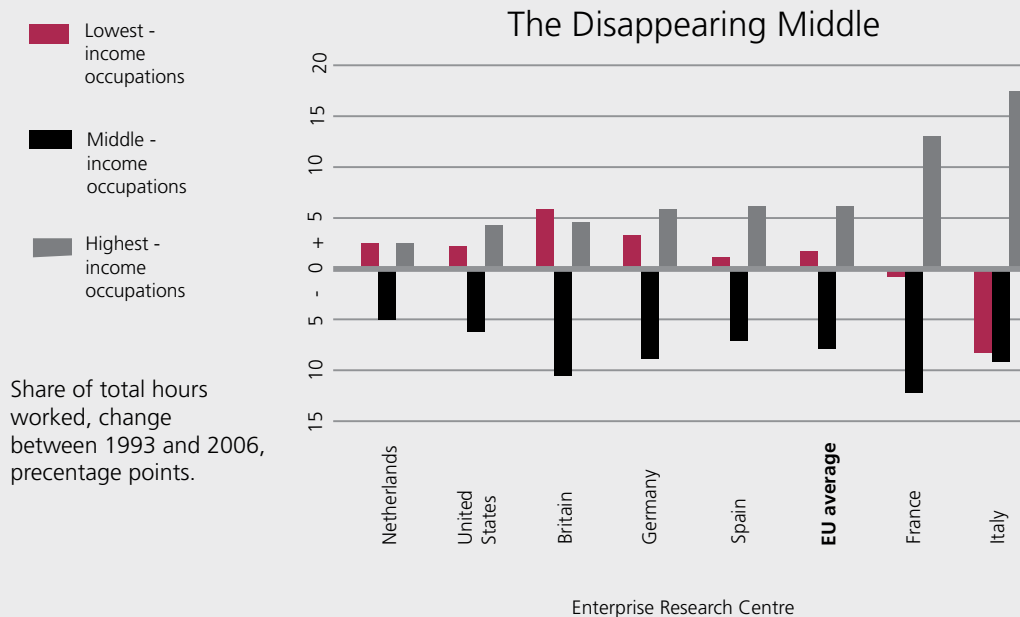
Professor Eamonn Murphy, Director, Enterprise Research Centre, University of Limerick

The focus of why we are here today is an important one; it is to talk about relationships between the individual, the workplace, and the higher education institution. A phrase I frequently use is the *extended university*. The Hunt report on Higher Education Strategy is about to come out, and we are fairly certain in the Hunt report that what we now call Institutes of Technology will be classified as Universities of Technology. So when I use the term 'university' I'm talking about the post-Hunt environment.

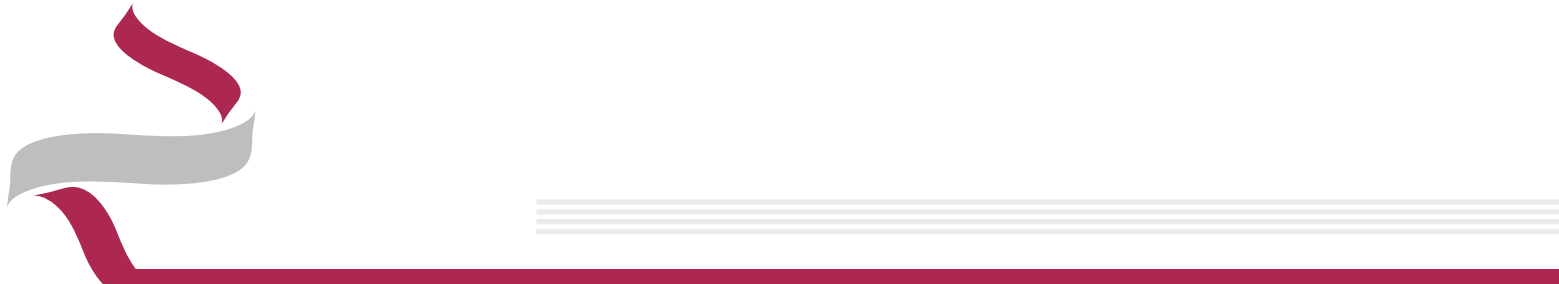


The Expert Group on Future Skills Needs points to requirements for flexibility, individual initiative and judgement, and occupations that are more knowledge intensive. *The Economist* had an article based on 2009 research which dealt with hours worked in the Netherlands, the United States, Britain, Germany, Spain, and it is evident that middle income occupations are disappearing all across Europe.

Need for New Structures: Employability



Source "Job Polarisation in Europe" by Maarten Goos, Alan Manning & Anna Salomons, American Economic Review, 2009



So what has happened? If we take Italy as an example, there is a huge rise in high-skill jobs; and Italy is unusual in that the low-value jobs – hairdressing, cleaning houses – all of those low-level occupations have blossomed across Europe, generally but not in Italy. Here in Ireland, the largest single employer closest to Dublin has 300 graduates employed as technicians, and somebody somewhere has decided that they need engineers, and that those 300 are surplus to requirements. That is what I’m talking about today; these are the middle income jobs that are disappearing. They are graduates of every higher education institution, and they are absolutely superb people, but they are in danger of becoming obsolete. That is the reality. If we look at individual graduates, they need flexible specialisation. Each graduate is responsible for their career. Not the organisation, not society, not anyone else. Each person has to manage their career, and we have to respond to their needs.

I use the analogy of a pair of glasses. If you were to ask me what is the function of the centre I run, and what do I try to do, the function I try to perform is not unlike a pair of glasses. Monks in the monastery cost a fortune to educate. It took years to train them as scribes, and then, in poor lighting and with damp conditions, their eyesight deteriorated, and their productive life, in comparison to their training life, was minuscule. But, the invention of reading glasses transformed the productive life of the monk, and that is what we now want – a pair of glasses for the 300 graduates in that major company that will transform them and give their skills new currency.

This implies a preference for a more inclusive society, and that is my *raison d’être*, that is what I put my energies into, and my drive is for a more inclusive society where those 300 people can be included and be part of a society and not be excluded or forced to emigrate. This is about people, this is about human beings, this is about the kind of society we live in, the kind of values that we espouse as a people. And we, as institutions, must respond to that. This is not an economic imperative; it is a statement of values, an assertion of the kind of society that people want to live in.

Universities & Society Over Time

The emphasis

- Eternity Medieval
- Tomorrow Humboldt 1860’s
- Today is why we are here

Now, we have to ask, why do universities exist? We exist for excellence in scholarship and research and we exist for the individual. In medieval times, the university existed for eternity and that was the reason they were established. In the 1860s, Humboldt brought the university back to tomorrow. And why are we here now? We’re here about today. The emphasis is on today, and now. Tomorrow, education is for a societal good. Today is for professional income; it is to develop the professional income of the individual. Tomorrow is for personal fulfilment; today is for personal gain. Tomorrow is Science Foundation Ireland; today is Enterprise Ireland. Tomorrow is valued; today is appreciated.

The Problem

- Academic community values longitudinal research (tomorrow) and it is the accepted way to achieve academic excellence.
- Today has its own intellectual commitments and its own moral demands (Carr, 1995).

The most advanced car that Mercedes Benz produce - the Gullwing, is a magnificent car. There are advertisements that run right around the world, - two page advertisements in the *Observer* and *The Sunday Times*. As you can see, the advertisement is dominated by Professor Gordon Wagner, and he is working where this particular car was designed. That is excellence in engagement.

Structured Response: The Extended University




London Underground Map

- **Vision:** Destination
- **Mission:** Journey

Individuals need to take charge of their own employment destiny: that is the vision. I'm not talking about undergraduates; I'm talking about mature students, who need a pair of glasses. This is what we must create: excellence today, and this is the solution. This is the London Underground map, and every tube station is a module on a different line, provided by a different institution. The student knows he is at Heathrow, and he wants to get to Liverpool Street – he knows where he wants to go, he's in charge of his own career. He picks the tube stations, he picks the knowledge he wants, where he wants, when he wants. We must decouple knowledge from packages. We must decouple knowledge from institutions. We have no right to place a barrier between the pair of glasses and the learner's future. We have put too many institutional structures impeding access and progression. We need to get the knowledge to the right person in the right format, full stop.

I am not commodifying education, but, I am commodifying knowledge, and there is a big difference. We have to create that vision: there is the destination, there is the journey. We have the technology; and we have the policy, but we do not have a systematic conviction to knowledge transfer, and to allow people to access knowledge freely in any shape or form. Now, there are barriers: situational, institutional, and dispositional, but, we must value excellence today.



Every institution has to commit to tomorrow – and I would argue, has to commit to eternity. There must be a clear emphasis on today, on tomorrow and on eternity; and I would suggest that the patterns should be slightly different. That is to say that if Irish Universities focus 30% on today and 70% on tomorrow, then the higher education institutes will be 70% on today and 30% on tomorrow, but there should be no ambiguity; there must be a clear understanding in the funding, in the application, and what is expected. In extending the university, we have to go back to the original thinking, we have to extend the umbrella, and we have to extend the structures, and we have to create what is needed in that space. And then, we must put individuals in charge of their own academic careers, and we want to create structures and technologies to support and implement that vision.

Finally, we need to delineate, we need to clarify who is responsible where. We have got to decouple knowledge from courses, from progression, from access, and we've got to create flexibility. We have got to create this vision that no matter where you are you can access the knowledge you want from Ireland in any shape you want.



Keynote presentations were delivered by Mike Devane, Chair, American Chamber - Research and Development Working Group, Business and Industry Consultant, Quilly; Prof. José-Ginés Mora, Institute of Education, University of London; and Prof. Eamonn Murphy, Director, Enterprise Research Centre, University of Limerick.

Panel 2 and Open Discussion:

Organisational Structure and Management to Support Partnership Activities

Panel Members:

Dr Maarja Beerkens, Centre for Higher Education Policy Studies, University of Twente, Netherlands;

Dr James Cunningham, Director, Centre for Innovation and Structural Change (CISC), National University of Ireland, Galway;

Professor Patrick Fitzpatrick, Head, College of Science, Engineering and Food Science, University College Cork.

Summary of the initial panel contributions:

Building on the motivation for external engagement, this session sought to address how organisational structures and management support partnership activities. Different opinions were expressed in relation to the management, leadership, and support given by HEIs to supporting partnerships with industry.

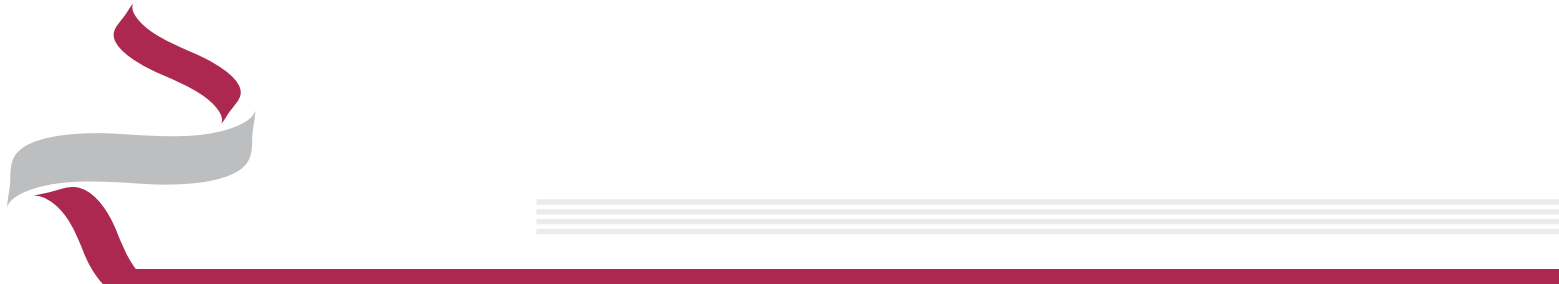
It was observed by panel members that there is some tension between the more traditional role of HEIs and the move towards more engagement. This tension can be observed between the today and tomorrow type of approach as articulated in the second keynote address, and is not unique to Ireland. Panellists agreed that there is no easy answer to this tension, which has been a feature of international debate in this area.

One issue that was raised was the changing management and leadership in third-level institutions. The need for a change in the mindset was clearly expressed earlier in the conference – ‘doing more with less’. Another example is the simple challenge or opportunity for greater interdisciplinary cooperation. It is recognised that third-level institutions are quite peculiar organisations, comprised of academic departments or units with their own strong, separate identities, and to establish more interdisciplinary collaboration is often difficult. There is probably no better driver for interdisciplinary collaboration than strong leadership and vision.

It was very clear from the first session that a motivation for engagement for industry is productivity, jobs and economic prosperity. How does this translate as a motivation for third level institutions? In most cases, the motivation for engagement would be expressed as ensuring the relevance of the educational provision to both the economic imperatives nationally and to the learners’ development needs. But, how is this activity recognised and rewarded within the management structures of the higher education providers?

Measurement is also important as a driver for structural change. There has been a lot of progress made by starting to measure the success of knowledge transfer activities. But how is it measured? It is still very narrowly defined by patents, by spin-offs, and this may not be the most crucial part of knowledge transfer activities. It was already said in the previous session, that there can be an over-emphasis on patents. As industry representatives have pointed out, there are often technology transfer offices that are building barriers in relation to protecting intellectual property rather than really commercialising it and being open about it. In some cases, selecting a particular metric may direct activity rather than measure it.

It is vital, however, to look beyond the economic value of intellectual property. It is also important to look at the societal and scientific reputational impacts that may accrue. There is a counterargument, which suggests that the appropriate way to actually push out research to the commercialisation domain is through the enterprise. Some



academic researchers will argue that for real efficiency in terms of this industry-academic relationship, it is actually the enterprise, from a capitalist point of view, that is best placed and is the most efficient mechanism to exploit technology and bring ideas to market and not third-level institutions.

The significance of engagement in the work of the Technology Transfer Offices, who are perceived as a primary interaction between industry and academia is clear. That model of engagement must be consistent, persistent and well organised. This will have implications for how the technology transfer work is valued, and how it supports academic entrepreneurship within institutional contexts.

In a project funded by the Irish Research Council of Humanities and Social Sciences a national survey was undertaken of all the principal investigators (PIs) that have ever received publicly funded money from both national and European sources. Of those who responded 67% had never worked anywhere other than a higher education institution. This must have implications for the way they understand or can communicate or engage with industry. Less than 10% of them had any direct interaction with an industry partner in terms of pre-research planning stage. Nearly 50% of those PIs surveyed stated that their primary focus was on peer publications. Only 5% of them ever participated in an industry workshop. This has significant implications for the mutual understanding that we seek to create to foster engagement and collaboration across the academic/business divide.

The mobility of people between sectors is also important for supporting partnership activities. Collaboration between HEIs and industry on a short-term contract basis can work, but, experience has shown that more effective technology transfer happens if there are long-term cooperation and collaborating networks. It is only then that there are different aspects of cooperation, for example, recruitment, training, joint projects and so on. The one-time contract research – putting out a call, asking for money – does not deliver the same kind of results as the more collaborative networks and the mobility of staff between the two sectors are vital. It is vital in order for people in HEIs to understand the needs of the industry, and also vital to build up an interest in the social portfolio. This again raises challenges for the human resource management structures for each side of the collaboration.

Again, it is important to highlight the need for a broad range of skills within industry and enterprise. There has been a lot of discussions about different types of skills: technical, social, professional, transferable, generic and career-orientated. In addition, it is crucial to engage students with workplace settings early on, so that they can understand what the needs of the industry are and also to build up their interest in the sector. In order to translate the investment in education efficiently we need to ensure that the variety of skills is developed throughout the undergraduate and postgraduate curriculum, including the doctoral curriculum.

It needs to be re-stated that there has to be absolute clarity of purpose in terms of the mission of HEIs and business. From an industry point of view, the nature of knowledge and the acquisition of knowledge are fundamentally changing. The rapid change in science and technology, which is very much multidisciplinary in terms of orientation, requires a broader skill set than skills which may be specific to certain areas.


Then, looking at the academic side, there is a big issue in terms of the systemic structure of the academic community and environment. There are challenges around funding, but also in terms of how the academic community is organised. So when industry and society are demanding far more multidisciplinary insights into different challenges, do third-level institutions need to respond to that in terms of the way that activities are organised and structured? It is important for students to have a broad understanding of the critical skills that employers require and to see how those skills are developed through their programmes.

Also, HEIs have to stand up and articulate in a very clear, precise, and concise way what their mission is, and not to be apologetic in relation to what they are trying to achieve. One of the major challenges that third-level institutions are facing is the demand for more multidisciplinary or transdisciplinary research that translates out to business and also out to society. HEIs bring value to the economy and to society in a number of ways, but, one of the clear consistent messages is the importance of engagement between industry and academia. It is crucial for both HEIs and industry to work together in a more planned approach that enables and captures the successes and the infrastructures which have been built in order to harness both the economic and social benefits in terms of Ireland Inc. for 2040, 2050, or 2060. It is also important for academics to constantly challenge themselves in terms of the relevance of their mission because every day lecturers go into a classroom they have to be relevant. The applied and practice relevance will enthuse students and develop their understanding of the main area they have chosen to study and work in the future.

So, are there barriers for higher educational institutions in achieving their mission and in creating partnerships with industry, and are these barriers insurmountable? The three main functions of HEIs are: to produce graduates, to provide a service to industry, and research and development. One of the barriers to extending partnership activities with industry is capacity; an example of this would be the number of internship or placement students. In the university sector alone in Ireland it is possible to have 20,000 students on placements so there is a question of capacity. There is also a question of cost, providing work placement is not free, it's a very significant cost to the third-level institution and to the system and it's not straightforward to be able to do that within existing resources. Other barriers include the reorganisation of the examination period and curriculum reform in order to reflect the needs of industry, but, none of those barriers are particularly insurmountable. At PhD level, structured PhDs have been introduced, where students are getting the skills of communication, creativity, innovation, team working and so on. So placement at postgraduate level is becoming more successful, however, the significant barrier to further extending this type of activity is the cost, sheer cost. There is also the barrier of sustainability. It is not enough for HEIs to talk to industry and develop a course to suit their needs and then two or three years later that course becomes redundant and then it is time to do something completely different again. This barrier is not insurmountable, but, there has to be a long-term approach taken to plan for changing and emerging needs.

It is important to again ask, what are third-level institutions for? What should they be doing? If a really radical approach to the role of higher education in society is to be taken, then there is a need for a funding model which is very, very different to the one that currently exists. The funding model should address the inequities in relation to part-time students. So, the funding model is absolutely crucial. If a very radical approach is to be taken, it must be decided what is the role for third-level institutions in the 21st century. Also, in relation to funding, the question has to be asked who pays for courses which are designed for industry, and how much should enterprises pay for these. These costings have to be done on a full economic costing and if it isn't done like that then it's done at the margin, and it's taking resources away from the core business of teaching undergraduates, which is how funding is earned from the state. If it's not done on a full economic costing model, then it will not work and it will not be sustainable.

The current structures are very highly bureaucratic and they are controlled very much by systems which are driven by cultural compliance. In many colleges it actually takes between six and seven years to develop a new degree programme. It takes about a year or two to compile the material, another year to get students into it, and four years to get students out of it. So, between the product design stage and a delivery cycle it currently takes about seven years. Listening to the earlier session regarding ringing up the president of a higher education institution and getting something to happen within the next week simply will not happen within the current structures. So, it is important to come up with a way that can facilitate fast reaction. And the only way that can really happen is



that within each institution there would be a unit which would be put together to target four or five things every year, where a new thing will happen, a new programme will develop, a new initiative will take place. But, in order to do that it is going to have to be funded by whoever the programme is serving because there are not funds within the HEIs to do that. Companies need to be approached and they have to be asked to fund at least part of the development of such programmes, because otherwise it is not going to happen.

Open Discussion Session:

Arising from the panel presentations a number of questions and comments were posed by delegates and these are summarised below.

It is important that the voice of smaller companies from a wide variety of industry sectors is represented in partnerships with HEIs. The Enterprise Platform Programmes and Enterprise Development Programmes that run within the institutes of technology and the universities are an example of partnerships at a very basic level. They support people with business ideas, who ultimately want to start up a business venture. They go through a period of about twelve months within an academic institution, they're provided with academic and business supports and the majority of them set up their own businesses. They then go and they incubate within the academic institutions, and they link in with the technology transfer offices with a view to research and development, innovation, commercialisation and so on. Upskilling and cross-skilling of employees in these various organisations is very important.

Most of these small companies are struggling to survive particularly within the last year or two. They've got to the stage where they've economised, to the point where they've cut everything they can cut, where they're as efficient as they can be, and we may have lost some companies in the process but the majority of them have survived. They are now going from survival to moving forward. How will they do that? They need to be doing it in two ways; they need to cross-skill and up-skill the remaining staff. People need to be cross-skilled in elements of other jobs to allow that job function to progress.

Companies realise that they need to find practical solutions, and I was impressed today by the number of academics who were talking about practical solutions.

We need to find solutions for the companies to be able to move forward, linking with the academic institutions for their training and development needs. Companies are now also valuing academic accreditation in order to validate the training and learning and to give value to both the academic institution for the work they're doing and to the individual employee who is taking the course, whether they are an undergraduate or a postgraduate.

An issue that a lot of the companies are finding is they may have people in employment that they need to up-skill, but, these people are so busy doing their day-to-day work they don't have time to be released to attend college. So, the idea of online learning, blended learning, and RPL all need to be looked at. Learning in a practical way that allows people to still work, pay their bills, and allows the employer to have somebody who is being upskilled and also allowing the academic institution access to these people is a win-win for everybody.

There has been a lot said about the need for clarity in relation to the mission of different institutions and that is absolutely vital, third-level institutions need clarity and differentiation in their mission. But clarity isn't going to achieve everything. Third-level institutions need to look at ways of achieving efficiencies, and they need to get below the level of the national system, of what's practical and feasible, in terms of interactions between institutions. There is a need to look at the possibility of regional clusters that would recognise the autonomy of institutions, and would identify the scope and breadth of expertise across the ensemble of institutions within a region and would identify opportunities for cooperation and avoidance of duplication. But in doing that, it's important to also recognise the appropriate metrics for performance, if funding is going to be performance driven in the future. And we are struggling between metrics that are, on the one hand, trying to reflect international reputation, and on the other hand, local engagement. To date, the metrics of performance came to be largely driven by the needs of international reputation. It is time to look at rebalancing what is appropriate for Ireland, in terms of what our higher education system can contribute, and particularly what it can contribute in different regional systems within Ireland. It is clear that the needs of the east coast are different to those of the north-west, or the south-west, and so on.

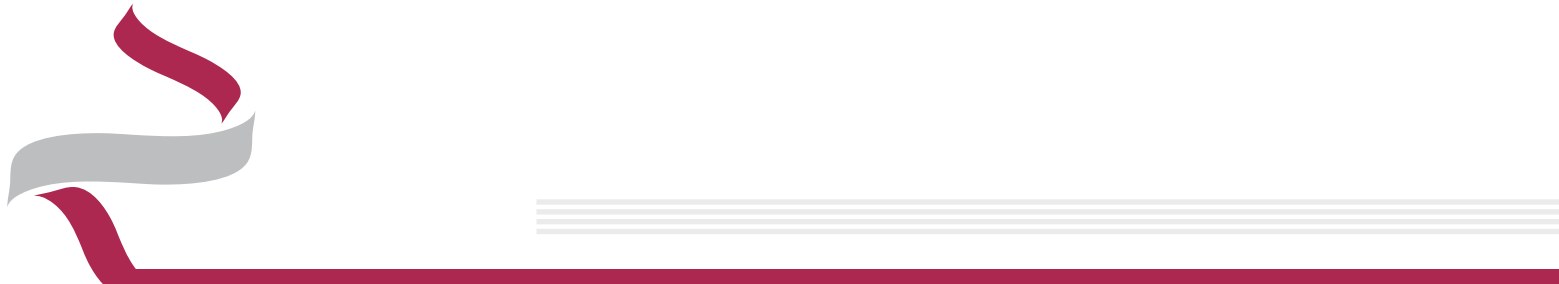
Turning to industry, and industry has been talked about in an aggregated fashion. But, as in the higher education sector, we need to disaggregate it. There are different types of industries with different kinds of needs, and industry is not confined to the private sector. The industry concept, I think, should also embrace the public sector. There is scope for considerable change within much of our public sector, whether it is the local authorities, or government departments, or various support agencies which are located in many areas around the country. But, we tend to ignore that side of it. They should also be brought into discussions about how our education institutions can interact with meeting the skill needs and the competencies to effectively drive economies where they themselves are key players. The economy is not just driven by the private sector and the HEIs. There are lots of others that are key agents and they need to come into that discussion.

So it's back to the question: how do we organise for more inclusive engagement? My suggestion would be that we identify the key players within each of the regions, we put together an overarching light-handed steering group that would identify the contributions that each can make and we look at how to avoid duplication and maximise the efficiency amongst those we have got. The solution, therefore, is to create together a single internationally recognised brand. One of the questions, however, is who are the key players?

You may find that in one of the HEIs, there may be multiple key players and perhaps even competing with each other for the attentions of maybe the same enterprise.

The HEIs need to work to ensure that there is a single point of contact for enterprises to interact with them in the first instance.

An example of having one point of contact between industry and HEIs may be seen in relation to work placements. Work placements are one of the early interactions for industry and the higher education sector. Some of the recent research done by the REAP project in relation to work placements has illustrated the extent to which individual HEIs are approaching the same enterprises offering different things, different time slots, different expectations with regard to payment, etc.



You can have one employer being visited three or four times by different representatives of different courses in the same institution, and in a region you could have one employer being visited by three or four different HEIs who are offering different placements.

This shows a complete absence of consistency, and I think this is one area where HEIs need to get a much greater degree of coherence, in terms of interaction with employers, so that we're not going out offering very different things, or asking for different things, and thus confusing the market.

The theme of this session is organisational structure and management to support partnership activities. There is a case for looking at how we spend our resources to support partnership activities:

Some academics are still wedded to the belief that most of what students learn, they learn from their old master who stands in front in the lecture hall, or who directs them to the sources of learning.

There has been an explosion in knowledge in various disciplines over the years, and I don't think that the education system or institutions have dealt well with that. I have been through many course revisions; course reviews and so on, where there has been no shortage of proposals to include new content, new theory in undergraduate programmes. There are very rarely proposals to remove anything from the programme and in relation to what was talked about this morning partnering with industry, and with work places, it is important to bring other dimensions into the curriculum, other experiences, other learning.

It is important to change that mindset, and to go back to the first speaker this morning, who values knowledge that is acquired in other ways, in work places, and in other social environments. Other areas such as the recognition of prior learning need to be developed. One of the problems we've encountered with recognition of prior learning is everybody understands how it works and it's a wonderful concept, but how do you scale it in the third level institution? It's very easy to deal with thirty students in a school or in a faculty who are engaged in a prior learning situation where it's been accredited, but what if you're dealing with 300 or a thousand students across the whole institution? It becomes a totally different problem.

The institutions need to spend more resources on mentoring, on assessing and evaluating learning that takes place in these less traditional spaces, and substituting it for some of the things we currently do. In the first session this morning, HEIs were told that they needed to be more dynamic, to go out to industry and ask how they can help, and that is quite a challenge. The whole purpose this session is about how to support the development of industry academic partnerships. There's much more talk now about blue collar work; and that might be a reflection that a mature society needs a more rounded view in terms of its approach to education and upskilling people. Then the question is, how do we get to upskill our blue collar workers?

This session is probably the toughest one. It asks how we are going to support partnership activities. The last session will focus on how to measure success in engagement activities, and we obviously need to have metrics to measure that, but the tough question is how do we manage and support all partnerships. We have fantastic resources, in terms of our academic institutions and staff and support structures and Enterprise Ireland and so on, but we need integration. We need a partnership to solve the problems and we know what the problems are.

In this session what we are trying to do is identify and come to agreement in terms of what structures are in place and look at those that need to be better resourced and see what new structures need to be put in place in order to support external engagements.

One of the things that should be looked on in a very positive way is the National Framework of Qualifications, which is an outcomes based qualification which enables us to develop programmes transfer learning between institutions in a very flexible way. Barriers that exist are sometimes in our heads, so it is critical to look at what are the enablers and what are the barriers. A real barrier that exists, however, is if third-level institutions want to source experts in a particular area to act as guest lecturers:

These people may be active in industry and the most relevant people to deliver the lectures, but, how do we compensate these people? Third-level institutions are restricted to seven hours at the part-time rate within one academic year.

We also have barriers with regard to regulations, whereby you cannot give exemptions in the final year of a programme. Sometimes the final year of a programme is only offered on a part-time basis, and colleges are restricted in how they can give recognition to prior learning, or even prior accredited learning in that scenario. Having looked at those barriers, there are however, great opportunities to address the extended university vision, but, it is also important to understand that what goes on within a higher education institution is what makes it unique. Third-level institutions are complex, multifaceted, and academics are wilful, but academics are also entrepreneurial. Academics want to do different things. You may need some enabling structures, but by and large, people will respond.

Finally, it is very difficult to come up with one formula, which shows that if you do certain activities you will be successful. So, beyond some relatively straightforward aspects, there is not much that can be said:

The straightforward aspects include commitment from leadership and senior management, vision, and an environment which does not inhibit the creation of partnerships. Of course, excellence is needed, and not excellence in terms of university rankings, but excellence in terms of up-to-date, well-qualified staff, and good up-to-date knowledge in the field.

All partners are looking for a formula to be successful, but, I'm starting to doubt that this formula even exists. Every partnership probably finds its own way, but, it often seems to be a matter of luck.



Session 2: Key Insights:

- There is some tension between the more traditional role of HEIs and the move toward more engagement or an 'extended university' in part because universities exist for excellence in scholarship and for the individual;
- We need commitment from leadership and senior management, vision, and an environment which does not inhibit the creation of partnerships. In many colleges it actually takes between six and seven years to develop a new degree programme – time is critical in engaging with companies;
- Facilitating staff exchanges between higher education institutes and enterprises could provide a useful mechanism for developing a better mutual understanding. A recent survey indicates that the majority of principal investigators who received research funding had never worked anywhere other than a higher education institution;
- The National Qualifications Framework which is an outcomes-based approach enables us to develop programmes and to transfer learning between institutions in a very flexible way. This will also facilitate the validation of learning regardless of when or where it occurs ;
- Flexible responses encompassing online learning, blended learning, and RPL all need to be looked at in order to value knowledge that is acquired in a variety of ways, in work places, and in other social environments;
- Companies are now also valuing academic accreditation in order to validate the training and learning effort within their organisation;
- The HEIs need to create a clear single point of contact for enterprises to interact with them in the first instance. There are different types of industries with different kinds of needs, and industry is not confined to the private sector. Engagement should also embrace the public sector;
- Where intellectual property is a barrier to engagement perhaps the enterprise is best placed to exploit technology and bring ideas to market;
- A more inclusive society requires us to respond to individuals' changing development needs and to ensure that they have the requisite skills to remain relevant within the changing society while individuals need to take charge of their own employment destiny. There are significant funding inequities in relation to part-time students;
- Companies need to be actively approached and they have to be asked to fund at least part of the development of focused, customised programmes, because otherwise it is not going to happen.

Session 3 and Keynote Address: Measurement of Success in External Engagement Activities

Professor José-Ginés Mora, Institute of Education, University of London

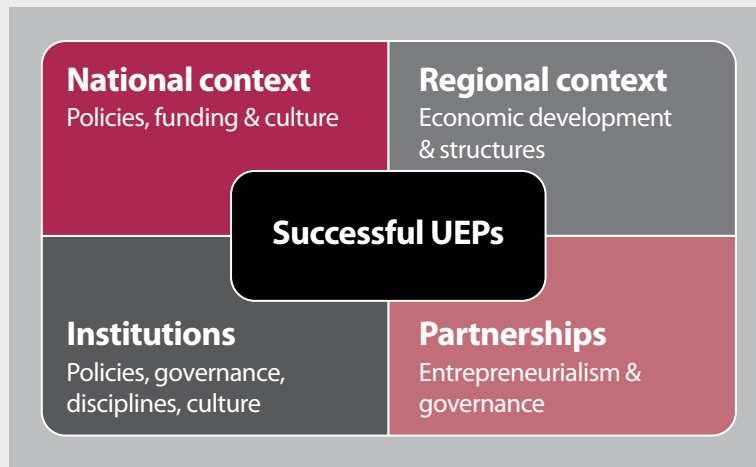


I am afraid that I cannot tell you how to measure the success in external engagement activities. It is very difficult, and I am not sure if I know what a successful or unsuccessful university business partnership is. I can, however, present you with the results of an EU project dealing with the success factors of partnership, Good Practices in University – Enterprise Partnerships (GOODUEP). Also, based on another European project, I'm going to present to you some ideas about how to measure external engagement activities. Measuring external engagement activities and also assessing the impact or the success of these partnerships is quite a difficult task.

The main reason why it is difficult to answer these questions is that these activities in universities are long-term activities. If you have a partnership with a company for doing business, the success or not of this joint venture is easy to assess. If you are benefiting, it is a successful partnership. But, most of the university activities have a long-term dimension, and this is difficult to assess, for example, how successful is the new lifelong learning course or what is the real effect on the labour market in the long term? In the short term, you can say, there are a lot of people enrolled, this is a successful course; but this is not the real impact of this course. You have to look at the long term.

I would like to explain the GOODUEP project. The GOODUEP project was a project run by six European teams and we analysed University Enterprise Partnerships (UEPs) in 18 European universities. We tried to analyse the government, the structure, what was behind the partnerships in order to identify the success factors, and explain why some of them are successful and some unsuccessful. We considered all kinds of HEIs, all kind of enterprises, public and private, and all kinds of activities. We analysed very diverse activities ranging from sports activities to cultural activities, and technology transfer. We had a very open approach. Our framework was this: we believe that successful UEPs were related to the national context, for example, national policies are not the same for developing partnerships in Germany or in Italy. For instance, in Germany there are clear policies for supporting this kind of UEPs; this does not happen in Italy. Also, the funding is not the same, for example, in Germany there is 2.5% of GDP invested in research and development, whereas in Poland it is just 0.6%. It depends also on the culture of the country. From a cultural viewpoint, the relationship with partners is not the same in the UK or Poland.

GOODUEP Framework



The regional context is also important. It is not the same developing a UEP in Northern Italy or Southern Italy. The institutional policies and the government of universities in much of continental Europe is so heavy that it is difficult to develop UEPs. I think that you are in a better position in Ireland. But also the disciplinary approach is important, for instance, in Valencia we have the University of Valencia which is 500 years old, and we have Valencia University of Technology which caters only for engineering and architecture. The capacity of the Valencia University of Technology for developing UEPs is far higher, because it is a different discipline culture. Success also depends on the partnership itself and the level of entrepreneurial engagement in the partnership. It is a very complex map.

I am not going to describe the project in detail; I am just going to present the conclusions. I would like to add that after in-depth analysis, at the second stage; we selected ten cases of good practice partnership. Some examples of these cases included the Integrated and Dual Study Programmes in the University of Applied Science in Cologne – this is a bachelor programme, a joint programme between this university and the German railways, the Deutschebahn. So it is really a joint programme for preparing the future employees of the German railways – a clear case of partnership in the area of teaching.

Another example is the case of Santiago - a financial company for supporting all kinds of joint ventures between universities and companies. It is extremely successful, it is a big company, probably the most important company for joint ventures in Spain – and now there is a branch in Brazil, and in Chile. So it is becoming a very, very dynamic institution. Other partnerships are more technology-oriented, and all the rest are based more on applied research.

So, what did we conclude from analysing these ten cases? Well, there are different types of governance structures, different types of partners – in one case it is with a big company, in another it's a foundation, in other cases it is the government, there is a diversity of cases. We asked them to illustrate what are the success factors behind the partnerships. Our results are based on the answers that we got from an international team who visited each of these ten partnerships.

Main Traits of Partnerships



	Type	Partners	Functions	Success Factors		
Imt (Kassel)	Institute	SMEs	Apl. Research	Leadership	Innovation	Trust
Isp (Cologne)	Consortium	Enterprises	Teaching	Entrepreneurship	Innovation	Trust
Ibv (Valencial)	Institute	SMEs, Reg. Gov.	Apl Research	Leadership	Flexibility	Innovation
Unr (Santiago)	Consortium	Enterprises	Financing	Leadership	Flexibility	Trust
Ismb (Turin)	Institute	Foundations	Apl. Research	Leadership	Funding	Innovation
Umh (Maastr.)	Company	None	Management	Entrepreneurship	Flexibility	Trust
Ken (Twente)	Sc. Park	Reg. Gov. Enterp.	Apl. Research	Leadership	Funding	Trust
Amf (Proxan)	Sc. Park	Reg. Gov. Enterp.	Apl. Research	Leadership	Funding	Flexibility
Lih (Hull)	Institute	Enterprises	Apl. Research	Entrepreneurship	Flexibility	Innovation
Uhh(Hertsf.)	Consortium	Enterprises	Apl. Research.	Entrepreneurship	Benefits	Trust

Have a look at the first column: it illustrates the importance of leadership and entrepreneurship. In some cases, where leadership is highlighted, it was because the whole partnership was based on the leadership of one guy or two guys, no more than that. In some cases, like Cologne or Maastricht cases, it was an institutional leadership, so it's not exactly the leadership of one person, but it was more an entrepreneurial behaviour of the institution. But leadership and entrepreneurship are the key factors behind almost all successful UEPs.

A further important characteristic is innovation, that is, the capacity for doing something interesting, for companies and universities. Flexibility is also important. Mostly in European continental universities, if you do not have a flexible institution it is quite difficult to develop these partnerships. Funding is also a factor; in some cases there is a special way of funding from government or from foundations that facilitate this development. You also need trust between both partners. So, in summary, you need leadership, entrepreneurship, flexibility, innovation, and trust. This is just a very simplified description of the ten cases.

The most important conclusion of the project, in my opinion, is the great amount of UEPs that we have found in European universities. Three years ago, at the beginning of the project, we had not selected specific universities; obviously it is not a random selection of European universities, but, we went to regular universities. It is really amazing to see the amount of activities that universities are developing in Europe, far more than we believed before starting this project. But on the other hand, there is the great variety of approaches - no two UEPs are similar, each one is different. Obviously there is a diversity of approaches because of national, regional, economic differences, and the people involved, and so on. Most initiatives are to a great extent based on networks of individuals with an entrepreneurial vision, and it is only after time that institutions take on this initiative and certain levels of development occur. So at the beginning, it is individual initiative, therefore, it is extremely important to support academics, because behind all these initiatives there are entrepreneurial academics.

Obviously the role of public authorities or private donors is important, if you want some money to start the UEPs. Again, I need to emphasise that mutual trust is also important. Flexibility for academics is also important as academics have very rigid duties, and the working life of academics is extremely linked to bureaucracy; it is difficult for them to move quickly. Additionally, universities need strong innovative points, something to sell – but not necessarily in research, and not necessarily in high technology. For instance, in one Spanish university, we found a company devoted to archaeology, with 128 employees working in archaeology. When we talk about UEPs people think about high technologies, but not necessarily!

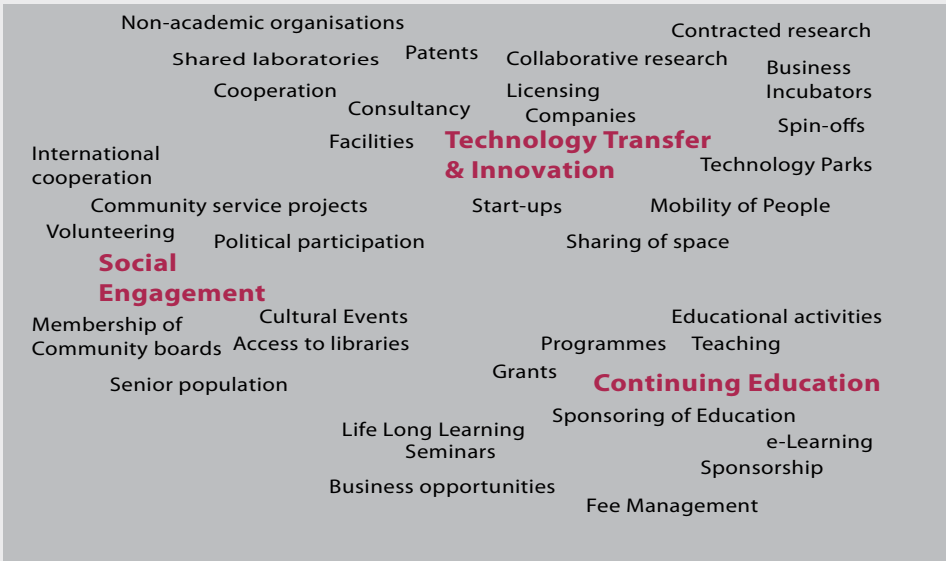
There is also a lack of information about UEPs, but it is because, to some extent, academics are still reluctant to show their involvement in UEPs. Academics, for example, are proud of their publications and they are willing to put their publications out there, but if they have a contract with a company, they are not necessarily highlighting this. There is some reluctance from the academic world to present activities such as making money. In some cases, the objective is precisely to hide these activities.

Overall, there is no agreement on the standard for measuring partnerships, and we lack a systematic approach. If you have a different kind of partnership everywhere, in every institution, in every country, it is difficult to find a framework; it is difficult to find measures for everything.

I am going to finish with another project that we are doing now in cooperation with the Dublin Institute of Technology, just to illustrate this problem – the problem of agreement on standard indicators for measuring not only partnerships but also other activities. This is the programme on European indicators and ranking



methodologies for university services. The idea is to find out indicators for defining third mission activities and then to create a methodology to measure these kinds of activities. But, there are many activities, thousands of different activities in European universities, so the problem is what to do with all these third mission activities that universities are developing? So in our group we have decided to cluster all these activities in three groups, what we call three dimensions: the first is technology transfer and innovation - this is the most traditional. Continuing education is lifelong learning facilitated by the university - it provides an additional pathway to learning.



Third Mission: Three Dimensions

What we are doing now at this stage of the project is that we have the three dimensions, and then for each dimension we are defining the processes, and for each process we define a long list of possible indicators. We now have a list of about one hundred possible indicators for defining the processes for each of the three dimensions. Then we analyse with experts, which are the relevant indicators; and then in the next step we will propose these possible indicators to universities and decide which indicators are usable and which are not. The final part of this project is to have a list of possible, relevant and fixable indicators for measuring third-mission activities for success. As I said previously, this is not so easy. To give you an example of what we understand by processes in continuing education, if you have a centre of continuing education, you are doing many things and you have a list of processes. For instance, for the first process which is – Analysis of the Demand and Curriculum Design – we have defined a list of six indicators for this process. We have the definition of each indicator, and now we are sending this to the experts, and using Delphi methodology we will try to separate which are the relevant indicators. So, this is where we currently are; we are in the process of defining and refining the relevant indicators.

If you would like to see the final report of the GOODEUP project, it is available at: www.gooduep.eu

Panel 3 and Open Discussion: **Measurement of Success in External Engagement Activities**

Panel:

Dr Mike Murphy, Director and Dean, College of Engineering & Built Environment, Dublin Institute of Technology;

Dr Richard Thorn, Director, Flexible Learning and Research, Institutes of Technology Ireland;

Lewis Purser, Director, Academic Affairs, Irish University Association;

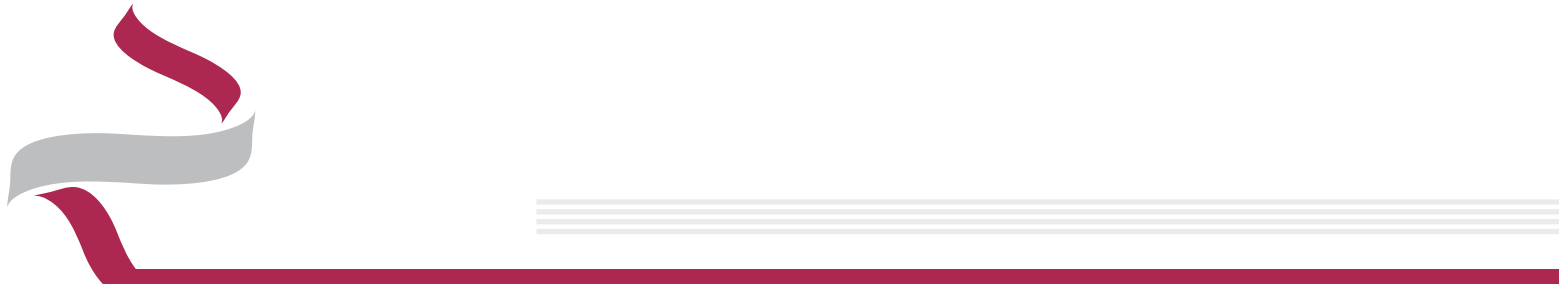
Muiris O'Connor Acting Head, Policy and Planning, Higher Education Authority.

Summary of initial panel contributions:

Within higher education today, the topic of the measurement of institutional performance continues to grow in importance. A number of well-known university ranking methodologies are published. Criticisms of these rankings are many, and valid, but these rankings are clearly addressing an information need on the part of the readers, i.e., the desire to know how one university, by some measure or other, ranks against others. The fundamental problem with these rankings is that they measure what they can measure, rather than what should be measured, and then an arbitrary ranking methodology is applied against the measured data. It is not the purpose here today to argue the point of whether such assessments are intrinsically good, rather the question that needs to be addressed is whether and how the measure of institutional performance should be broadened to include third mission activities.

It is important to realise that only measuring universities' first and second mission activities – those of teaching and research – is insufficient. The third mission activities of the modern university represent both vital and necessary activities within the university, and they are broader than simply engaging with employers. Measuring the quality of third mission activities, however, presents challenges.

Since 1990, when Paul Romer published a landmark article, economists have collaborated in developing the theory of growth that puts knowledge, and not the traditional measurements of land, capital, labour or natural resources at the centre of economic changing progress. Consequently the 21st century economic paradigm has shifted towards putting knowledge first. For Ireland, Europe, and the world, increasingly, this means connecting higher education systems more closely to economic development strategies. From a policy perspective, therefore, the aims of a publicly funded university within such a higher education system should be in pursuit of the benefits of economy and society.



Traditionally, university activities have delivered on their aims through their two principal activities of teaching, i.e. creating an educated population, and research, i.e. creating new knowledge. Now this new knowledge economy is making the traditional academic first and second missions ever more important, however, it is also clear that they neither sufficiently encompass, nor describe the activities in which today's universities should engage. Schafer and Wright, for example, observed earlier this year that HEIs are anchored in their communities and increasingly, in a knowledge economy, act as anchors for community development. University leaders increasingly see that the community environment, has the direct impact of the marketability of their institutions as places to study, to work and to invest in. So, in other words, by engaging the community, the institute is made to look more attractive. Partially for this reason there has been a move towards recognising and acknowledging all the other activities of the university. These include the exploitation and dissemination of creative knowledge and capabilities into non-academic environments, academic activities such as public outreach and dissemination, community engagement, partnerships with employers, continuing education, knowledge and technology exchange, and international cooperation, or services that demonstrate the university's interaction with society.

Following on from this point therefore, the question arises as to what should be the aims of the university or, should we say the modern university?

- ...or the research-led university...
- ...or the research-informed university...
- ...or the practice-led university...
- ...or the enterprise university...
- ...or the extended university?

There is, and should be, diversity in higher education:

Ethos, vision and goals of universities may be quite different, and both universities and societies will benefit from different universities pursuing different missions.

There is a concern that the narrow rankings, that are used, for example by the *Times Higher Education* supplement, where the focus is on research intensiveness, will tend to drive coherence in HEIs, rather than a diversity.

For the complex world that our students live in today, we must educate active, rigorous and flexible individuals, rather than skilled workers for pre-established jobs. So, the third mission activities of the modern university represent both vital and necessary activities within the university, and they are broader than simply engagement with employers. But, how do we measure the impact of the university engaging such third mission activities? The problem with measurements used for university rankings is that often the measurement is quantitative only, and the qualitative is ignored. Yet the qualitative responses are those that most often suggest how things can best be improved. A sign that hung in Einstein's office noted "Not everything that counts can be counted and not everything that can be counted counts."

A key factor in third mission activities is the quality of the relationships the university builds over time, with community partners, including employers. Such a rich relationship can lead to the development of multiannual, multidisciplinary learning and research projects. An example of this is a project in DIT which has been ongoing for many years with Enable Ireland and Microsoft. Recently, the general manager of Microsoft Europe, Middle East, Africa, – came into Microsoft headquarters in Ireland and presented an award to a third-level student who had

designed and developed a wheelchair that facilitated the standing of people with disabilities. And again, that has come from a multiyear engagement with the active support of Enable Ireland and Microsoft and DIT. But how is the value of that quantified? It is very, very difficult to quantify, but surely there should be some kind of measure of the value to the third-level institution and the value to the wider society.

A United States scholar, Professor Ed Zkowski, has championed community learning as a fundamental underpinning of the modern university, and he has observed that

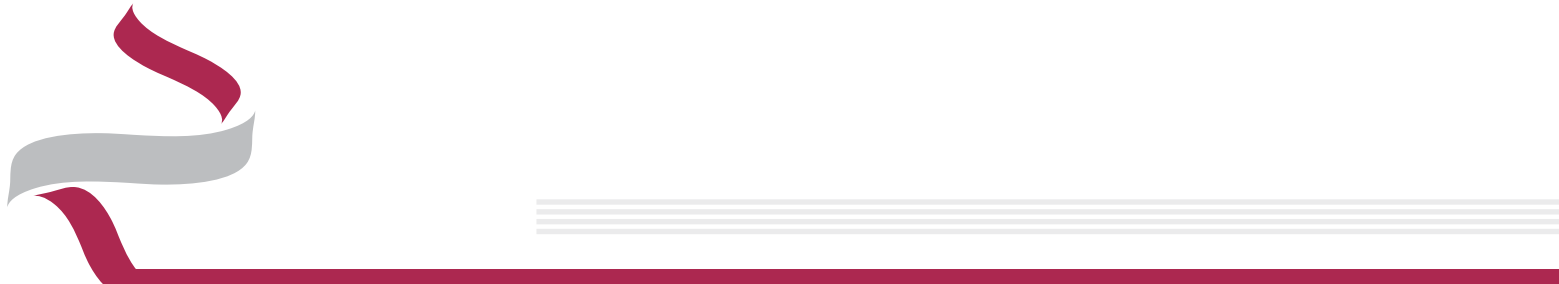
Over the last fifteen years, much has been written about the need to rethink the role higher education can and should play in building a diverse democracy. A democracy whose graduates are not only capable of participating successfully in knowledge based economy but also of assuming their responsibilities as citizens in an increasingly interconnected world. Engagement points beyond student academic abilities, to describe the degree to which all academic activities have succeeded in creating educationally and socially productive partnerships, with community based organisations, especially organisations that address needs not met by private sector interests.

The challenge with measurements is to broaden them significantly, to enable and encourage diversity and excellence within university missions, but yet not so broad as to provide little insight and value to any stakeholders. This in turn could lead to the concept, not just of a research-led university, but perhaps a third mission-led university.

In relation to all of these activities two projects which deserve special mention are the Strategic Innovation Funded *Education in Employment* project and the *REAP* project. Both of these projects have made a significant contribution to our thinking and understanding of engagement between third-level institutions and industry. Most people understand the primary task of third-level education which is teaching, as it is easy to understand how to measure this activity in terms of retention rates, graduation rates, student diversity indices and so on. The second task which most people agree on is the traditional research task, and this is a relatively more recent phenomenon, really only since the beginning of the industrial revolution. But, notwithstanding the fact that this is a relatively short period in the lifetime of institutions which are hundreds of years old, again it is reasonably well understood in terms of how it is measured. It is sometimes contested in the detail, but people understand the language of publications, citations, patents, licences and so on. So, again it is important to park those two activities for a moment, if we want to concentrate on measuring external engagement activities. These first two tasks could be described as the bread and butter of the rankings that are so much talked about.

It is only in the last fifty years that the third task which we are discussing here today has been recognised as an appropriate activity for HEIs, as it is complex, it is multi-faceted, it is not easily described, let alone measured. It is important to restate much of what has been said already to emphasise the importance of higher education and industry partnerships. The recent iterations of the Carnegie classification system, and the decision of the EU to consider diversity and ranking from a multidimensional perspective are developments which suggest that the policy makers are now starting to take this seriously and that means that the higher education sector is going to have to listen very carefully and help to come to a common understanding of this newer type of engagements.

The forthcoming higher education review is likely to require an even greater response from Irish HEIs, and in particular, the institutions response to third mission activities. So it is important for third-level educators to get their heads around all of this very, very, quickly. There are two choices in the way third-level institutions approach the evaluation of the measurement of these activities. There is the use of the traditional peer evaluation process,



whereby an institution carries out a self-evaluation, and then a group of national and international experts are wheeled in and there is a judgement made. All academics are familiar with that process, as it works reasonably well, and you end up with a result. It will not convince policy makers that there is a lot being done, which means that it is necessary to come back to systematising the way third mission activities are described and measured. First of all, the typologies need to be agreed on, and the ranges of typologies that can be used for measurement are phenomenal. When the typologies are agreed upon, then the appropriate measures need to be agreed, and there are potentially hundreds of them. Some ground rules need to be agreed on, for example, everybody must be very clear that institutions must be measured against their own mission. There is no point in saying to an institution that is a research-led, or wants to be research-led, or came from a research-led culture, that it is going to be measured on third mission activities.

So measurement against the university's own stated mission is critical.

It is also important that all of the information must be easily collected. Institutions provide endless amounts of data, so there is no point in coming up with something that is not easily collected. Also, it is critical to remember that it must be within the power of those being measured to have some power over them. There is no point in putting measures in, and this can be seen with some state agencies, where you are going to be measured on something that you have no power to control, which means that in advance, the typology and the measurement must be agreed as being appropriate to mission, and being appropriate to the nature of the institution.

It is also important to investigate the relationship between graduate education, doctoral education and relevant stakeholders and relevant partners. These are not new issues, and these issues are not going to go away. It is interesting to note that over the years, throughout Europe, the European commission and a number of European industrialists believe that universities today have no choice but to engage in constructive dialogue with their stakeholders. The traditional position and structure of the university are at risk, and those universities which do not commit themselves to open and mutually beneficial collaboration with other economic, social and cultural partners will find themselves academically, as well as economically, marginalised.

There has been a lot of discussion today regarding different types of partnerships. But, we need to come back again to the question of how we are going to measure these partnerships. We have to look at these partnerships from an institutional perspective and how these fit into the mission of third-level institutions, and from an industry perspective we need to look at how they might expect third-level institutions to respond to their missions. We can go through a range of issues that might be beneficial to a third-level institution, for example, enhanced reputation, diversification, income etc, but, if we come down to the bottom line in a number of cases it is probably all to do with quality. The quality of what the institution is trying to deliver, and its relevance, for example, how useful is it, how does it help our graduates to get jobs, does it help improve our research, does it help solve societal problems etc. If we look at those two things – the partnerships are designed to improve the quality of what we do and the relevance of what we do; and maybe those are the same fundamentally, but, how do we then approach them?

There is a whole menu of possible activities outlined in the partnership continuum diagram which we all received this morning, and there is a huge range of types of possible interactions, and external engagement type activities. Many other projects give us further typologies of such activities.

What we have learned, however, is that one size can't fit all and not everybody is going to do everything.

There will also be different interpretations of what successful external engagement is and what relevant external engagement is. There will also be different definitions of the success of that engagement. These will very much depend on an institution's mission, its perspective, its core activities, and how external engagement ties into those. Today, we have talked about how the recognition of prior learning can certainly contribute to achieving some of those successes. We had suggestions also about the need for a regional approach to strengthen capacity for external engagement. We have also talked about the difficulty in finding any sort of standardised or conceptual framework, in which to evaluate or in which to place such partnership. Many of the similar underlying success factors, however, such as commitment, vision, and a permissive environment allow such things to take place.

A suggestion would be to look at how third-level institutions could be rewarded for fulfilling mutually negotiated elements within their mission. At the moment, in the university recurrent grant allocation model, as negotiated with the HEA, there is a space for a performance related funding element. Unfortunately that space was never explored and filled, it did however, get a lot of support from senior university management at the time. But, with the different interpretations of how the performance would be measured, and the start of a serious decline in the overall resources, the 5-10% which might have been allocated as a performance-related element of the model was suddenly being swallowed up by 5-10% annual reductions in the model. There are, however, still possibilities to explore, if partners came back to the table to see how that part of the model could be used to reward institutions for fulfilling mutually negotiated elements within their mission. At the time, however, there was no iteration of national need and it was very difficult to say how that would be measured over a five to ten year period. Again the focus of this session is to look at how third-level institutions can be steered or can be assisted for external engagements and in particular how measurements of success can be put in place.


The challenge for the future is to build on the good relations between HEIs and enterprise. The priority should be to complement this very healthy engagement at the highest levels with more routine, proactive, nitty-gritty, two-way engagement at operational level and within regional clusters.

We all recognise in a knowledge society there is huge potential for HEIs to impact on national and regional competitiveness, and to play a key role in the development of knowledge clusters and networks at local level.

The benefits for the institutions are very obvious, and they are very multifaceted but one of the most important benefits is to continually ensure and refine the appropriateness and responsiveness of the services being provided by HEIs.

There are reasonably straightforward ways to quantify or compare levels of engagement based on existing data such as the student profile in institutions including for instance the percentage of flexible learners, evening courses, part-time learners, open and distance learners. Another indicator might be the percentage of the student population that were mature learners. Other indicators might include the approach to professional postgraduate qualifications. Placements and internship opportunities for students and the accreditation of civic engagement and service learning are also good measurements of student engagement.

It is also necessary to look at the staff profile if we want to get a sense of the intensity of engagement, for example, as we heard earlier, getting people with significant industry experience in as guest lecturers and the extent of the external input into curriculum design and review of programmes. In relation to research, the existence of joint research partnerships, the level of intellectual property released, joint publications with people from enterprise or



people from community development, and the level of contracted research, and problem-solving and consultancy activity would all be good indicators for measuring engagement.

In terms of measurement also, the governance and mission, and leadership of the institution would be a clear indicator. The quality of boards of governors is determined by the quality of people on them regardless of their background but you could probably infer a certain amount from the composition of the boards of our various institutions in relation to the outward orientation of the membership of that board. Strategy and mission statements are also vital measurements. The quality of strategic planning in the Irish HEIs has improved remarkably over the last ten years, particularly in relation to financial incentives – because an institute’s strategic plan has to tally with proposals for funding under SIF and other funding mechanisms. In all of this, leadership is vital to ensure an institution wide approach, and this is important to ensure that people are not involved in some types of peripheral pilot projects. This is where the Strategic Innovation Funded projects are successful, because they are trying to impact on institution-wide change, and their success is the achievement of institutional transformation, and in particular, transformation in the way the sector engages with particular issues. Third-level institutions need to move beyond piecemeal activity to a comprehensive set of mission-driven interventions, then these activities could be looked at in assessing or measuring engagement. It is mostly higher education people that are represented here, but, that does not mean that the balance on the attendance list is inappropriate, as HEIs need to talk between themselves first before going outside. There is a need to think about how higher level institutions look from the outside in - try cold-calling your own institution some time, just to get a sense of just how responsive you are or how coherent the institute is to the outside. There is a lot of talk here today about academic staff, academic workload, and all sorts of focus on academic activities, but there is another 50% of staff in our institutions that are generally categorised as administrative. There is a huge potential for improvement in the use of academic human resources, but, there is also potential for better use of administrative resources in institutions

All countries are investing in the skills and qualifications of their populations to achieve economic advantage; we must do it better than everyone else, for less money and to a higher standard. We have to think about transforming the way we deliver our learning and again the level of engagement with enterprise and the community sector can help us to do that. It is Ireland versus the world, and it is important to see how Ireland compares with other countries. Ireland has a lot of advantages, for example, the policy context is very favourable. The Innovation Taskforce is focussed on innovation through interaction, particularly the chemistry between institutions and enterprise. We have a serious advantage in the architecture for learning provided by the National Framework for Qualifications – this is completely transformational, and together with Scotland we are ahead of the pack on this. It has the potential to allow us to explore learning in many different settings, workplace learning, modular learning, and to build completely flexible learning and decouple learning from our institutions. In terms of system-level supports, the funding allocation mechanism at present undermines the flexible delivery and the responsiveness of Irish higher education. The Higher Education Authority’s submission to the National Strategy is a public document and it has argued strongly for parity in the funding allocations, that the distortion and bias towards full-time education should be a thing of the past.

Contribution from the floor:

Partnership is about unity of purpose, about a form of engagement that is relatively straight forward. It is important not to overcomplicate the relationship. It is unnecessary to have a hundred performance indicators to figure out whether it is working or not. Some of the best corporate-strategic partnership engagements, that cost billions and billions of euro or dollars, are ones that are based on the fact that there is not a single piece of paper in existence that marks out the pros and cons of the relationship. So it is not difficult, and again it is important not to complicate it, because if you complicate it we will be spinning our wheels. There are many thousands of people without jobs, and the system needs to apply itself to fix the problem, and the system cannot afford to be spinning its wheels, doing things that are nice to do, or using terms like 'the third mission' – we're talking about engagement and partnership. We do not need new words, it's this simple – there's a significant piece of work that has to be done in the next twelve months and we need to apply ourselves and not make it complicated.

Session 3: Key Insights:

- Measuring the level of external engagement activities and measuring the success of these activities are difficult tasks, in part, because the variation of context in terms of the policy framework and the regional and discipline cultures, mean that the experiences of engagement can be very different and therefore difficult to compare;
- Measuring universities' first and second mission activities only – those of teaching and research – is insufficient. Third mission indicators include technology transfer and innovation, continuing education, lifelong learning, and social engagement. Academics may be reluctant to report these activities as they may be seen as of lesser value than publications etc;
- There is a need to keep the mission clear – there is a need for greater collaboration, an uncomplicated approach is required;
- One size can't fit all and not everybody is going to do everything. Ethos, vision and goals of universities may be quite different, so measurement against the university's own stated mission is critical;
- The challenge is to set third mission measurement parameters broadly enough to encourage diversity and excellence while still providing insight and value to stakeholders.
- There are reasonably straightforward ways to quantify or compare levels of engagement based on existing data such as:
 - > student profile, the percentage of flexible learners, mature learners, the number of placements and internship opportunities, accreditation of civic engagement and service learning;
 - > staff profile and the extent of the external input into curriculum design and review of programmes;
 - > joint research partnerships, the level of intellectual property released, joint publications with people from enterprise or people from community development, and the level of contracted research, and problem-solving and consultancy activity;
 - > strategy and mission statements are also good indicators.



Conclusions:

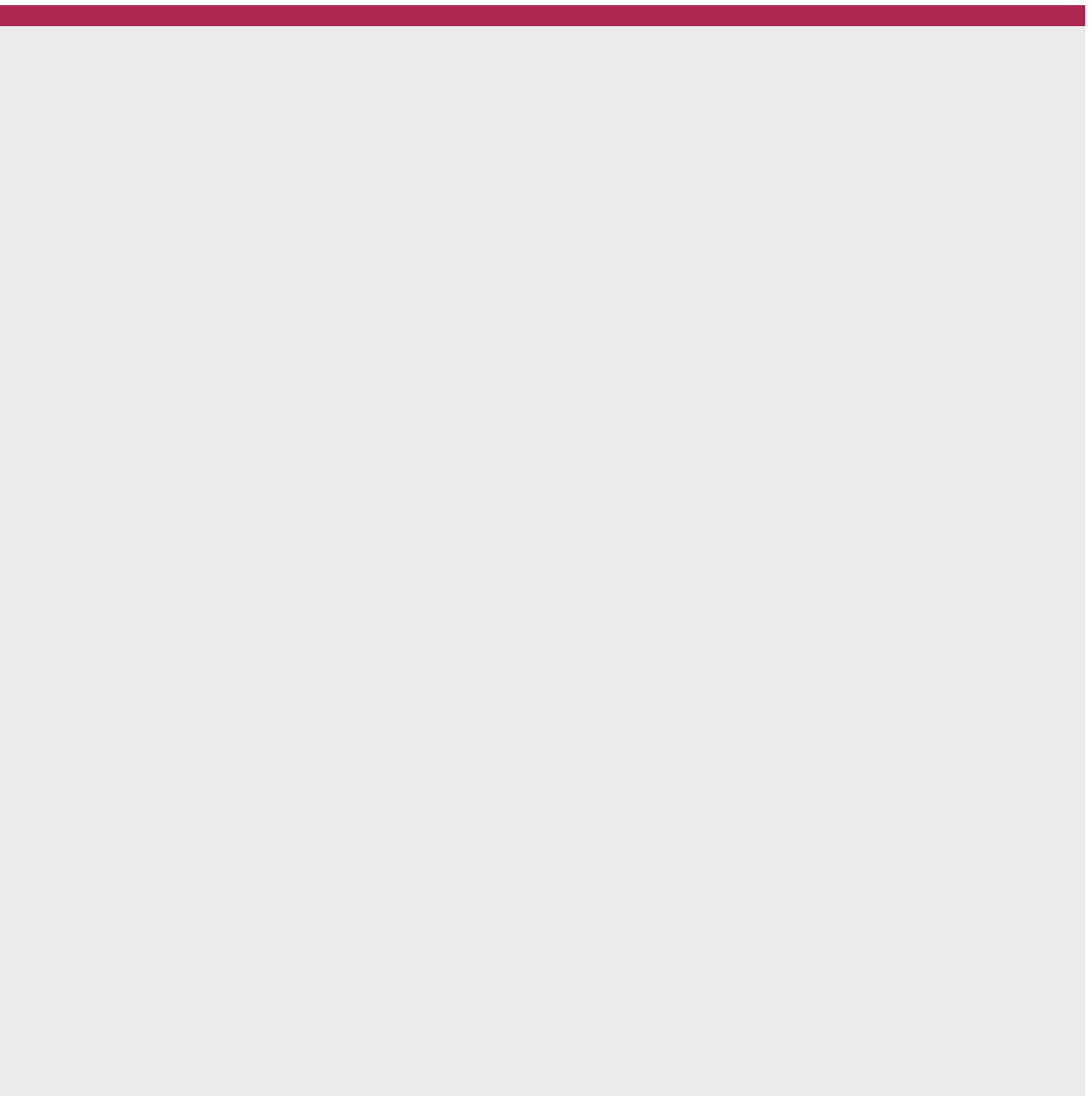
The keynote presentations generated considerable debate, energy and interest from the conference attendees demonstrating the relevance and timeliness of the event. The organisers hoped that the event would stimulate interest and raise questions in relation to how external engagement and partnership activities might become a more central mission for third level providers and how the structure and management of institutions might drive greater and more visible support for these activities. In addition, the conference placed a focus on metrics and measurement of the impact of these collaborative activities.

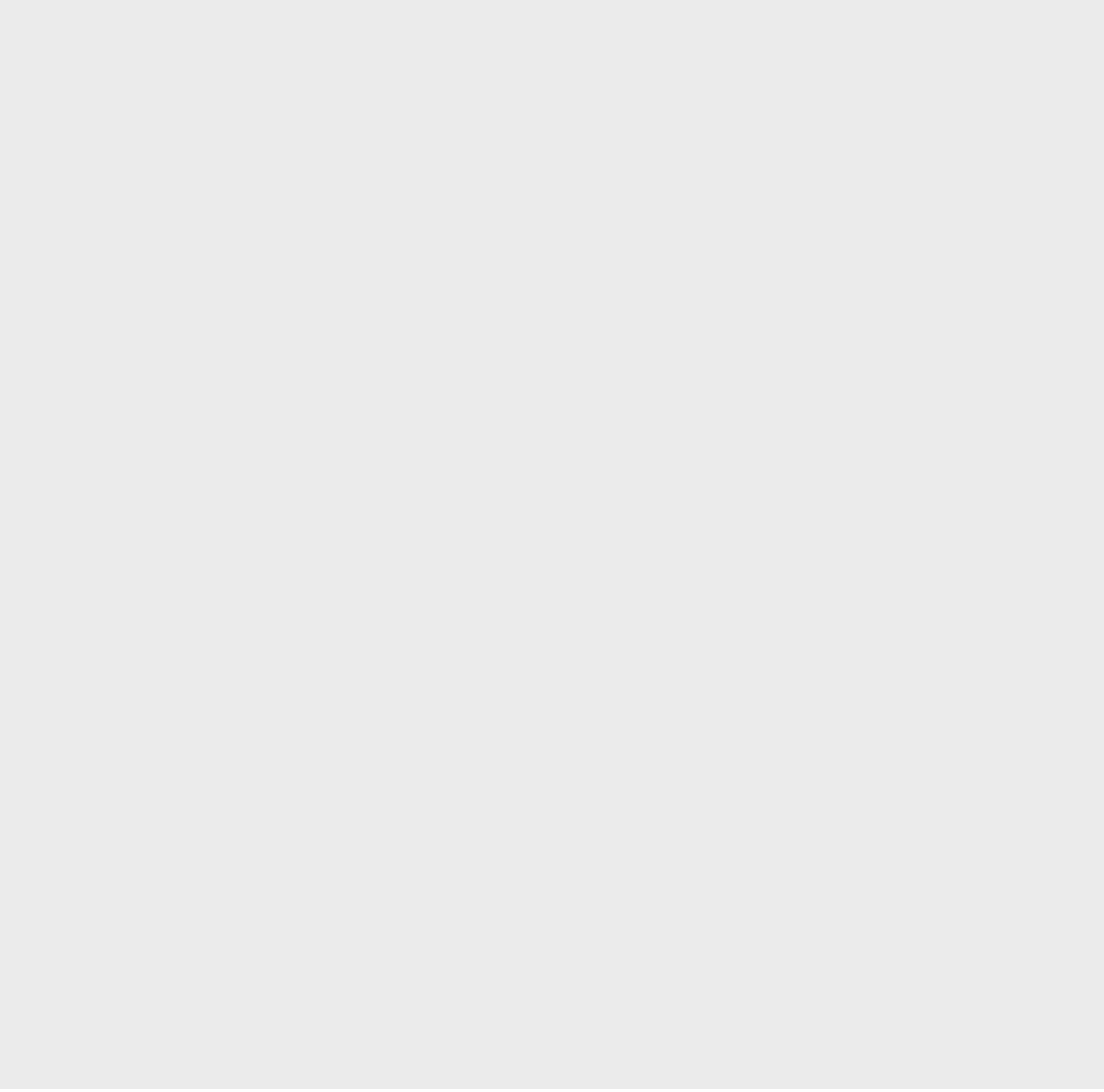
In exploring the motivation for enterprise/academic partnerships a clear message emerged regarding the need to become more competitive to 'do more with less'. In general, there was a broad agreement that these partnerships can play a key role in ensuring the employability skills of emerging graduates and in facilitating the upskilling of the existing workforce to ensure that they are skilled to meet new and emerging demands. Flexible learning opportunities, making use of recognition of existing learning, on-line, blended and work-based learning will be required. Collaboration will also be important in the generation of new jobs and identification of new growth opportunities.

While third level institutions should serve economic and social needs it is important to remember that HEIs are there for serving individual needs also. Responding to individuals' changing development needs helps to ensure a more inclusive society.

Having considered why engagement and partnership activity is needed there was also a consideration of the possible barriers to engagement. The particular difficulties of small and medium enterprises and the general difficulties associated with response times may deter engagement in some cases. Another barrier that was raised was the issue of intellectual property – this may act as an effective barrier to research and development engagement. Reward and recognition systems within third level institutions tend to be weighted towards publication and teaching. It is also noted that there is an opportunity to improve collaboration within institutions between departments and faculties as well as external engagement. A clearer and better developed mutual understanding could be facilitated through staff exchanges. Management structures would need to actively value this activity and to support it.

Driving forward the partnership agenda can only be achieved within the context of the university mission. A variation of mission between universities can serve the country well. Excellence in any particular endeavour can only be usefully measured against the particular stated mission of the university. There are existing metrics that can be readily used to make a meaningful estimate of the extent of engagement activity – measuring the impact or the success of that activity tends to be more difficult as the nature of the relationships is and should be long term.







Roadmap for Employment
- Academic Partnerships

REAP Project Partners:



Athlone Institute of Technology
kdoyle@ait.ie



Cork Institute of Technology
reap@cit.ie



Dublin Institute of Technology
david.kirk@dit.ie



Institute of Technology, Sligo
vanaswegen.jennifer@itsligo.ie



Institute of Technology Tallaght, Dublin
terry.maguire@ittdublin.ie



National University of Ireland Galway
niamh.corcoran@nuigalway.ie



University College Cork
jb@ucc.ie



Waterford Institute of Technology
jaoconnor@wit.ie

REAP Project,
Strategic Innovation Projects Unit,
Cork Institute of Technology,
Bishopstown, Cork.
T 021 432 6017
E reap@cit.ie
W www.reap.ie

