“What Works” Conference on Fostering Quality Teaching in Higher Education

How to maximise the added value of student experience?
Conference Report

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1. Introduction

OECD Higher Education programme (IMHE) “What Works” conferences have been a successful series of workshops and meetings designed to assist IMHE members, as well as non-members, by reviewing current policy and practice while disseminating examples of successful innovation. The conferences are intended to equip participants with inspirational examples of institutional strategy development, and to provide an understanding of conditions for implementation and the context, measurement and assessment of impact. This is also a unique chance to meet different leaders and practitioners, to share perspectives and experiences and to build institutional capacity in designing and implementing effective higher education policies.

Continuing with this series, the IMHE decided to organise a “What Works” conference on quality teaching. Quality is an important and complex issue. In recent decades, the number of students has grown substantially in almost every education system. At the same time, the employment market is becoming more competitive and higher education institutions are urged to prepare students for entry into this competitive environment by equipping them with appropriate skills, knowledge, values and attributes. There is a strong drive to build and create knowledge that complements and aids our understanding of working life, which requires reformulating the concept of knowledge in learning situations. In other words: institutions are bound to provide quality teaching that leads to learning outcomes and, above all, added value for their students.

This is an easy statement to make, but a difficult reality to accomplish. Higher education institutions are complex organisations under pressure from many different directions; fostering quality teaching is a daily challenge. Most universities have designed institution-wide teaching and learning strategies, but struggle to implement them and effectively assess their impact on the learning experience. Which levers should be activated and how should they be co-ordinated (curriculum development/professional training for teachers)? How can teaching be a priority when the academic career essentially depends on research performance? How can the overall learning needs of students be matched with the teaching passions and skills of the faculty? How does one ensure programmes are relevant for students living in a globalised world?

Moreover, the complexity and uncertainty of society and the economy require educational institutions to continuously adapt while upholding quality standards. All institutions are concerned: research-intensive universities, community colleges or vocational institutes, etc. In this context, IMHE organised the “What Works” conference on Fostering Quality Teaching in Higher Education with the intention of helping institutional leaders and policy makers identify the levers and their interplay for effectively improving quality teaching by maximising the added value of the student experience.

The conference on Fostering Quality Teaching in Higher Education was successfully held on 8-9 April 2014 at the OECD headquarters in Paris, France. Seventy-six participants from 31 countries participated in this 1.5 day conference. Most of participants were institutional leaders or policy makers concerned with academic affairs, learning teaching, quality assurance, etc. in universities. Many of them have had long experience of teaching or of directly being involved with teaching and learning.
This enabled the conference to provide insights to help higher education policy makers and institutional leaders explore what works best in higher education and how to maximise the added value of the student experience. The conference addressed questions such as:

- How to respond to the growing demand for relevant teaching?
- How to ensure that higher education will lead to gainful employment and equip students with the right skills and aptitudes?
- What are the drivers to active and effective learning and teaching?
- How to assist human resources in leveraging quality teaching?
- How to embed quality teaching throughout the entire institution?
- How to increase the efficiency of teaching when funding constraints become more stringent?

In order to bring as many added values as possible, the conference was structured in four parts:

- **An introductory keynote**, presented by Charles Fadel (Founder and Chairman of Center for Curriculum Redesign), set the scene by exploring why quality teaching is important, and outlining the key challenges facing quality teaching in higher education.

- **Four breakout sessions**, with participants split into two groups for each session, addressed overarching topics in higher education. Participants could choose which sessions to attend according to their interests. Each session featured two to four field cases, presented by university leaders and policy makers about their own experiences. In total, there were 22 presentations covering six topics:
  - Supporting and engaging human capital in quality teaching
  - Turning new learning paradigms into reality
  - Revamping programme structure, content, pedagogy
  - Drivers to active and effective training
  - Assessment and teaching effectiveness
  - Matching higher education with labour market/societal requirements

- The participants had the opportunity to discuss the policies, strategies and implementation that had been presented and to collaboratively draw lessons to be learned or to be inspired by.

- **Two engagement sessions**, with participants split into four groups, allowed all the participants to actively explore practical issues. Each group discussed a set of questions to explore the two key issues of the engagement sessions:
  - How to practically identify and measure the effectiveness of higher education for students?
  - How to implement an effective and reliable quality teaching-focused evaluation system?

- **A closing keynote**, presented by John L. Davies (Emeritus Pro-Vice-Chancellor and Professor of Higher Education management at Anglia Ruskin University), highlighted the lessons learned from the conference and possible axes for development of quality teaching.
What should students learn for the 21st Century?

According to Charles Fadel in his recent working paper *Education with a Capital E™*, education needs an innovative curriculum that is adapted to the needs of the 21st century. “An ‘Education with a Capital E™’ is both broad in a relevant way and also comparably deep in judiciously chosen areas, where the three dimensions of Skills, Character and Metacognition are taught through the lens of traditional and modern Knowledge, with interdisciplinary lenses.”

This is a summary of the text, please refer to the Centre for Strategic Education Occasional Paper No. 134, February 2014 to get the full article [http://curriculumredesign.org/](http://curriculumredesign.org/).

**Knowledge**

It is critically important for the curricula to be relevant to the real world, for economic and societal needs, as well as for students’ wishes, motivation, and engagement. There is thus a profound need to rethink about the **what** of education, and to strike, simultaneously, a better balance between the conceptual and the practical. Traditional subjects must be augmented by modern disciplines, and areas of focus must be chosen in a way that will cultivate the other three dimensions (Skills, Character, Metacognition). Interdisciplinarity can, thus, be viewed as a strong binding mechanism.

**Skills**

High-order skills are essential for absorption of knowledge, as well as for work performance. In spite of a reasonable global consensus on what skills are at the broadest level and how teaching methods via projects can affect skills acquisition, there are two major barriers that prevent building curricula that dive deeply into a given subject area:

- overwhelming amounts of prescribed content, which allow little time to address skills, making it much harder for students to acquire and for teachers to teach;
- Little teacher expertise for combining knowledge and skills into various non-didactic practices.

**Student development: shaping “character”**

Consciously working to develop “character” helps people face up to an increasingly challenging world and to benefit civil and civic society. Public schools thus must accept that it is part of their mission as it is for private schools. Besides the complexity of accepting this fact, the challenges for student development or character education are similar to those for skills. However, it is likely to happen in out-of-school settings, as well as the classroom.

**Metacognition**

Metacognition is essential for activating transference, building expertise, fostering creativity via analogies, establishing lifelong learning habits and, most importantly, is the best hedge against continuous changes. Metacognition for learning involves the learner reflecting on all dimensions: prior knowledge, skills and character qualities; required knowledge, skills and character qualities; learning strategy choices; ongoing formative evaluations; summative evaluations; and learning improvement strategies.
The framework for metacognition comprises:

- Learning how to learn: which is about understanding how you learn, and what processes you learn to use.
- Self-directed learning: which is the ability to leverage learning how to learn. Self-direction is a key trait that supports effective metacognition and learning, including personal, performance and social character qualities.
- Interdisciplinarity: which is a key facilitator. It arises naturally when learning methods are applied to an authentic, real-world learning challenge or project that requires traversing disciplinary boundaries.

**The role of technology**

Also in this paper, Charles Fadel points out the role of technology.

In education today, technology is being employed to help achieve administrative efficiency, which is relatively easy; and academic excellence, which is hard.

Challenges to the use of technology include:

- rate of technological change and uptake varies and introduces complexities;
- total cost of deployment rises dramatically in environments shifting from one-to-many, to one-to-one; while professional development typically lags behind in funding, design, provision and access;
- There is only inconclusive evidence that technology enhances higher-level thinking;
- Technology creates new problems to solve (e.g. fragmentation of attention span, poor sceptical inquiry, etc.).

Yet there is no way to escape it, as today technology is an environment, not just a tool. It helps the learner because:

- it motivates – it can engage and empower learners;
- it connects – it opens doors to a world of people and information; improves equity by providing access; and enhances collaboration;
- Ideally it can be personalised, with achievement improvements via self-paced and individual learning styles.

**2. Supporting and engaging human capital in quality teaching**

Research performance, rather than teaching and learning, has been traditionally emphasised. Institutions might send that message, intentionally or not, through their policies. Academics worry that time spent on teaching would undermine their research capacity. Teachers also have to share their time and efforts, exclusively committed to teaching before, to other activities.

The key challenge for quality teaching is to develop subject-specific experts into excellent teachers. Meanwhile, participation and engagement in professional development activities are related to the quality of student learning. Many institutions are, therefore, keen to provide professional development to faculty.
Case 1: Faculty care deeply about their teaching – Heather Kanuka, University of Alberta, Canada

The University of Alberta (UoA) is a top tier Canadian university and one of the top 100 in the world, home to more than 170 graduate programmes, 200 undergraduate programmes and 400 active student groups. The university has about 39 500 students, among them 7 600 graduates and 7 200 international students; 3 260 academic staff and 1 650 faculty members.

While teaching and learning has had a high profile in the University of Alberta’s academic plan and resources have been provided for teaching development, inspiring faculty members to participate has been a challenge. In 2007, records showed that only 2.4% of faculty members attended teaching development activities. Interpretation of the low participation rate was assumed to indicate that faculty care little about their teaching responsibilities and/or enhancing their teaching. A follow up survey was conducted, the results of which revealed that 91% of faculty members consider teaching important, and care deeply about their teaching and their students. Reasons for not attending teaching development sessions revealed that what was currently being offered was not meeting their teaching needs. To identify these needs, a needs analysis was then conducted with deans, directors and chairs (n=95) asking the following questions: What are the top teaching priorities? What are the high-risk areas? What support is needed from the teaching centre?

The results of the needs analysis revealed that faculty need support with (1) curriculum (re)development, (2) the integration of technology, and (3) innovative solutions for mid- and large-enrolment classes. Other suggestions included focusing on new and early faculty and (re)engaging mid-career faculty. To address these issues, changes were made to the teaching development activities, including a move away from ad hoc workshops delivered by teaching award winners to an ongoing and sustained instructional design series with practical resources, research informed recommendations, and pedagogical support from qualified experts. To determine if the Centre for Teaching and Learning could (re)engage faculty and inspire them to attend teaching development activities based on these changes, the following benchmarks were set as a success indicators: 25% participation rate from those who identify themselves as academic members and instructional staff; 25% participation rate of total number of faculty members.

In fact, the changes in teaching development activities implemented exceeded these benchmarks. In 2009-10, participation rates for faculty members increased from 2.4% to 18.5%. In 2011-12, participation rates for faculty members increased to 56%.

While participation of teaching development activities is an essential first step in improving and/or enhancing teaching practices, whether participation effects change in teaching practices is also key. To gain insights into this, we conducted another survey. The results of this survey revealed that 72% (n=180) of survey respondents indicated they attempted to make changes arising from the teaching development activities. Of those that did make changes, 98% indicated the changes were effective and the changes would be enduring. Finally, the survey results revealed that engaging students, encouraging critical thinking, and improving student assessment were the most valued professional development topics, and where faculty wanted the most help.
Case 2: Career model for promotion of teachers – Koen Goethals, Ghent University, Belgium

Ghent University (GU), is one of the major universities in the Dutch-speaking region of Europe. It is home to 41 000 students, of which around 4150 are foreign students, including exchange students; 9000 staff members and 11 faculties, with some 120 faculty departments and eight administrative departments.

For a long time, research has been the emphasis over teaching in the internal culture of GU. In order to rebalance research and teaching, the four components must be assured: career options, professionalism, incentives at different levels, and organisational support. Based on this concept, the overarching pillars of GU’s efforts towards quality teaching are: professional career track, supporting education processes, internal allocation of HR budget to faculties, and supporting educational professionalism.

Regarding the professional career track, GU has introduced a new career model for promotion to full professor. Professionals can now personalise their goals, on either research, or teaching, or service to society. Research is still obligatory, but not necessarily as emphasised as before. Professionals can choose the amount of time and effort dedicated to research as they see fit in relation to their goals. This has been intended to refocus on teaching, by awarding teaching/educational efforts more. Teachers no longer feel that teaching would undermine their research capacity and promotion chances.

To support the education process, a position for education director for each faculty has been put in place, linked to a reorganisation of processes and structures that ensure proactive quality control, pedagogic and administrative support in each faculty. The education director is in charge of programmes, administration, quality control, and monitoring services.

The general architecture of the international allocation of the HR budget was developed as an answer to the introduction of the new performance-based interuniversity model. It is clear, transparent, and tailor-made for the institution. The greatest part of the budget goes to education (around 48%, compared to 39% for research and 13% for base activities). Within this education budget, 25% is for master’s theses, and 75% for education load, which is allocated according to individual courses depending on the different methods used to teach the course and the number of students. This architecture is part of the efforts to award teaching and education.

In order to support educational professionalism, GU also introduced education innovative projects (with a budget of 1.2 million per year) and didactic performance certificates.

Case 3: Comprehensive professional development for faculty: Introduction of tenure system and 100 hours programme – Hiroaki Sato, Ehime University, Japan

Ehime University (EhU) is the largest university in Shikoku, Japan. It comprises six undergraduate schools and seven graduate schools. It is home to around 10 000 students and around 2 200 staff members. There are many external and internal factors explaining the introduction of the tenure system with 100 hours professional development at EhU.
External factors include:

- Needs of quality assurance of higher education and faculty, due to the changes in role of universities and faculty, the dramatic increase in number of faculties in Japan, etc.
- Problems of faculty development: it is focused too much on teaching, while research and management developments are also needed but depend on academic societies or each laboratory and not the institution.
- Problems of the tenure system: tenure track has very limited numbers, meaning that most faculty members can get tenure when they get the job. Expected competencies during the tenure track are limited only to research competencies and are not life-long.

Foreign models of the tenure system in countries like UK, Sweden, Denmark, Netherlands, Finland, etc., inspired a change in the Japanese system.

The internal factors include the excellent faculty development programmes and professional staff and the president’s leadership and well-co-ordinated management system, contributing to the success of the new system’s introduction.

Purposes of the tenure system at EhU:

- Prepare faculty by ensuring they have well-balanced comprehensive competencies, teaching, research and management.
- Facilitate faculty mobility.
- Enhance quality of faculty and education.
- Funding support for tenure track faculty: tenure track faculty can be supported by funding during the first 3 years.
- The tenure system is giving newly hired young faculty the chance for professional development in terms of full-spectrum faculty jobs (teaching, research and management) under a systematic programme for a fixed term and budget.
- It leads to independent experience as educators and researchers and grant faculty tenure through rigid review.

Tenure track faculty members are newly hired instructors, assistant professors (excepting clinical professors who belong to the university hospital); or newly hired professors whose research experience is short with experience of working outside academy.

Fixed term is 5 years and no reappointment. If a tenure track faculty member gets tenure, the fixed term is over on the day before the day of transition.

Taking professional development:

- Tenure track faculty must take 100 hours of the professional development programme during the first 3 years.
- The professional development programme consists of educational development programmes, research development programmes and management development programmes.
- Tenure track faculty who complete all programmes can get a Certificate of Professional Development Programme at EhU.
In order to complete the programmes, teachers are expected to acquire four competencies: Academic Integration, Teaching, Research, and Management.

<table>
<thead>
<tr>
<th>Academic Integration Competencies</th>
<th>Teaching Competencies</th>
<th>Research Competencies</th>
<th>Management Competencies</th>
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</thead>
<tbody>
<tr>
<td>Integrate each competencies of teaching, research and management academically with ideal faculty images and career vision</td>
<td>• Have knowledge and skills which is needed for teaching; instructional design, teaching method, assessment</td>
<td>• Have knowledge and skills which is needed for research; getting external funding and science communication</td>
<td>• Have knowledge and skills which is needed for management; lab, project and meeting and health and safety management</td>
</tr>
<tr>
<td>• Explain teaching philosophy underpinning teaching</td>
<td>• Understand intellectual property and copyright</td>
<td>• Explain research ethics underpinning research</td>
<td>• Explain basic higher education policies trend</td>
</tr>
</tbody>
</table>

Source: Hiroaki Sato

During the process of introducing the new tenure system, EhU has developed a management system and encouraged collaboration with departments, such as the Mentor System, to ensure smooth programme management and quality assurance. Consistency between programme content and criteria for faculty selection and promotion in departments is also a challenge. EhU has carried out standard development in co-operation with other universities by sharing, co-managing the programmes, enabling the interchangeability of the certificate of completion of programmes, and ensuring quality assurance by self-assessment and external assessment.

Case 4: Towards an integrated system for the management, development, and assessment of academic staff – Denis Berthiaume, University of Applied Sciences and Arts Western Switzerland

The University of Applied Sciences and Arts (Haute école spécialisée de Suisse Occidentale, HES-SO) has about 20000 students, 2000 permanent academic staff, and 2000 temporary academic staff distributed among 27 schools in the cantons of the Arc Jurassien region, Geneva, Fribourg, Valais, and Vaud. It has 45 bachelor’s programmes, 20 master’s programmes, and over 100 continuing education programmes.

HES-SO has to face many challenges concerning its academic staff:

- The academic staff are hired by cantonal authorities: there are different criteria for recruitment and promotion, different salary scales, and different categories of academic staff.
- New typology of academic categories is imposed by seven cantonal governments: new criteria for recruitment and promotion have been introduced. The “HES professors” title now is reserved for only research-active academic staff – over 1000 academic staff are no longer allowed to use the title “professor”. Salaries for academic staff are also ring-fenced and different between cantons.
• Professional development offered is limited: there are professional development workshops offered in teaching and learning. However, there is no professional development in applied research or management, nor support for the further education of staff (e.g. professional doctorates).

• Performance appraisal of academic staff does not exist: apart from teaching and learning, there is no incentive for further development, nor guidance as to how to improve one's academic performance.

In this situation, the HES-SO is expected to carry out a comprehensive agenda:

**Management:**
- Clarification of various “levels” in the new job typology  
  Jan 2014
- Identification of recruitment and promotion criteria  
  May 2014
- Identification of career progression pathways  
  Sept 2014
- Possibility of career counselling  
  Sept 2014

**Development:**
- Workshops on teaching and learning can be turned into a PG certificate  
  June 2014
- Workshops in applied research and management of higher education  
  Sept 2014
- PG certificates in applied research and management of higher education  
  Sept 2015
- Three PG certificates + project can lead to Master in Academic Practice  
  Sept 2016
- Possibility of pursuing professional doctorate studies abroad  
  Sept 2017

**Assessment:**
- New canvas for the production of academic portfolios  
  Sept 2015
- Submission of portfolios every four years or for promotion  
  Jan 2016
- Support in the production of academic portfolios  
  Sept 2015
- Portfolio assessment takes into consideration type of academic post

3. Turning new learning paradigms into reality

Graduates are entering an employment world of greater uncertainty, speed, risk, complexity, and demand for interdisciplinary and non-routine working. There is thus a need for tighter connections between university education and working life. On the one hand, it would prepare the appropriate skills, knowledge, values and attributes for students for such an environment, as well as build networks and pathways for employment after graduation. On the other hand, it could help institutions to interpret and respond pedagogically to the challenges of this environment.

Students have become the focal point of the learning approach in many areas of the world. Institutions, therefore, have to learn how to best serve the student community. At the same time, students appear to have become more sensitive to equality of education access, treatment and assessment. The expansion of higher education providers along with the diversification of student types put the issue of equity at the very centre of quality issues. With this view of learning, the role of higher education teachers is, therefore, changing. In
addition to being, first and foremost, a subject expert acquainted with ways of transmitting knowledge, they are now required to have effective pedagogical skills for delivering student-learning outcomes, to co-operate with students, colleagues from other departments, and external stakeholders.

The individual performance of each faculty member is a crucial factor in quality teaching. But gaining real improvements in teaching quality can be achieved more rapidly and more cost-effectively if approached as a collective effort that is underpinned by well-aligned institutional policies. Inter-linkages between areas (disciplines, fields) and processes (lecturing, instructing, counselling...) are characteristics of institutional complexity that can be turned into levers for change and improvement in teaching quality. Institutions should, therefore, seek to enhance the coherence of their policies (including those apparently peripheral to quality teaching) to ensure that they support enhancement of teaching quality. A systematic approach would ensure that the various department- or programme-wide policies are consistent with the strategic objective of quality teaching and fully compatible with the institution-wide orientation of the teaching and learning framework – while accommodating the different needs and contexts that apply to individual departments and programmes.

**Case 5: How to build a quality culture? – Lorraine Stephani, University of Auckland**

The University of Auckland (UoAu) is New Zealand’s world-ranked university. As well as being New Zealand’s top university, it is the country’s largest. UoAu has a comprehensive range of courses with teaching and research conducted over eight faculties and two large-scale research institutes. UoAu is home to around 41 000 students and 4 900 staff members.

The Centres for Excellence in Learning and Teaching of UoAu have a strategic role: advising on policy development and organisational practice; engaging in educational research and scholarship; carrying out curriculum reforms; and playing an organisational development role as an institutional change agent.

The developmental role of the centres means to support staff in enhancing academic skills and building capacities in the areas of teaching and learning; in curriculum design and (re)development; in using technologies effectively in teaching and learning; in evaluating learning and teaching effectiveness; and in supporting students in developing appropriate learning skills.

The centres organise two programmes for teachers: a three-day programme Introduction to Teaching at University Level, which is mandatory; and postgraduate certificate programmes relating to learning and teaching, which are postgraduate supervision programmes provided in most universities in New Zealand, Australia, UK, Canada and are mandatory in some universities in order to obtain tenure.

Those programmes contain:

- generic academic development: workshops on assessment issues, lecturing to large classes; curriculum design; writing learning outcomes; technology in learning and teaching; small group work etc.;
- contextualised academic development: assessment in the context of the discipline; curriculum design; technology in teaching, etc.;
- higher level development: facilitating departmental development through “planning days”. 
In order to evaluate academic development, various forms of assessment have been used: evaluation questionnaires, but these are not hugely useful; feedback from departments on what has changed; focus groups; benchmarking with other centres; longitudinal archives; committee level reporting; research on evaluation over a period of time, which is on-going and does not produce instant results or change.

The programmes mean to introduce:

- active rather than passive learning;
- assessment strategies that seek critical thinking and problem solving (authentic assessment);
- a shift from a content driven curriculum to enquiry based learning;
- enhancing student engagement in the learning process (a content driven curriculum encourages surface learning and memorisation);
- an outcomes based curriculum encompasses knowledge, skills, and understanding – a major shift from transmission of information to transformation of students;

UoAu also introduces incentives to encourage teaching, such as:

- promotion criteria, with the expectation of a Teaching Portfolio;
- Teaching Excellence Awards, either local or national;
- teaching innovation grants;
- teaching leadership roles.

**Case 6: Centralized and Discipline Based Teaching Development Initiatives to Foster Student Learning – Alenoush Saroyan, McGill University, Canada**

McGill University (McG-U) is one of Canada’s best-known institutions of higher learning and one of the leading universities in the world. It is a university with two campuses, 11 faculties, some 300 programmes of study, more than 37,500 students, and more than 6,000 staff members. Regarding its view on teaching, McG-U states: “The mission of McGill University is the advancement of learning through teaching, scholarship and service to society by offering to outstanding undergraduate and graduate students the best education available...”

McG-U took into account the new learning paradigms and has sought to adapt the teaching provided to students with four levers:

- opting for teaching development from an Activity Systems perspective;
- seeking university-wide consensus in defining quality;
- developing centralised and decentralised initiatives;
- relying on networks and implementing institutional policies, and paying attention to the alignment of policies.

In particular, teaching development from an Activity Systems perspective is the main focus.
McG-U provides various teaching and learning services:

- centralised teaching initiatives: course design and teaching workshop; Research and teaching nexus;
- decentralised teaching initiatives: Medicine’s Teaching Scholar’s programme; Law’s teaching network; Engineering;
- the Active Learning Classroom;
- using technologies in teaching: student response system; using social media tools in teaching and learning.

In addition, McG-U values good teaching by introducing:

- teaching evaluation policy, using teaching portfolios and student course ratings;
- university and faculty based teaching awards;
- merit and performance based salary increase.

Case 7: Empowering students as co-producers of quality teaching – Dan Derricot, University of Lincoln, UK

Student engagement is most powerful as a driver of quality teaching when it involves dialogue, and not only information on the student’s experience. As students are the intended beneficiaries of quality teaching, they are able to provide crucial “customer feedback”, not only on what works well, but also on what they would like to have done differently and how. However, obtaining constructive feedback from students is not a straightforward initiative. Students may be reluctant to take up such a role and they may be dubious about the added-value of their contributions and believe that their views will be ignored. These concerns may be compounded if it is difficult for them to see evidence of action as a result of the various evaluations they participate in. It is, therefore, crucial to render students’ evaluations meaningful to them if they are to be useful to the institution in promoting teaching quality.

The University of Lincoln (UoL) has established an international reputation for the quality of teaching and research. Home to 13,000 students, it is a comprehensive university with strong arts, humanities, social science, computing, and biological sciences bases.

UoL developed a Student Engagement Strategy for the period 2012-16, which aims to extend the principle to students as producers of student learning (quality) and as partners with the university by promoting a community of staff and students. The Strategy also recognises the importance of institutional support and of student engagement for the student experience.
This strategy is enabled through a vision and buy-in demonstrated by senior management, a student engagement team in the vice-chancellor’s office, and the requirement for each academic and support department to embrace and develop this agenda in their own way. This has indeed created positive impacts. As staff are developing courses in partnership with students, they feel a greater sense of ownership and commitment to the university and their learning. They also feel empowered to lead change, as well as contribute to it (“peer mentoring” schemes for example). It thus creates more committed students and staff and a positive, forward looking in general.

The organising principle of student engagement in UoL is the co-production of quality. This is the process through which one academic community is developed and student experience is based on personal and critical engagement.

The teaching and learning strategy called “Student as Producer” embedded research-engaged-teaching across the undergraduate curriculum. In practice, research-engaged teaching means engaging in real life research practices and research-like activities to make pedagogical benefits of producing knowledge and outputs, e.g. researching primary materials, creating artefacts, improving business processes. In other words, the central element is learning through working with academics to co-produce knowledge. Students are, therefore, critically challenging and producing knowledge and not just consuming it.

This teaching and learning strategy is driven by the quality assurance system. “Student as Producer” is articulated through eight principles of programme design, which are broad and interpretable within each discipline. Each programme is approved/accredited internally and re-approved every five years. A new requirement is that principles are embedded into all courses gradually as they are due for re-approval. In addition, annual monitoring reports on each programme are also used to draw out practice and encourage continual improvement.

“Student as Producer” has created quality teaching by creating deliberate, critical reflection on pedagogy en masse across all departments, especially around the role of students and the relationship between teaching and research – not seeing them as conflicting, but complimentary. It also helps move the focus from teaching to learning, as students become more engaged and critical and get more from the learning. In general, it stimulates the academic environment for all.

4. Revamping programme structure, content, pedagogy

Some institutions phase in quality teaching by revamping the structure, content of programmes, as well as the pedagogy. Institutions that have designed an institutional policy to foster quality teaching continue to let departments or individual teachers operate on their own and suggest improvements. However, they ensure that these meet the requirements of the institutional objectives reflected in the policy.

Case 8: Educational transformation at the University of Veracruz, teaching work towards educational relevance – Leticia Rodríguez Audirac, University of Veracruz, Mexico

The University of Veracruz (UoV) was founded in 1944 and has since become the most prestigious university in the province of Veracruz and one of the top five public universities in Mexico. It encompasses five campuses, 72 faculties, 32 research centres and laboratories.

UoV introduced MEIF (Medole Educativo Integral y Flexible) model in 1999, which aimed to use an integral approach in educating students via competences/skills, to develop students’
capacity for autonomous learning, to create a more flexible curriculum. However, there were gaps between designing plans and the variables involved in implementing those plans, such as academic planning, administrative procedures, internal regulations, etc. Thus, UoV decided to improve the model by:

- creating documents and disseminating information;
- training teachers;
- designing curriculum and programmes;
- modifying gradually MEIF’s norms, regulations, and internal structures;
- carrying out individual and group reflection along the way;
- making strategies leading to the MEIF’s solidification within the institution.

These cumulated into the project AULA, with the objectives of contributing to the achievement of MEIF’s goals, especially by strengthening teacher practice from three axes: training based on competences/skills and complex thinking, linking teaching to research, and the use of technology in learning environments and processes. During this project, teachers are asked to design new strategies for the courses, to implement strategies, and to report on results. The project provides teachers with training workshops on orientation of the project, advice, on-going monitoring and feedback, final report and learning outcomes. The number of participants in the project has increased from 113 in 2009 to 3146 in 2013. And it has been co-ordinated with other institutional projects: incentives and recognition, evaluation of teachers by students, procedure for evaluating incoming teachers to the UV.

The impacts of the AULA project have been tangible. The axis that showed greatest improvement was that of complex thinking and skills. The use of information and communication technologies also increased. However, linking research to teaching seems not to have undergone any significant change. Thus, there are some requirements in order to have more comprehensive impacts:

- to strengthen the relationship between teaching and research in academic coursework, which implies, in turn, developing skills that help in problematising reality and in identifying suitable research questions;
- to strengthen innovation as a competence, both in the theoretical field and the field of project development.

5. Drivers to active and effective training

Case 9: Raising awareness of the quality teaching with students’ involvement – Hermina Pika Radmilovič, University of Maribor, Slovenia

The University of Maribor (UoM) is the second biggest university in Slovenia, with 18 000 students and 1 700 staff who strive to make students’ learning experience a positive one. It has seventeen faculties, which offer undergraduate and postgraduate study programmes in humanities, social studies, technical studies, economy, medicine, law, natural sciences, educational studies and arts.

According to the Higher Education Act and the Statute of the University of Maribor, the students have 20% of the representatives in each governing body or committee of the university. In the elections for the dean or rector, the students have at least 1/5 of their representatives from the total number of academics. Indeed, leader of the Students’ Council at UoM holds a Vice-Rector position for Student Affairs and has an important role, especially in...
the university development of quality system. In addition, leaders of Faculty Student Councils also hold the position of the Vice-Deans for Student Affairs at the faculty level. This means that the students are represented fully and have possibilities to influence decisions at the highest level within the University.

The student Vice-Rector is invited to the regular meetings of the Rector's team, has the same rights and voting opportunities as other vice-rectors who are professors. This has been the tradition at UoM ever since its establishment. Not every rector is comfortable with this arrangement at the beginning of his term, but soon realises the advantages of student involvement on this high level of decision-making.

The central role of students is crucial also in the assessment of teaching. Students evaluate teachers every academic year for every subject they teach. This student survey is obligatory and is offered on-line. The results are discussed at the departmental level, at the quality commission of the faculty, study commission and faculty student council. The deans, together with the student representatives, have to have a personal meeting with 10% of the best and worst evaluated teaching staff. The best practices are shared; those with weaknesses in teaching are offered support. The appointment-promotion systems also take students’ opinions very seriously, as the promotion criteria also include student evaluation results and Faculty Student Councils’ opinion.

With such an important role of student evaluation, it is very important that they have the knowledge and skills in order to make positive changes and influence the development of quality in all areas of university functioning. The Centre for Quality Development at UoM has started several training programs to build effective student engagement. Using the experiences and the training model developed by SPARQS (www.sparqs.ac.uk/), the students’ representatives from each faculty, the members of the quality committee and student representatives from each study programme are regularly trained to learn about quality processes and important elements of their learning experiences.

Case 10: Partnerships for Learning and Teaching protocol – Ian MacLaren, National University of Ireland, Galway, Ireland

The Partnerships for Learning and Teaching (PLT) describes a process for academic development that is both formative and confidential. It is premised on the understanding that
the sharing of good practice among academic staff leads to significant improvements in teaching and learning. The process is designed to meet the specific objectives of each of the participants. Observation of teaching may be an element, but the process could also include, for example, a review of teaching materials and assessment methods.

It is proposed that each participant will select a partner, either from within or outside their school/discipline area. It is possible, in some cases, that school guidelines could influence the implementation of the selection process.

Each pair will engage in a 3-step process.

**Step 1: Initial Meeting**

The pair meets to agree the scope of the “review” and define a schedule and mechanisms for formative feedback. It would be very beneficial if, prior to the meeting, each participant takes an opportunity to reflect on their teaching and their objectives for the review. The following questions may prove useful:

- Are there aspects of my teaching or assessment practice that I would like to investigate, or reflect on, further? (Note: this might be to understand better why something works well, as much as something that is not working successfully.)
- Is there an aspect of my teaching or assessment practice that I would like to change?
- What aspects of student learning would be most useful for me to explore?
- What are my goals in teaching my subject? Are they being achieved? (Adapted from Gosling and O'Connor, 2006)

**Step 2: The Review**

Each member of the PLT pair performs the review/observation as defined in the agreed scope. This may, for example, mean that each partner observes the teaching of the other in a real classroom situation.

Feedback can occur immediately after the observation or at an agreed time. Sample reporting and feedback forms will be available from the Centre for Excellence in Learning and Teaching (CELT) [http://www.nuigalway.ie/celt/](http://www.nuigalway.ie/celt/).

**Step 3: Overall Assessment of PLT**

To complete the PLT cycle, the pair arrange to meet for an overall review of the process. It will address:

- The extent to which the objectives have been met.
- Additional opportunities for on-going professional development in teaching and learning.
- An assessment of the overall effectiveness of the PLT process and suggestions for improvement. A feedback form for this purpose is available on the CELT website.

**Optional Additional Step for Quality Review Purposes**

The PLT pair may choose to submit a declaration to the Head of School, stating that the PLT process has been completed. A declaration form for this purpose is available on the CELT website.

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Feedback on issues raised during the review may be included. The declaration form should be signed by both members of the PLT pair.

Case 11: Guidelines and requirements for teaching portfolios at NUI Galway – Ian MacLaren, National University of Ireland, Galway, Ireland

Teaching Portfolios are new, well-recognised within higher education as a means of:

- providing insight into an academic staff member’s views, perspectives and philosophy of teaching and learning;
- demonstrating the individual’s range of experience and approaches to teaching, feedback and assessment;
- summarising and reflecting on student and peer evaluations, and indicating how such are responded to;
- providing an indication of professional and scholarly activities relating to teaching, learning, course design, student support and assessment.

Teaching Portfolios are developed by many academic staff, who update them regularly to ensure that they are a form of “living document” and as a means of embedding regular reflection and review into their professional practice.

Increasingly, however, they are being used for job applications, promotions and applications for teaching awards. In these cases, of course, evidence that is independently gathered, or that illustrates the lecturer’s standing within the teaching or their subject discipline, can be particularly effective.

**Format**

A variety of models of the Teaching Portfolio exist, with considerable variation in the weighting of the various components. In general, for use as a personal reflection tool, then of course the choice of format should be one that best suits your needs and circumstances.

For formal purposes, where the portfolio is being submitted for review or consideration by a promotions or awards panel, then it is appropriate to agree a standardised, comparable and transparent structure. The model adopted in NUI Galway, following consultation and review of the promotions criteria, is an adaption of our long-established framework that brings greater clarity to the requirements for each section.

The Teaching Portfolio should be structured as follows.

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A Statement of Teaching Philosophy</td>
<td>Provides a description of the author’s views to the underlying principles upon which their approaches to teaching and learning are based; giving appropriate reference to the conceptual frameworks or theoretical perspectives if appropriate.</td>
</tr>
<tr>
<td>2. Summary of Teaching Experience &amp; Responsibilities</td>
<td>Summary, indicating the range of experience, levels of courses, and teaching and learning scenarios (e.g. project supervision, large and small class teaching, blended learning, postgraduate and undergraduate, etc.). Experience of thesis examination, both internal and external and other similar assessment responsibilities should be included here.</td>
</tr>
<tr>
<td>3. Teaching Skills &amp; Approach</td>
<td>Provide an indication (backed by appropriate evidence) of the level of skill, confidence and commitment to teaching; the selection of appropriate methods; the setting of expectations and challenge; the provision of formative feedback; coping with particular challenges, etc. Indicate here any Teaching</td>
</tr>
</tbody>
</table>
Awards that may have been obtained.

### 4. Curriculum & Course Design/Development

Experience in the review and revision of existing programmes and modules and the design of new modules and programmes. Examples may include the incorporation of active learning methods and formative feedback; ensuring disciplinary currency; close alignment with the *Learning, Teaching & Assessment Strategy*; new modes (such as part-time, online, blended, etc.) and the use of accepted good practice within the discipline.

### 5. Student Support & Facilitation

Availability and approachability to students, providing advice, dealing with particular needs, mentoring and supervision, support of students on placement and in fieldwork and a clear commitment to student retention and success. This section should also include items related to the supervision to the supervision and development of postgraduate research students.

### 6. Innovation & Leadership in Teaching and Learning

Indication of a leadership role within the development of new programmes (and their subsequent implementation); leading in the review of existing course offerings (sustainability, refining portfolio of offerings, etc.); leading in the innovation of teaching and assessment approaches (including technologies and flexible learning programmes); ability to seek resources, collaboration and participation of colleagues and partners; special project funding or grants; active contribution to teaching committees, etc.

### 7. Professional Development & Scholarship

Attainment of appropriate professional qualifications (such as the PgCert in Teaching & Learning in HE, PgDip/MA in Academic Practice); publications and conference papers on teaching and learning (including textbooks); research or scholarship in teaching, in the discipline or higher education in general; dissemination of ideas national or internationally; mentoring and supporting colleagues; linking teaching and research.

### 8. Appendices

Summary of key pieces of evidence and samples of work.

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**Supporting materials and forms of evidence**

In the complex world of contemporary higher education, particularly in institutions that span not just a range of disciplines, but also which offer programmes at different levels (pre-undergraduate to post-doctoral) and in different modes (online, blended, face-to-face, part-time, etc.), then there is of course a wide set of potential example materials and forms of evidence that may be available that captures activity in the areas covered in the portfolio.

The following table provides some examples of the types of evidence or supplementary materials that a reviewer might expect to find (or find reference to) in a teaching portfolio. Of course, not all apply to all disciplines. It is important that statements you make in the portfolio about your teaching practice are backed up by the appropriate evidence, but it is also important to be selective in the amount of evidence that you provide.

<table>
<thead>
<tr>
<th>Category</th>
<th>Potential Evidence/Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teaching Experience and Responsibilities</strong></td>
<td>Summary table of teaching experience, including range of scenarios, assessment types, etc. – Note also particular constraints such as contractual terms, part-time work, etc.</td>
</tr>
<tr>
<td><strong>Teaching Skill &amp; Approach</strong></td>
<td>• Results from, and responses to, student surveys&lt;br&gt;• Standard module feedback&lt;br&gt;• GSE (grouped student evaluation)</td>
</tr>
</tbody>
</table>
### Other student feedback methods
- PLT (peer review) summary
- Teaching Awards
- External Examiner reports/comments
- HoD/HoS or other references

### Curriculum & Course Design/Development
- Example teaching and assessment materials
- Course Documentation
- Quality Reviews
- Accreditation approval
- External Examiner reports
- LTA checklist
- External feedback
- Peer review

### Student Support & Facilitation
- Surveys, questionnaires
- List of responsibilities and examples of activities
- HoD/HoS or other reference/endorsements
- Other feedback (alumni, partner organisations, etc.)

### Innovation & Leadership
- Programme leadership and development, including for new and innovative courses/models and for review of existing portfolio of programmes.
- Active role in teaching and learning committees, etc.
- Appropriate HoS, Vice-Dean (or similar) experience
- Funding obtained for teaching innovations and development
- Support indicating collegial and collaborative approach

### Professional Development & Scholarship
- Attainment of
  - Postgraduate Certificate in Teaching & Learning in HE
  - PgDip in Academic Practice
  - MA in Academic Practice
- Active and continuing participation in professional development programmes and events (indicating outcomes where appropriate)
- Publications related to teaching & learning
- Conference presentations and organisation
- Membership of appropriate professional organisations and networks

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**Case 12: The Aalto Learning Hub – Martti Raevaara, Aalto University, Finland**

Aalto University (AU) is Finland’s third-largest university. It comprises six schools with over 20,000 students and 5,000 staff members. AU offers a wide variety of Bachelor’s and Master’s level degrees, as well as doctoral programmes in all the fields of study. The university’s operations showcase Finland’s bold new experiment in higher education, such as Aalto Learning Hubs, among others.

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²This refers to the NUI Galway’s “Partnerships for Learning & Teaching” scheme in which staff review each other’s teaching and/or course materials.

³In other words, an indication that the course(s) meet the specific requirements of the Learning, Teaching & Assessment Strategy.
Aalto Learning Hubs are practical spaces, in whose design students are allowed to have a say. Hubs can be described as a combination of a workspace and living room. A Learning Hub is not only a place to study, but also a social meeting point, where people come to enjoy themselves.

“*The concept of the Learning Hubs is generally the same: you take a space that is underused and with little investments convert it into something that speaks to the needs of the students. Everything is done together with the people using the space; the locals*” explains Learning Hub project co-ordinator Valeria Gryada.

Gryada works as a designer at the Aalto University Library and has been involved in development of the Learning Hub concept since its inception. The first experimental version of the Learning Hubs ran at the Töölö Campus Library a couple years ago. According to Gryada, this was a true pilot project that produced vital statistical data, thus proving that the Learning Hub would significantly increase the number of users for the space.

Since that time, more Learning Hubs have been installed, sweetening the daily routines of Aalto students and faculty mainly on the Otaniemi campus. The initiative for construction of a Learning Hub in the main building of the Töölö Campus came from the school itself. The word of earlier trials had spread all the way to Runeberginkatu, and the School of Business also wanted to offer its students better working facilities. The goal is to improve learning, promote student interaction and strengthen the sense of community at the School of Business.

**From students to students**

Besides Gryada, an international and multidisciplinary student team has been working on the Töölö project. The team members come from the different schools of Aalto University.

“The different backgrounds of students turned out to be really useful, as they had different points of view on things and were able to build on each other’s ideas,” says Gryada. Indeed, she wants to emphasise the role that the student team played in realising the project.

“Personally, I try to see my role as not really a team leader, but rather a mentor. I want to give them the space to produce their own ideas, not just replicate things that have already been done,” she explains, adding that she is proud of the team’s accomplishments. During the spring, they gathered a large volume of background information and, based on it, came up with a plan, which was presented in May. Based on this plan, installation of the actual space is slated to begin this autumn.

**Different facilities for a wide variety of studies**

The key word in planning was “user-oriented”. In the spring, the team surveyed students at the School of Business – the future users of the space – to determine what kind of study facilities they wanted on the Töölö Campus. Surveying the students turned out to be critical. Gryada provides an example: “At one point, we had a wild idea to completely remove the silent study room on the fifth floor. But we found out that it was actually the only quiet place to study on the whole campus!”

Based on the feedback gathered from students, the space will be divided into separate areas that promote different work needs. There will be space for group work, as well as working on a computer. Although the silent study room will remain where it is, it will receive a minor facelift. A new feature planned for the space includes areas designed for practicing presentations.

Practical improvements come from a grassroots level: more power outlets, better ergonomics and less noise. Making the space a pleasant and motivating meeting place is vital. “There have
to be places where students can just buckle down and study for exams, but also where people can brainstorm, create new things together, meet people and enjoy studying.” says Haakana.

User-orientation will remain a key element even after the space is completed. “We want to make the space flexible, so that users can shape it according to their needs. If something doesn’t work, they can fix it easily and quickly,” says Gryada.

The students of the School of Business will be able to enjoy the updated facilities most likely in the autumn of 2013.

6. Assessment and teaching effectiveness

Fostering quality teaching as with the pursuit of any objective requires a realistic assessment of the starting point – the current level of teaching quality – and a way to measure the progress made. Yet the quality of teaching in higher education is influenced by an array of factors that are both internal and external to the institutions.

Quality teaching is one element alongside others (e.g. research, innovation and social responsibility) to be evaluated in assessing the global performance of an institution, with the emphasis depending on the institution’s mission and strategic objectives.

More generally, evaluating quality teaching needs to be seen within the broader institutional context, closely linked to quality assurance mechanisms and supported by the development of suitable measurement tools that are robust, reliable and meaningful.

Case 13: Assessing student learning – Erin Nordal, European Students' Union (ESU), Belgium

Students have been calling for new ways of teaching and learning and new types of universities since massive protests broke out in Europe in 1968. The aim then was to transform universities to reflect social diversity and respond to the needs of an increasingly heterogeneous student population. Overcoming a lack of democratic governance and changing conservative values and capitalist consumerist culture within universities were essential components to achieving this goal.

Shortly thereafter, the concept of critical pedagogy arose, which had a strong link to the aims of those protests in 1968. The objective of this teaching method is to empower disadvantaged students with knowledge by understanding students’ experiences and social contexts. Students are not empty vessels waiting to be filled with knowledge; the goal must be to transform them and assist them in learning, to challenge common perceptions, myths and what can seem as being already “known”.

Student-centred learning is a concept inspired by these movements and the methods of critical pedagogy. Various actors have contributed to the development of this concept since that time. One of those actors is the European Students’ Union (ESU), which has invested a great amount of work in defining this concept and pushing for its implementation in higher education in Europe.

What is student-centred learning?

Student-centred learning is both a mind-set and culture within higher education institutions. Years of research on the learning process have shown us that the transmission of knowledge from teachers to learners is less effective than an approach to teaching and learning that involves students directly in the production of knowledge, and transforms students’
perceptions and understandings by empowering them to apply knowledge in their own contexts.

It is essential to develop innovative methods of, and excellence in teaching, and to take students seriously by providing them with as much choice as possible, from assessment methods to course literature and study courses in general. Inclusion of students in the academic community must also be supported by building relationships between academic staff and students. Rather than viewing students as consumers, where university staff provide “customer service”, these relationships must be based on mutual respect. Through implementing student-centred teaching and learning, students will gain transferrable skills such as problem solving, critical thinking and reflective thinking.

**What stage are we at now?**

The concept of student-centred learning was first introduced in a communiqué of the Ministerial Meeting of the Bologna Process in Leuven in 2009\(^4\), where ministers agreed that “Student-centred learning and mobility will help students develop the competences they need in a changing labour market and will empower them to become active and responsible citizens.”

An increasing number of actors have also joined forces with ESU in advocating the implementation of the main principles of student-centred learning, which is reflected in the European Union’s modernisation agenda for higher education, as well as the High-Level Group on the Modernization of Higher Education report from 2013\(^5\) on improving the quality of teaching and learning. ESU welcomes these efforts and recognizes that it is crucial to reach an agreement across the entire sector in order to make student-centred learning and excellence in teaching a reality.

**Recognising excellence in teaching**

The European Students’ Union is currently leading a project that is financially supported by the Lifelong Learning Programme of the European Union. The main purpose of this project is to support the implementation process of sound student-centred learning strategies and approaches at higher education institutions and to foster a culture for student-centred learning in Europe and a desire for an excellence in teaching among educators.

This project has been called Peer Assessment of Student-Centred Learning (PASCL) and will develop a set of criteria for student-centred learning that will be used to evaluate higher education institutions starting in 2015. Those institutions that fulfil the pre-defined criteria will be given a label that acknowledges their “student-centredness”. It is important to give institutions an insight into their level of performance in implementing student-centred learning and to reward excellence in teaching. This will hopefully help to create more inclusive higher education institutions.

**What’s next for student-centred learning?**

The implementation process of student-centred learning requires first and foremost ample public funding to provide student welfare services (everything from adequate grants for students to childcare services), continuous professional development for academic staff, small

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4 [www.ehea.info/Uploads/Declarations/Leuven_Louvain-la-Neuve_Communiqu%C3%A9_April_2009.pdf](http://www.ehea.info/Uploads/Declarations/Leuven_Louvain-la-Neuve_Communiqu%C3%A9_April_2009.pdf)

class sizes, conducive infrastructure, etc. It also requires favourable working conditions that allow academic staff to schedule their time with their students.

We must also work for a changed attitude at all levels and increased co-operation among students, higher education institutions, teachers’ unions and other relevant stakeholders, to advocate for proper European and national policies, as well as increased funding to support a transition to student-centred learning. We are also in deep need of tackling the structural challenges that favour research over teaching. We can only move forward to a more modern type of university by prioritising this issue and by ensuring that students gain necessary skills, such as critical and reflective thinking and a capability to solve problems.

Finally, here are a few key thoughts for students: be active, challenge whatever you learn, give feedback and demand your rights as the main benefactors of the higher education system.

Case 14: Measuring teaching effectiveness at the American University of Beirut – Karma El Hassan, American University of Beirut, Lebanon

American University of Beirut (AUB) is a teaching-centred research university. It is home to around 700 instructional faculty and a student body of around 8 000 students. AUB encompasses six faculties, more than 120 programmes leading to the bachelor’s, master’s, MD, and PhD degrees.

Effective teaching includes approaches exhibited in particular situations that lead to positive student outcomes, increases student knowledge and facilitates their learning. Measuring teaching effectiveness is very important because the evidence produced is used for major decision-making, including formative use, meaning to make decisions to improve and shape the quality of teaching; and summative use to “sum up” overall performance or status to decide about annual merit pay, promotion, and tenure.

Although there might not be a consensus on what really is teaching effectiveness, there is a unified conceptualisation of measuring teaching effectiveness: Given complexity of act of measuring teaching, evidence is collected from a variety of sources to define the construct and to make decisions about its attainment. Since a variety of sources exists, triangulation of sources is the key: “Strengths of each source can compensate for weakness of other sources, thereby converging on a decision about teaching effectiveness that is more accurate than one based on any single source, thus providing a more accurate, reliable, and comprehensive pictures of teaching effectiveness that just one source.”

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At AUB, assessment of teaching effectiveness is part of its annual assessment plan that is linked to strategic planning. It includes assessment of learning outcomes at course, programme, and faculty level, in addition to the assessment of general education outcomes. To achieve the above tasks and in alignment with the triangulation of sources principle, various tools are used at AUB and they are summarised in the below table.

### Sources of Evidence of Teaching Effectiveness

<table>
<thead>
<tr>
<th>Sources of Evidence</th>
<th>Types of Measures</th>
<th>Provided By</th>
<th>Who Uses Evidence</th>
<th>Type of Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Ratings</td>
<td>Rating Scale</td>
<td>Students</td>
<td>Instructors/Administrators</td>
<td>F/S/P</td>
</tr>
<tr>
<td>Peer Ratings</td>
<td>Rating Scale</td>
<td>Peers</td>
<td>Instructors</td>
<td>F/S</td>
</tr>
<tr>
<td>Self-Evaluation</td>
<td>Rating Scale</td>
<td>Instructors</td>
<td>Instructors/Administrators</td>
<td>F/S</td>
</tr>
<tr>
<td>Student Interviews</td>
<td>Questionnaire</td>
<td>Students</td>
<td>Instructors/Administrators</td>
<td>F/S</td>
</tr>
<tr>
<td>Alumni Ratings</td>
<td>Rating Scale</td>
<td>Graduates</td>
<td>Instructors/Administrators</td>
<td>F/S</td>
</tr>
<tr>
<td>Employer Ratings</td>
<td>Rating Scale</td>
<td>Graduates/Employers</td>
<td>Instructors/Administrators</td>
<td>P</td>
</tr>
<tr>
<td>Administrator Ratings</td>
<td>Rating Scale</td>
<td>Administrators</td>
<td>Administrators</td>
<td>S</td>
</tr>
<tr>
<td>Teaching Scholarship</td>
<td>Judgmental Review</td>
<td>Instructors</td>
<td>Administrators</td>
<td>S</td>
</tr>
<tr>
<td>Teaching Awards</td>
<td>Judgmental Review</td>
<td>Instructors</td>
<td>Faculty Committees/Administrators</td>
<td>S</td>
</tr>
<tr>
<td>Learning Outcomes</td>
<td>Tests, projects,</td>
<td>Students</td>
<td>Instructors/Curriculum Committees</td>
<td>F/P</td>
</tr>
<tr>
<td></td>
<td>simulations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching Portfolio</td>
<td>Most of the above</td>
<td>Instructors, Students, Peers</td>
<td>Promotion Committees</td>
<td>S</td>
</tr>
</tbody>
</table>

F = Formative, S = Summative, P = Program


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In conclusion, teaching effectiveness is important because effective teaching helps student learning. It has become even more important as the emphasis on quality in higher education has increased. However, effective teaching does not occur by chance. Effective teachers have become good at what they do because they evaluate their practice. Another important conclusion is that whatever combination of sources teachers and/or related bodies choose to
use to measure teaching, they have to take time and make the effort to design, execute, and report the results appropriately. The accuracy of faculty evaluation decisions hinges on the integrity of the process and the reliability and validity of the evidence they collect.

Case 15: Assessing quality of internships – Roberta Piazza, University of Catania

The University of Catania, founded in 1434, organises scientific research and higher education, integrating research and teaching for more than 60,000 students. Its teaching activities (over 80 First Level Degree courses and 50 Second Level Degrees) are carried out in 23 Departments, Ph.D courses, career training courses and Master’s degrees. Furthermore, the Superior School of Catania has been activated, included in a National Network of Schools of Excellence, offering additional degree courses and post-degree specialisation courses.

The experience of the Department of Educational Sciences of the University of Catania is aimed at developing the self-evaluation of learning experiences. The activity, intended for students attending their final year of the first level degree in education and students attending the second level post degree course on job placement services, has been set up as a support activity for students not used to making the most of their learning experiences, especially if related to non-formal and informal settings.

To increase visibility of internship learning outcomes that could help to motivate students towards further learning and “to navigate better both the system of lifelong learning and the labour market”, a model has been developed. It is based on the designing of an on-line platform to update staff agencies’ competences with the aim of facilitating communication and exchange among university staff, training agencies staff and students. It has been designed to promote information sharing among experts and to create a learning environment thanks to a support network via forums and discussion groups.

In addition, the tutorship activity has been planned to offer a permanent support to the students. The intervention has been planned to make students aware of the importance of self-reflection in learning and reflective writing. During the 200 hours of internship in the workplace, a permanent monitoring activity has been conducted through group discussion and personal contacts. Students have been guided towards: recognising their learning outcomes; narrowing the gap between theories and practice; gaining a clearer overview of their learning progress; an appreciation of the importance of self-evaluation in the role of improving themselves. The writing of the final paper allows students to review their learning experiences, to evaluate their performance and to plan future learning, taking charge of their personal and professional development.

7. Matching higher education with labour market/societal requirements

The OECD Skills Strategy states:

Education and training systems need to have adequate access to information on the demand for skills and the drivers of changes in skills demand. Contrary to what some national or even supra-national targets for educational attainment suggest, there is generally no ‘right’ proportion of certain education qualifications in specific occupations. What is ‘right’ depends on a range of context-specific factors, the structure and skills needs of the economy, and the country’s overall aspirations. And it can change over time. Changes in earnings differentials, and the private and public rate of return associated with different education programmes, provide some indication as
to the extent to which additional investments in education are warranted. At the same
time, it is widely recognised that education also serves a consumption function in the
sense that individuals seek to develop skills beyond those that they use in the
workplace. Even if those skills are not associated with immediate earnings advantages,
they may be related to significant social benefits.

All skills needs have to be identified, articulated and translated into up-to-date curricula
and relevant programmes; and systems need to allow individuals to move flexibly between
pathways, including between vocational and academic tracks and other non-formal
learning pathways. Governments, especially those of emerging countries whose skills
needs are changing particularly fast, can reach national aspirations through targeted
education programmes.7

Evidence from the OECD reviews of higher education and regional and city development also
shows that, in many cases, higher education is often geared more towards national skills
needs or to the global aspirations of higher-education institutions than to local needs or
realities8.

Remarks by Peter A. Creticos, DePaul University, USA, 9 April 2014

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“During the 1970s, business adopted new methods for managing risk. Manufacturers shed
inventory and demanded that their suppliers give them just-in-time service. Vertically integrated
businesses began to see value in unbundling their operations into discrete businesses, some they
controlled and continued to use while others they forced into open competition. Businesses also
outsourced non-core functions, such as accounting and human resources, to contractors. In the
late 1990s, employers used contingent workers for core business functions and downsized to a
relative handful of critical personnel. At the same time, many businesses set up shop in the
developing world in order to take advantage of lower wages and easy business regulations.

Workers also are seeing many changes. In the U.S., businesses are replacing defined benefit
pension programs that presumably guaranteed predictable lifetime payments with defined
contribution programs where workers carry the risk. Workers are also picking up an increasing
share of health care costs through higher co-payments and deductibles.

What we now see in the U.S. is that employers appear to be upping the ante on worker
qualifications and are shifting the burden of job-related education and training onto the
workforce and public systems. In a recent NY Times column, the economist Paul Krugman
challenged common knowledge that there is a pervasive skills gap that is hobbling economic
growth. He noted that the economic evidence that would ordinarily indicate the existence of
labour shortages simply does not exist except for pockets of local labor markets. Wharton
Professor, Peter Cappelli, makes a compelling case that is consistent with this view in Why Good
People Can’t Get Jobs: The Skills Gap and What Companies Can Do about It. In it, he notes that


http://dx.doi.org/10.1787/9789264034150-en
employers increasingly seek out ‘purple squirrels’, a term that he borrowed from the IT industry. These mythical creatures possess skills that do not naturally exist in nature.

And, yet, employers wait for purple squirrels to appear at the HR office rather than train workers to fit their needs. The thought is that eventually the productivity and opportunity penalties from an inadequate workforce will compel employers to hire people who generally fit the primary job requirements and then train or provide further educational supports to help round them into shape. But, that does not seem to be happening on a large scale and certainly not to the extent that we witnessed in the 1980s and 1990s when corporate universities were in their heyday.

Paul Osterman and Andrew Weaver at MIT Sloan School of Management, in a November 2013 paper based on an extensive employer survey of U.S. manufacturers, also challenged conventional wisdom and were unable to find evidence of pervasive shortages. What makes this especially interesting is that in focusing on manufacturing alone, Osterman and Weaver controlled for the extensive background noise created by large aggregations of data cutting across many industries. Within manufacturing, they found that the vast majority of manufacturers were not experiencing long-term vacancies, but those that did report problems were significantly associated with higher reading and math demands. Even here, not all of this subset of manufacturers was experiencing significant problems in long-term vacancies. For example, so-called high-tech plants did not stand out as having problems. Among the manufacturing types that did, in fact, experience long-term vacancies, were those that require unique and specialized skills located in industry clusters. Osterman and Weaver suggested that managerial strategies could improve outcomes, perhaps through targeted training solutions and improved relationships with local education and training providers.

Earlier this year, Career Builder came out with the results of its own late 2013 survey of employers, workers, job seekers and ‘academics’.

The report concluded that:

Employers complain about a shortage of qualified people for their jobs, citing a lack of necessary skills among applicants. Hiring managers are searching for people with the ability to be productive immediately, not candidates who may need extra training to do well in a job (even if that training is job-specific). Despite this apparent shortage of talent, however, 75 percent of employers believe they can afford to be selective in the offers they make to potential employees due to the current high rate of unemployment. In fact, 35 percent actually believe they can pay people less because of the unemployment rate.

It goes on to say that,

...job seekers agree with employers that the skills gap exists, but the two groups tend to place the blame in different places. While employers are quick to point the finger at a general lack of skills within the applicant pool, job seekers believe the problem to be rooted in education gaps and a lack of job-specific training. Interestingly, both groups agree – at least to some extent – on disparities concerning wage expectation.

It further points to the massive growth in the number of degree holders in the U.S. with no apparent ‘adjustment’ by the education sector to labor market conditions.

The OECD’s PIAAC study of adult skills offers some additional evidence of the misalignment of worker qualifications and skills and what are required to do the job. Non-trivial percentages of

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workers in many advanced economies reported that they were overqualified or over-skilled for their current jobs. While some of this is due to normal labor market frictions, an abundance of young workers with advance education entering the workforce, and similar factors, the authors of the OECD study nonetheless noted that this suggests that firms are suffering from lost productivity and are wasteful in their use of talent. What the study is unable to assess, however, is whether some of this phenomenon can be explained by management practices: in other words, is there a pattern of practice in which employers are setting the bar for entry or advancement that is above that which is needed to actually perform the tasks of that job? This is because only workers participated in the survey and not the employers.

What is fascinating is that the public policy response to demands by employers for more skilled, higher qualified workers, even in the face of evidence that pervasive education and skills gaps do not exist, is to essentially attempt to fix workers, students and the education and training system, rather than question the management decisions and business practices that may also be reasonably connected to this phenomenon. In a paper published by the Joint Skills Committee of Scottish Funding Council and Skills Development Scotland in April 2013¹¹, Professor Ewart Keep essentially does just this by asking that the “black box” of management practices be peeled open and examined in the plain light of day. While he goes on to address the role of unions and workers’ rights – ideas which I personally favor but do not belong in today’s discussion – the more fundamental message that I take from his paper is that policy should not take the practices of business as simple givens, especially if public resources, laws and regulations come into the mix.

So, how does this come back into our discussion about what works in higher education and quality teaching? To me, it comes back to the utility of the higher education experience for the student, and not just in terms of whether it translates into a good job and a good career - although that is the outcome that most seek. But, I take a somewhat contrarian view that it is not focused entirely on the program graduate who enters the workforce. For example, I recently heard a speaker at an OECD conference on inclusive growth describe the metrics that the local workforce agency uses in determining success. While I can accept the idea of a successful placement as a performance metric, I have a hard time accepting long-term retention or advancement as indicators of the training program’s performance. These are steps that are outside of the control of the training program, and often, outside of the direct control of the program graduate. Workplaces are not necessarily meritocracies. Many factors intervene that are outside of the control of the job-holder.

At the same time, we are faced with the growing reality, at least in the U.S., that workers must be increasingly self-reliant in order to remain competitive in the labor market - whether they currently hold a job or not. Higher education institutions in general will play a central role in this, but some will do better than others. Setting aside research institutions, which have separate and distinct roles to play in both pure knowledge attainment as well as in commerce, the higher education institutions (or schools within HEIs) that focus on teaching and knowledge transfer that will succeed are the ones that focus on the needs of their students by helping them remain competitive in labor market.


¹¹ www.skillsdevelopmentscotland.co.uk/media/646087/skills_in_focus_-_inside_workplace_final.pdf
Notice, I have not said that the role of the institutions is to serve area businesses and fill their needs. I avoided this for two reasons: First, the decision-maker, the driver as to which courses are filled and which are not, is the student. When businesses put student into the seats at school, one can argue that it is the business. But, with most of the costs of attending schools being borne by students and with employer subsidies – and, with general subsidies by government – slowly withering, it is the student who is bearing increasing risk and increasing cost with respect to their education and training decisions. Second, it presumes that there is a homogenous community labeled ‘business’ that speaks with a coherent voice, when in fact, it is really a matter of who makes the most noise and has the time to serve as the public face of business. Advisory committees are often like focus groups, they provide suggestions as to what requires further research, but they are hardly representative samples of businesses within a given labor market. We tend to give them a lot more weight that they deserve, but that can, in part, be attributable to the convenience of rounding up the same group of people time and again.

So, how do higher education institutions better serve their students?

First, they continue to expand their primary services to include what we in the workforce development world call intermediary services. Students are taking enormous financial risks and incurring large opportunity costs as they decide to pursue a particular course of study. They do so with often only vague notions of what the market will demand at the time that they will complete their studies – if that. Often, it is what they are interested in studying – what strikes their fancy – and without any sense as to whether there is a job that is related to it. HEIs can play an important role in helping students sort out a course of action that gives them a reasonable chance of success. In my mind, this blends core educational offerings – offerings that will stand the student in good stead no matter what their future job is – and offerings that focus on a vocational connection. So, if you think that I am advocating on behalf of a liberal arts core – I am. But, I am also suggesting a directionality to the educational experience – one that puts a student on a particular career path. My reasoning is that it provides options for students in the event that they encounter what Nassim Nicholas Taleb has labeled ‘black swan’ events, but also recognizes that employers in a given field are looking for specific skills and knowledge sets.

There is a real challenge to providing effective intermediary services. Our knowledge of what the labor market will look like at any point of time in the future is very bad. Speaking in the context of the U.S., although I have yet to encounter a significantly more robust labor market information system anywhere else, we simply cannot offer any prediction on what job vacancies in a given occupation will look like in a given labor market at a particular point of time in the future. We can project demand and we can even assess what the emerging supply in schools look like over the course of a few years, but, to my knowledge, there is no measure of projected vacancies. This is critical to a student or to someone who is already in the workforce and seeks to advance or change jobs. It plays an important role in terms of wages and in economic growth. And yet, our systems are not aligned to provide that guidance.

My own guess is that our current measures are designed to help policy makers and economists understand large structural issues and that information that really matters in terms of individual choices is not especially interesting to those who study markets. So, in this respect, higher education institutions, as intermediaries, must also serve as advocates for changes and improvements to the information system. Indeed, higher education institutions also have a stake in the matter of new information systems. They need to know what to offer in terms of courses and coherent curricula. As their students must cope with just in time learning, so must institutions be prepared to offer the courses that meet these needs.
Somewhat related is the question of credentials. These are critical to worker mobility and to a competitive environment in which employers are essentially bidding for labor. This means that they must be aligned with labor market needs and carry market credibility. An employer must know how to value any particular credential by understanding what it implies about the worker’s knowledge and baseline proficiency attached to the credential. It also must be understood that there is essential public value that is derived from a credentialed workforce and therefore must be considered, in part, to be a public good. Employers have very little reason to support worker credential attainment because it does contribute to worker mobility. But it is in the interest of individuals and the state for the workforce to remain competitive. From an economic development standpoint, it supports new investments and business expansion if employers know that the labor market can respond to their needs. It also increases competition for workers and will help support wage growth with the obvious economic spinoff effects. In the long term, it benefits employers, but in ways that require them also to compete for the services of the workforce.

While higher education is facing enormous cost pressures, it must also find a way to be accessible. The rapid rise in tuition, especially at institutions that rely primarily on tuition as its revenue source, works against the goal of accessibility. In the U.S., students are incurring enormous debt based on the hope that a higher education will warrant the extraordinary cost and risk. It is a huge gamble, even for so-called ‘professional’ degrees that have a more direct pathway to employment. In many areas, the market for lawyers and MBAs and even a handful of STEM-related professions has dropped significantly, in part because of over-supply and in part because some of the functions that were normally the responsibility of workers with advanced degrees have been outsourced to para-professionals or, in some aspects of law and accounting, for example, replaced by a computer program.

But, accessibility is also related to time and place. Workers are having to learn on the fly in their off-hours, at home and on the job. So, as you all well aware, the concept of the ‘traditional’ student is no longer standard. There have been some fancy phrases that have been attached to this: lifelong learning and life-course development. But, I think that it is more fundamental: it is a matter of lifelong survival in the face of multiple threats and conflicts. And, it is now the individual who is tagged with the responsibility of sorting out how to stay job and career fit.

Finally, HEIs and public policy makers, especially those with a focus on economic development, must pierce what Keen described as the black box of employers. There are employers who use financial strategies to maximize shareholder value, and while that grows wealth for a few, it does little to advance a local economy. There are also some who pursue strategies that increasingly commoditize work. Again, important gains for shareholders, but it hardly does long term good for the local economy – especially in regions that are considered to be advanced. The real consumers for the people who graduate from your programs and the ones that will grow the economy are those that are fully engaged in process or product innovation. These businesses require the human touch and will support the growth of middle-income jobs requiring mid- and advanced-skilled workers.”
Engagement Sessions

**Session 1: How to practically identify and measure the effectiveness of higher education for students?**

- Discuss quality teaching. Teaching has lost its importance to research. For many institutions, quality teaching has never been discussed.
- Explore the meaning of effectiveness in your institution. Effectiveness is not a unique concept, but each institution can have its own conception of effectiveness. It also depends on the viewpoint of other partners: government, students, employers and the media.
- Include students in the discussion on quality teaching.
- Explore the variety of units to be assessed within higher education institutions (students, research outputs, skills...the list is long and all converge towards quality).
- Assess the capacity for change of teachers.
- Explore alternative ways to assess what cannot be measured, such as culture, the impact of things such as cognitive development, motivation, ethics, morals, etc. Discard quantitative indicators if they are unable to reflect the reality. Opt for more qualitative and discussion-inducing evaluation methods.

**Session 2: How to implement an effective and reliable quality teaching-focused evaluation system?**

- Ownership: the evaluation should include different stakeholders, students in particular. Students now are seen as co-producers of quality, so they could contribute to issues and measurement of quality.
- Objectivity: a reliable evaluation system should avoid ranking. It should measure what we need to measure.
- Transparency: the whole process should be transparent, but at the same time the system should avoid to be bureaucratic. Transparency is fundamental to build trust within the whole system, which is the key.
- Benchmark with foreign models (e.g. SPARQS, NESSE).
- Assess the teaching process that is truly conducive to outcomes and changes.
- Assess curriculum in the broader sense, not only from discipline-specific academic criteria. Quality is a wider concept, calling for prior discussions with the entire university community.
Conclusions

John L. Davies, Emeritus Pro-Vice-Chancellor and Professor of Higher Education Management at Anglia Ruskin University, UK

The closing keynote by John L. Davies was a series of reflections on the papers and discussions in the Conference, from a strategic standpoint. The contributions were encapsulated in a conceptual framework indicated in the Figure 1, based on the assumption that the sum total of the initiatives discussed constitutes a serious effort of achieving transformational change within universities.

Transformational change is invariably stimulated by factors external to the institution that create an imperative for creative internal responses (the E factors indicated in Figure 1). These create challenges for HEIs and tend to destabilise the internal status quo, as a prerequisite for the adoption of innovations and doing things differently.

Transformational change assumes that innovations internally will:

- not be confined to the top levels of an HEI, but will need to be adopted by the academic community at all vertical levels (depth of penetration);
- need to be adopted by all relevant academic and administrative units across the institution, since mutual support is essential if innovations are not to be localised or thwarted (breadth).

It is not suggested that all institutions do/need to respond in similar ways, owing to their differing settings, traditions, expertise, etc. However, the evidence presented in the Conference does, in total, display many of the elements that are indicated below.

**Conditioning factors in institutional transformational change**

**Figure 1**

![Figure 1: Conditioning factors in institutional transformational change](source: John L. Davies)
External Conditioning Factors

E.1: The development of the knowledge economy:

- mode 2 – interdisciplinarity and knowledge production based on real life issues and their resolution;
- the locus of knowledge – intellectual expertise is not only in HE, but also in business and private and public sectors;
- the advent of the learning/knowledge region;
- skills to work in the knowledge economy – where are these acquired – HE; enterprises; both?

E.2: Employer demand and preference

HE need to consider various elements:

- How is market demand expressed (various practice and reactive instruments for the HEI)?
- Respective roles of employers and HEIs in manpower development (EUCEN).
- Varying degrees of sophistication re. staff development in stakeholder/companies/organisations and consequences for HEI: how to engage and co-operate.
- Profound change in business models – industry looks for ready-made employees (despite skills shortages likely exaggerated), whilst others prefer to train themselves.
- Often ambiguous messages: from employees, therefore HEIs need to be flexible, and to ensure accurate interpretation.
- Little is known about employer needs in the future – students and HEIs need better labour market information.
- Employers are providers of work learning experience: how should HEIs recognise this?
- Different conceptions of time and urgency amongst the various stakeholders in employer development – creating possible frustrations and discontinuities.

E.3: Changing student demand and profiles

These raise questions about HEIs’ ability to respond adequately and in time.

- Massification – challenges of how to cope economically and pedagogically.
- Students pay high costs and spend time in HE: naturally, they want careers as return on investment.
- Consequences for mainstream full-time education.
- Increase in non-traditional student populations, especially lifelong learners (part-time).
- Using student experience in the learning process.
- Student choice in relation to content of learning, location, pedagogy, assessment: how do HEIs respond to buyer’s market?
- From lifelong learning to lifelong survival – need for lower-cost, understandable and transferable credentials.
- Capacity of university to adjust in time to all the above.
**E.4: Role of government**

This is critical in terms of providing directions, facilitators and removing inhibiting factors.

- **Role of government in terms of:**
  - policy formation, e.g. equal opportunities, internationalisation, funding, student mobility, flexible learning;
  - developing enabling legislation so that universities are facilitated to respond to new paradigms of education.
- **Diversity of HEIs’ mission:** large institutional autonomy (Switzerland), not others (France).
- **Balance between institutional autonomy and public accountability and direction in relation to educational development:**
  - diversity of control over hiring and QA: control over requirements to access professorship and hiring of faculty (Switzerland), no nation-wide QA mechanisms (Japan).
- **Ensure equitable sharing of costs of lifelong training** – e.g. training tax (US).
- **Key role to play in economic development:**
  - make employability an important piece of HE (Germany);
  - couple HE policy with economic development policy to ensure positive labour market outcomes (US).
- **Responsiveness of accreditation and quality agencies to non-traditional higher education practices.**

**E.5: Expansion and evolution of knowledge base**

This is open, not prescribed – not the preserve of HEI, and this creates a challenge for HEIs.

- How to cope with/navigate the explosion of available knowledge – and how to assist students to do this?
- **Inter-disciplinarity (mode 2) and how it is delivered.**
- **Types of knowledge:**
  - functional
  - procedural
  - conditional
- **Use of knowledge (Ernest Boyer’s four faces of scholarship and use of knowledge) by HEI staff:**
  - create
  - disseminate
  - apply
  - integrate across disciplines
- **Ramifications for the mutual reinforcement of:**
  - teaching and learning
  - research
  - knowledge exchange
  in terms of expectations and staff and HE activities, and design of educational and research opportunities.

**E.6: Technological revolution in educational delivery**

Some important consequences for HEIs:

- MOOCs and their effect on conventional universities;
- implications for inter-institutional alliances in educational delivery.
**E.7: Financial reduction**

This poses issues in terms of the economies of the learning process, student numbers, and ability to generate support for new initiatives.

- Different categories of financial reduction scenarios (within a spectrum from a threat to a massive long term funding crisis).
- Budget allocation models to support new paradigms and new pedagogies.
- Income generation via the commercialisation of new methods of delivery to new audiences (entrepreneurial drive).

**E.8: Globalisation**

This creates challenges well outside the jurisdiction of national systems, but offers HEIs many new prospects for innovation internationally.

- A further manifestation of borderless higher education: internationalisation at home and abroad.
- Offshore and e-learning delivery.
- Implications of trade in higher education and international student markets.
- International agendas for HEIs (UNESCO, OECD).
- IT/e-learning and access to new markets.
- International student mobility and employment and implications for internationalisation of the curriculum.
- Rankings and competition and the consequences for educational strategy.
- International institutional partnerships for educational delivery/criteria for engagement.

**Internal Instruments of Change**

**I.1: Awareness and engagement of staff**

This is clearly crucial for staff ownership of innovations, harnessing of enthusiasm and expertise.

- Transparency in policy formation within HEI and a combined top-down and bottom-up model for educational development.
- Absorption of non-conventional academic activity into personnel practices (timetabling, contracts, staff development, incentives and rewards).
- Heavier reliance on cross-institutional project groups to develop new paradigms and activities.
- Cross-fertilisation of experiences and good practice across HEI (internal and external).

**I.2: Programmes**

There are clearly huge possibilities in educational innovation to respond to external factors.

- Introduction of new paradigms and programme philosophy, especially relating to learning outcomes.
- The student as co-producer and creator of knowledge:
  - independent/negotiated degrees, often interdisciplinary;
  - company formation;
  - project management, and work based projects;
  - action learning and action research;
- Identification of skills and competencies:
- acquisition
- development
- assessment

- In the workplace via placements and internships and organisation-related projects.
- Embed a culture of student-focused.
- Strengthen quality of self-reflection.
- Bring together theory and practice, including through variety of practice-oriented pedagogies.
- Centrality of multi-disciplinarity – mode 2 throughout the curriculum:
  - through structured means, e.g. cross-disciplinary institutes, formally designed inter-disciplinary programmes;
  - facilitated through student choice as independent study programmes;
- Implications for faculty development and work.
- Necessity of flexible module and credit systems to realise the full exploitation of:
  - inter-disciplinarity
  - lifelong learning
  - independent study
  - internationalisation
  - co-operative education (in company)

- Innovative assessment arrangements for non-traditional programmes and students.

I.3: Quality
Non-traditional innovative education needs appropriate QA regimes to support and facilitate it.

- Philosophy of quality regimes, which currently tend to be risk-adverse. Can QA regimes foster experimentation?
- Potential tension between bureaucratic external and internal quality regimes and those quality arrangements geared up for innovation and experimentation.
- Ensuring that QA is comprehensive in terms of:
  - mainstream programmes
  - lifelong learning and non-traditional programmes
  - co-operative education programmes/off-campus
  - e-learning delivery
  - continuing professional development
  - modular degrees
  - relationship between education, research and knowledge exchange
- Define “quality teaching” – should be broad and also include research and management abilities.
- Multiple tools and sources of evidence can be used to assess teaching quality.
  - different tools have different purposes (formative/summative, improvement/faculty career advancement);
  - use of wide array of tools fosters objectivity and culture of assessment.
- Key challenge: criteria to quantify quality teaching – not easy to determine.
- Stakeholder engagement in QA processes.
- QA as dissemination of good practice.
I.4: Student engagement
This is clearly as important as staff engagement.
- Make the student a co-producer of knowledge – active attitude, critical thinking, self-reflection and manager of his/her own learning, e.g.:
  - negotiated programmes
  - enterprise – setting up companies
  - managing projects
- Role of student at all levels of decision-making – curriculum design, QA, programme approval, staff hiring.
- Select “student champions” to activate students.

I.5: Employer/external stakeholder engagement
This is clearly essential in terms of the partnership imperative defined in E.2, and to stimulate and sustain internal change.
- Survey employers about graduates’ competencies; use feedback to improve curriculum/student services.
- Maintain ongoing partnerships with local industry; involve them on advisory groups.
- Exchanges with employers should not just be with HEI senior leaders but also at the level of researchers.
- Involve employers in academic processes:
  - programme design
  - teaching and supervision
  - assessment
- Employers as providers of real-life experiences
  - work placements and internships
  - R&D projects.

I.6: Human resources
Educational innovations are likely to create significant challenges in terms of the ability of staff to response. Also:
- Different categories of staff are at different levels of readiness and confidence to take aboard new developments and assistance needs to be targeted.
- Changing role of the academic:
  - new pedagogies
  - cross-disciplinarity
  - teaching, research, knowledge exchange interface
  - experience of world of work
- Contracts as facilitator or inhibitor to innovation.
- Recruitment priorities for new initiatives – academics and external practitioners.
- Improve and formalise professional development programmes
  - certificate upon completion, can build towards higher credential;
  - programme to cover teaching, research, management, capacity to integrate all competencies;
  - provide broadly applicable modules (e.g. on ICT) and contextualised ones, e.g. discipline-specific assessment;
  - offer flexible delivery – online.
- Make participation in professional development compulsory for staff possibly a criterion for tenure.
• Make demonstration of quality teaching a consideration in merit pay, promotion and tenure.
• Develop, with unions, competency profiles for professors and clarify steps allowing for career progress
• Create faculty mentorships and communities of practice
• Provide incentives for participation in professional development.

1.7: Organisation

The conventional cultures, structures and organisational norms of traditional universities are in need of likely renewal to support the innovations under discussion.

• Development of new paradigms/metaphors for the university and its culture:
  - entrepreneurial, responsive and outward-looking;
  - collaborative, as well as competitive internally and externally;
  - a learning organisation of which there may be two dimensions – learning as distinct from teaching pedagogies; experimental ethic compared with status quo;
  - borderless university.
• Senior level leadership and management:
  - Vice-President Teaching and Learning + Vice President Non-Traditional Programmes and External Engagement, both related and in harmony with VP Research and VP Knowledge Exchange;
  - responsible for policy and strategy, championing innovation, problem-solving and monitoring.
• Critical role of middle management and necessity of assistant dean for education, teaching and learning with supporting units at faculty level.
• A dedicated office for educational innovation, separate from conventional academic administration, e.g. multi-purpose university learning laboratory with various functions.
• Structures for multi-disciplinarity.
• Partnerships for the effective design and deliver innovations:
  - on-line provision
  - staff development and research
  - new student experiences
  - benchmarking.
• At national and international levels, both universities and enterprises.
• Note different levels of partnerships:
  - strategic
  - unit or programme level
  - individual.

In summary, it would clearly be helpful if HEI viewed specific educational innovations in a broader context than simply that of the finite projects. Innovations clearly need to be effectively bedded down internally, as well as being responsive to external stimuli, and it is hoped this presentation will assist in this regard.