Flexible Pedagogies: new pedagogical ideas

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Executive summary

Purpose and scope

This study forms part of a multi-strand project on flexible pedagogies funded by the Higher Education Academy (HEA). This strand on 'new pedagogical ideas' positions the relationship between flexibility and pedagogy as an important arena for critical questions about core purposes and modes of participation for teaching and learning in higher education (HE). Within this context, 'new pedagogical ideas' are explored with a focus on building the capability of learners to anticipate and engage with the future and to navigate through complexity, uncertainty and change. It considers the pedagogical questions that arise about the purposes and outcomes of HE in an era of increasing 'flexibility' informed and facilitated by technological changes, globalisation of the sector, rising participation and changing employer expectations.

The report argues that the proliferation of new technologies in HE teaching and learning, coupled with a diversification of learner profiles and pathways through HE, has triggered developments to extend flexible learning at several levels. Despite the potential this brings for democratic and emancipatory approaches to teaching and learning, pedagogical dimensions are easily obscured by technological 'mist'. Furthermore, the tendency to emphasise student choice and curriculum delivery can prevent clear focus on the need for renewal of learning and teaching approaches. In this changeable, globalised learning arena, pedagogical change will be needed to ensure that HE fulfils its educational purpose in responding to societal needs.

This inquiry looks beyond the immediate practical and technological drivers for 'flexibility' in modes of accessing and delivering HE. Instead, it views flexibility through pedagogical lenses as the ability of people to think, act, live and work differently in complex, uncertain and changeable scenarios. It responds to the need for forms of pedagogic innovation that help to develop *flexibility as an attribute or capability*, in both learners and educators. Flexibility is viewed here not just in terms of the drive for greater responsiveness in the delivery of HE, or greater variety in the pace, place and mode of engagement with HE, but in relation to dialogues concerned with rethinking the nature of the university and the value of learning.

The study seeks to ground these pedagogical ambitions in the realities of education practices and the systems of HE institutions, drawing out implications for key agencies and stakeholder groups responsible for academic leadership and curriculum development. Other flexible pedagogies project strands have been tasked with exploring current issues in flexible learning, whereas this study of new pedagogical ideas seeks not to be determined by present trends but to understand how flexibility could inform the future of HE pedagogy in an increasingly globalised arena.

Research process

The inquiry was carried out from mid-March to mid-July 2013, following a process to commission strand leaders for the five research strands and supported by two meetings of the flexible pedagogies project team. For this 'new pedagogical ideas' strand, an initial desk-based review was undertaken of scholarly literature, enhancement initiatives and policy documentation in HE teaching and learning, with specific attention to the UK context. The aim was to identify trends in pedagogical innovation and to situate those trends within the context of recent policy and practice in teaching and learning enhancement in HE.

The second stage in the process was to explore these 'new pedagogical ideas' and their location within the project terrain, through consultation with selected key informants actively involved in HE teaching and learning. This helped to contextualise and develop the findings and recommendations, providing perspective on the relevance and potential of these themes within the education landscape and in relation to the institutional settings in which they are practised.

Research questions

The research process was informed by a shared research question for the flexible pedagogies project:

"Why and to what extent might flexible pedagogies be promoted – and in what ways?"

The 'new pedagogical ideas' strand was framed with specific research questions to understand flexibility in the context of pedagogical innovation and to explore the place of pedagogy in the core purposes of HE:

- How do new pedagogical ideas underpin the reimagining of universities and their core purposes?
- How might we connect pedagogical innovation with the shift to increased flexibility in HE?
- How can flexible learning pathways support new forms of thinking, debate and action in HE?
- How can ideas of flexibility inform education to deal with complexity, uncertainty and change?
- How do 'flexible pedagogies' help us to rethink the how, what and why of the HE experience?

Six new pedagogical ideas

The review process identified the following 'new pedagogical ideas' for the future of an increasingly 'flexible' HE which offer new pathways for graduate attributes or capabilities:

- learner empowerment – actively involving students in learning development and processes of 'co-creation' that challenge learning relationships and the power frames that underpin them, as part of the revitalisation of the academic project itself;
- future-facing education – refocusing learning towards engagement and change processes that help people to consider prospects and hopes for the future across the globe and to anticipate, rethink and work towards alternative and preferred future scenarios;
- decolonising education – deconstructing dominant pedagogical frames that promote only Western worldviews, to create experiences that extend inter-cultural understanding in the HE system and the ability to think and work using globally-sensitive frames and methods;
- transformative capabilities – creating an educational focus beyond an emphasis solely on knowledge and understanding, towards agency and competence, using pedagogies guided by engaged, 'whole-person' and transformative approaches to learning;
- crossing boundaries – taking an integrative and systemic approach to pedagogy in HE, to generate inter-disciplinary, inter-professional and cross-sectoral learning, to maximise collaboration and shared perspective, while tackling bias and differences of perspective;
- social learning – developing cultures and environments for learning that harness the emancipatory power of spaces and interactions outside the formal curriculum, particularly through the use of new technologies and co-curricular activities.

This new terrain around flexible pedagogies connects several strands of education thinking and practice, revealing the need for further scholarship and pedagogical guidance, to bring together the conceptual, theoretical and empirical dimensions, as well as the implications for academic practice.

Institutional implications

The consultation process underlined certain issues in relation to embedding flexible pedagogies:

- flexible learning has often been viewed mainly in terms of learning delivery, but in pedagogical thinking and practice, flexibility can and should be considered as an attribute of both learners and educators – and can also be understood as a characteristic of institutional education strategies;
- flexible pedagogies require joined-up and systemic approaches to enhancement at the institutional level. The institution thus plays a vital role in initiating and/or supporting the adoption of flexible pedagogies, through the interplay between learning and teaching strategies, corporate plans and enhancement initiatives, and the experiences and positioning of educators;
- given the emergent nature of these new pedagogical ideas, the work of sector agencies will be important in helping to articulate the 'big picture' and to support innovation in ways that will promote flexible pedagogies as critical to institutional initiatives in flexible learning;
- developments in IT appear to have dual (even contradictory) influence on pedagogical innovation, at times enabling deep pedagogical change, but often deployed to fulfil other purposes. Flexible learning initiatives that use IT to enable deeper pedagogical change have far greater credibility with academic staff and therefore will achieve more traction for embedding at the institutional level;
- there is greatest support for institutional responses that ensure the contributions and concerns of students and external HE stakeholders are reflected through the use of flexible pedagogies. Drawing on their priorities for flexibility as a human capability, to inform programme development, will ensure that the curriculum develops in ways that are real and relevant for societies;
- institutions hold the key to the pace of transition towards flexible pedagogies and to realising their benefits for the quality of the student experience. Understanding how to bring innovation for flexible pedagogy into internal academic systems and education priorities will be critical.

Recommendations

The role of institutions will be critical in taking forward, developing and refining flexible pedagogies through education strategies, enhancement initiatives and assurance practices. Support from sector agencies will be an important component of their ability to pursue and embed innovation in this area. The capacity-building recommendations from this report are therefore grouped at two levels:

To promote flexible pedagogy at the sector level:

- the HEA could support institutions by developing a series of 'roadshow' events and discussions based on the flexible pedagogy themes, with a view to establishing an online resource for good practices as well as guidance briefs for both students and educators;
- the QAA and HEA could work together with NUS to develop guidance on flexible pedagogy with the involvement of students. The QAA could then explore how its research and development work aligns with the flexible pedagogy terrain and could support future benchmarking activities;
- the HEA could examine ways in which future articulations of the Professional Standards Framework might reflect distinctive and ambitious capabilities linked to flexible pedagogy themes;
- the HEA could develop and disseminate exemplars and new pedagogical tools for more powerful 'co-creation' models to engage learners in constructing and questioning knowledge and learning;
- the HEA could convene seminars for conveners for PGCE HE programmes to explore dominant paradigms that influence pedagogical practice and to reflect fresh approaches aligned with flexible pedagogy themes within institutional CPD activities and programmes for teaching staff;
- the UK Funding Councils could undertake comprehensive scoping of the issues arising in relation to internationalisation and student learning experiences to help improve inter-cultural literacy and awareness of cultural influences in the HE system among staff and students;
- the UK Funding Councils could explore ways to incentivise social learning initiatives that use campus spaces, new technologies and involve local communities, using existing funding streams to foreground the place of flexible pedagogy themes outside the formal curriculum;
- the QAA could consider ways of linking flexible pedagogy themes with institution-wide flexible learning initiatives as a possible thematic priority for future institutional audits.

To promote flexible pedagogy at the institutional level:

- the HEA could ask its network of Pro-Vice-Chancellors for Teaching and Learning to help articulate pathways at the institutional level for responding to emerging flexible pedagogy themes;
- Directors of Teaching and Learning could explore appropriate ways of reflecting flexible pedagogy themes in learning and teaching strategies and through associated quality assurance processes and quality enhancement initiatives;
- Directors of Teaching and Learning could engage in exploratory discussions within their institutions at dedicated teaching and learning events, to consider the relevance of flexible pedagogy themes in consolidating the distinctiveness of their curriculum portfolio and institutional profile;
- conveners of PGCE HE programmes could consider ways to address flexible pedagogy themes and to support the CPD needs of educators to take these pedagogical developments forward;
- senior managers responsible for the student experience could engage in strategic discussions within their institutions about the development of social learning, transformative capabilities and their reflection in student achievement records, for example through the HEAR.

1. Introduction: Connecting flexibility and pedagogy

This section sets out the positioning of this report in exploring the relationship between flexibility and pedagogy and defines its boundaries. It outlines the landscape and context for the project, its key research questions and the scope and process for the inquiry.

1.1 Project context

This report on 'new pedagogical ideas' was prepared as part of a multi-strand research project for the Higher Education Academy (HEA), concerned with the changing learning landscape of HE. The HEA 'flexible pedagogies' project was conceived in recognition of changes affecting knowledge and learning practices that have triggered moves for greater flexibility in the HE curriculum. The project as a whole contained five strands, which included inquiries considering developments in e-learning, part-time learning, credit transfer and employer engagement. This strand on 'new pedagogical ideas' was tasked with looking beyond the most obvious technological developments and changing patterns of delivery, to consider the implications for pedagogical innovation, of an increasingly 'flexible' HE teaching and learning arena.

Pedagogical innovation is currently being influenced at all levels by several significant issues, such as rising global student numbers and increasingly diverse learner backgrounds (in educational, cultural and practical terms) (NUS 2012; Ramsden 2008; UUK 2012a). New technologies continue to proliferate extending the ways in which knowledge and learning are shaped, accessed and managed. As participation in HE expands these diverse pathways and student cohorts are extending the potential and pressure to address more varied learning needs and styles. Meanwhile, processes of marketisation and managerialism continue to prompt debate about threats to the core ethos of HE, particularly its role in education and innovation. A range of concerns have been raised about the compromise and loss of capability for HE to serve as a beacon for social change and to extend the 'public good' of learning across local and global communities (Bell et al 2009; Blewitt 2013; Brown & Carasso 2013; Collini 2012; GUNI 2011).

These influences exist alongside (and often in tension with) pressures on HE to take greater responsibility for the impact and relevance of its research, as well as the professionalism and accountability of its education (as witnessed in the growth of research and impact assessment regimes, as well as professional qualifications and training of university teaching staff, in recent decades). The terrain surrounding this investigation of flexible pedagogies therefore resonates with ongoing discourses about the identity and idea of the university (Barnett 2013), its core functions and responsibilities (Boyer 1990), as well as the nature and purposes of its knowledge practices (Maxwell 2008).

The expanding horizon of learning possibilities that has opened up in response to this mixture of influences is both exciting and daunting, adding new dimensions to thinking about core educational purposes in HE. In this environment we are in need of pedagogical responses that satisfy the drive for flexibility while supporting that foundational ethos behind the pursuit of 'higher' education. The risk (and some would argue the current reality) is that we remain focused on immediate pressures without working to secure the educational foundations for future HE. The need to be future facing in developing HE teaching and learning is even more important in this era of flexibility to embrace pedagogical movements that will best serve HE in promoting learning across societies and equipping graduates for life beyond university.

Therefore the approach of this inquiry reaches beyond the developments in 'flexible learning' that are driven by current imperatives for HE (eg supplying skills to boost industrial growth during economic downturn, or improving employment prospects for students facing sharp tuition fee increases). These are important influences on the HE landscape but this review is concerned with deeper educational questions behind the concept of 'flexible pedagogies' as the sector shapes its future through more flexible forms of teaching and learning. Other flexible pedagogies project strands have been tasked with exploring current issues in flexible learning, whereas this study of new pedagogical ideas seeks not to be determined by present trends but to understand how flexibility could inform the future of HE pedagogy.

1.2 Flexible learning and flexible pedagogy

Thinking and practice in the current flexible learning arena is being driven by technological developments, the extension of new delivery pathways, and the rapid globalisation of the sector, giving form to understandings of the future university as 'edgeless', 'liquid' or 'borderless' (Barnett 2013). Recent thinktank reports, addressing the intensive competition that universities will face in future years, have asked whether HE can justify its place as provider of the key learning experiences that citizens require, often sounding positive notes about the promise of technology in this respect (Barber et al 2013; Bradwell 2009). However, this expansion of 'flexible' educational horizons does not always nurture the kind of pedagogical approach that seeks to improve the quality, relevance and value of learning (Watling 2009).

Initiatives in flexible learning deploy IT innovations and seek to broaden the range of entry and progression options to HE, to enable new patterns of participation across an increasingly globalised sector landscape. In contemporary discourse and practice, the term 'flexible learning' spans several areas of activity with importance for this project (as reflected in the associated project strands outlined above). There is no single standard definition of flexible learning but a growing literature exists in this arena, exploring the discourses, rationale, potential, benefits and tensions of the new flexibility arena in HE (Collis & Moonen 2004; Kirkpatrick 1997; Willems 2005). Prominent models tend to propose continuums of more and less flexible curriculum provision; more comprehensive approaches offer frameworks that address content and pedagogy alongside considerations related to entry and progression pathways, delivery and logistics, and institutional arrangements (Casey & Wilson 2005; Collis and Moonen 2004; Normand et al 2008).

Flexible learning: Territory and definitions	
The HEA approach to flexible learning recognises that 'flexible learning is about enabling choice and responsiveness in the pace, place and mode of learning':	
Pace	encompasses accelerated and decelerated programmes, part-time learning, recognition of prior learning and associated credit frameworks;
Place	encompasses work-based learning and the exchange of effective practice through employee learning and employer engagement;
Mode	encompasses the use of technology to support learning (commonly known as 'e-learning' or 'technology-enhanced learning').
It understands that there are significant areas of overlap between these aspects, which brings the need for integrated strategies for institutional implementation.	

Advances in IT have uncovered significant potential for opening up the HE learning process, extending access and improving inclusivity, with organisations such as the Open University (and its *FutureLearn* institutional partners) and *Coursera* engaged in pioneering open educational resources and courseware, to bring this potential to life. As commentators have recognised, technological innovation is an important enabler for flexible learning but it is by no means the main determinant (Casey & Wilson 2005). The use of IT to broaden the classroom experience into virtual learning environments is developing rapidly, bringing possibilities for greater inclusivity and access. However, it can also bring downgraded pedagogical interaction, raising questions about the quality of learning experience provided through these more 'flexible' patterns of participation. Where extension of 'choice' and an expansion of delivery logistics is the only consideration driving the development of flexible learning pathways, flexibility as a pedagogical concern can be sidelined or absent amidst a focus on issues such as efficiencies, competitiveness and access (DeBoer & Collis 2005; Kirkpatrick 1997).

One useful framework, developed through an international study of changes in HE, distinguishes between *planning flexibility*, which adds flexibility but without altering teaching and learning programmes, and *interpersonal flexibility*, which relates to the dynamics of the programme as experienced by learners – and often involves changes in pedagogy (DeBoer & Collis 2005). This is important in highlighting how considering flexibility in relation to pedagogy is not automatic but can prompt significant change in core learning dynamics. This understanding underpins the approach taken in this study, seeing this connectivity between flexibility and pedagogy as essential for the future quality of HE, as well as the ability of HE institutions to effectively consolidate their position in an increasingly competitive arena of HE providers.

1.3 Rethinking flexibility and pedagogy

Flexible learning has often been seen mainly in terms of the logistics and options for learning delivery but in pedagogical thinking and practice, *flexibility can and should be considered as an attribute of both learners and educators – and can also be understood as a characteristic of institutional education strategies.* These components are dealt with in terms of pedagogical interactions in Section 2 and in relation to institutional contexts in Section 3. To explore this relationship between flexibility and pedagogy more deeply involves critical questions about the direction of educational travel in the present HE landscape and attention to flexibility as educational outcome. Rethinking pedagogy in terms of flexibility in this sense means understanding how pedagogical approaches can enable people to develop flexibility of thinking and action, to influence the scenarios they encounter in their life and work beyond HE.

This approach considers the future landscape for HE graduates, recognising that as the world changes our pedagogies must also find new forms to help learners not just to react to current trends or to repeat dominant patterns of thinking but to be capable of responding constructively and pursuing alternatives. The assumption here is that there is an emergent pedagogic need for different kinds of education in HE and that this will require the development of pedagogical models different from those traditionally deployed in the sector. A similar link between flexibility of offer and pedagogical need was suggested in the 2008 UK HE *'Vision 20-20'* report on teaching and the student experience:

"What kind of curriculum will prepare graduates for an uncertain global future – a future in which their capacity for commitment, agility and boldness will be tested to its limits?" (Ramsden 2008: 7)

Signs of interest in this redefinition of educational outcomes have been increasingly evident in recent literature from industry and employers, with calls for HE experiences that equip people to operate more flexibly in the societies of the 21st century. This includes the flexibility to work across systems; to think critically and creatively; to engage at multiple levels; to develop inter-cultural competence; to propose alternatives; to adapt to changing circumstances and propose alternatives; to develop skills that will support transition to a 'green' economy; and to demonstrate 'moral compass' (ASC 2007; Barber et al 2013; BITC 2010; British Council 2011; IBM 2010; IPPR 2009; Ipsos-MORI 2010; SKY 2011). These reports point to the emergence of a changed 'big picture' view of the skillset and capabilities likely to be expected of future graduates. Principles of flexibility are reflected in the attention they give to operating effectively in global environments, engaging widely across systems and structures, understanding diversity and plural values, and being capable of leading change, in increasingly unpredictable and complex scenarios.

Consultation input: Flexibility and pedagogy			
Director of studies	Senior lecturer	Director of teaching and learning	Professor
"It should be a benchmark skill across disciplines to help students develop that flexibility … not just doing the same thing differently, but getting at the core question of 'what's the different thing we need to be doing' because the world has changed, the mind of students and the mind of employers."	*"If you define flexible pedagogy in the sense of the outcomes - are they really needed in the world out there? And if so, is it fundamental or just incremental? If it's a fundamental shift, then there's an argument about globalisation, IT, and self-reflection: that's the kind of person who is needed now. And then the argument has to be how does flexible pedagogy support that outcome – then you have a more focused definition to work with."*	*"If you don't want to use students as consumers as your framing for all of this, if you believe that universities are all about exploring ideas, these days there is quite often a mismatch between what we teach and what we research – our teaching has not set off in the same direction – and that is the fundamental question. If these are the questions that we want to put public money for research into, why aren't they also the questions that we want people to be teaching?"*	*"There is a bigger (and perennial) argument here about the purpose of education. How can emergent pedagogies serve critical reflexivity rather than (just) the skills debate? Is there enough emphasis on the dangers of marketised individualised learning? So - education for what? Learning for what? There is a danger that flexible learning is restricted to a debate about effective means, and very little about ends."*

In the present HE arena, phrases such as '21st-century graduates', 'active citizens' and 'reflective learners' are in frequent use, but engagement with pedagogies to develop the attributes implied in this refreshed learning 'wish-list' can be superficial. Flexible learning imperatives bring changes to delivery methods, keeping students, educators and institutions busy, but not always engaged with the purposes of learning or encouraged to question the 'how', 'what' and 'why' of their HE experience. Exploring the democratic and emancipatory potential of flexibility in HE requires approaches that both preserve and rethink what is meant by educational value amidst the extension of choice that often drives the flexibility agenda. It also suggests potential connectivity between flexibility as pedagogical outcome and the pedagogical approaches used to support that outcome, forming an additional point of inquiry linked to this project (see Section 2.1).

1.4 Flexible pedagogies and institutional realities

One important task for this project was to consider the institutional settings in which 'new pedagogical ideas' might be brought to life, paying attention to strategic dimensions of pedagogical change and the ways in which institutions attempt to address learning needs articulated within the sector. The challenge of rethinking pedagogy and flexibility is one of pedagogical innovation across the curriculum, in dynamic relationship with the expertise of specific subjects and changes in different professions. This requires a 'systems' perspective on the educational infrastructure, recognising how generic pedagogies change shape, in the context of different institutional arrangements, academic departments and educational agendas.

Uncovering the true educational potential of the flexible learning agenda requires understanding of issues of implementation at the institutional level (Casey & Wilson 2005). Earlier sector initiatives to extend curriculum delivery using IT confronted various implementation and embedding challenges (eg the 1989 Computers in Teaching Initiative, 1992 Teaching and Learning Technology Programme and e-learning investment via the Joint Information Systems Committee). In the evaluation report of the recent HEFCE Flexible Learning Pathfinders project (2005-2010), many strategic and practical issues were identified by participating institutions in terms of the challenges flexible learning experiments presented for existing institutional systems and structures. However, as recent commentators have declared, HE institutions will have to change (Barber et al 2013) to tackle the clashes of organisational models and cultures that occur in attempts to work institutionally on strategies with both corporate and educational intentions.

This inquiry has therefore paid explicit attention to both the institutional setting and the wider sector contexts in which these new pedagogical ideas might be implemented, taking account of lessons learned from teaching and learning initiatives in recent decades. One model to support flexible programme delivery, based on practice in two Scottish HEIs and funded by QAA Scotland, paid attention to institutional and operational dimensions as well as the management of teaching and learning, noting the likelihood of disconnect and the need for strategic alignment at these three levels (Normand et al 2008). In attempting to understand the emergent pedagogical challenges around flexibility, the present inquiry took perspective on the HE system as a whole. This recognises the ways in which institutional arrangements and their interconnections can both support and complicate the efforts of educators to move to greater flexibility in teaching and learning approaches (DeBoer & Collis 2005; Normand et al 2008; Outram 2011).

1.5 Research questions

This review joined the other research strands in the Flexible Pedagogies project by framing its inquiry in relation to the following shared research question:

"Why and to what extent might flexible pedagogies be promoted – and in what ways?"

The new pedagogical ideas strand explored flexibility specifically in relation to pedagogical innovation, to identify potential learning needs implied by the concept of 'flexible pedagogies', as well as responses to those needs. The specific research questions for this strand were concerned to locate 'flexibility' in relation to pedagogy and as part of ongoing dialogue about the nature of the university and the value of learning:

How do new pedagogical ideas underpin the reimagining of universities and their core purposes?

- How might we connect pedagogical innovation with the shift to increased flexibility in HE?
- How can flexible learning pathways support new forms of thinking, debate and action in HE?
- How can ideas of flexibility inform education to deal with complexity, uncertainty and change?
- How do 'flexible pedagogies' help us to rethink the what, how and why of the HE experience?

We declare an interest and expertise in 'Education for Sustainability' (EfS), also known as Education for Sustainable Development (ESD), seeing this as part of the broader movement to reignite debate over the role and nature of future HE and a point of connection with the ideas outlined in this report. The strategic vision for change in education systems outlined in ESD also resonates with the concerns of other 'adjectival' education movements (as explained in Appendix 5.3). The appendix serves to highlight how some of the 'new pedagogical ideas' outlined here can connect through a strategic focus on 'whole-institution' change and also underlines the international context in which new pedagogical movements are arising.

1.6 Process and components of the inquiry

The analysis underpinning this report took place over four months, from mid-March to mid-July 2013, following an initial call for proposals from the HEA Flexible Pedagogies project team, led by Professor Ron Barnett. The inquiry process for the new pedagogical ideas strand involved several steps:

- review of current policy and practice influences in UK HE teaching and learning;
- integration of strategic findings from previous education enhancement initiatives;
- identification of key pedagogical themes or learning challenges emerging in the sector;
- locating leading initiatives and good practices that are responding to these needs;
- consulting with experts to contextualise and develop the findings and recommendations.

This review spanned a range of enhancement initiatives, policy drivers, institutional developments and scholarly literature around the teaching and learning landscape in HE. Following an initial identification of current trends in pedagogy and leading edges in pedagogical thinking, six key 'ideas' were mapped as the prominent thematic points of focus in the present learning landscape. To illustrate these themes, examples of innovative practice were selected to accompany the explanation of the academic scholarship, education traditions, policy trends and pedagogical ambitions behind each of the six 'new pedagogical ideas'.

The interim findings were then explored with several key informants from the UK and beyond, through face-to-face discussions and email consultation. Informants were selected to represent a wide range of teaching and learning expertise, from different academic disciplines as well as thematic areas of expertise in relation to pedagogy and learning. They represent a range of institutional roles, encompassing lecturers and senior lecturers, Directors and Pro-Vice-Chancellors for Teaching and Learning, as well as others with institutional academic leadership roles, for example as Directors of Studies or Lifelong Learning. They also span a range of both 'research-intensive' and 'teaching-focused' institutions, including members of different mission groups (Russell Group, Million+ and University Alliance) and from institutions in the UK devolved administrations and overseas (eg in Scotland and Australia).

The input from these informants was central to the inquiry process, in helping contextualise the themes and to consider their implications for academic practice and university systems. Informed consent was requested to use quotations from these informants and several comments have been included in this report to illustrate key themes arising, with the use of generic role titles to maintain confidentiality.
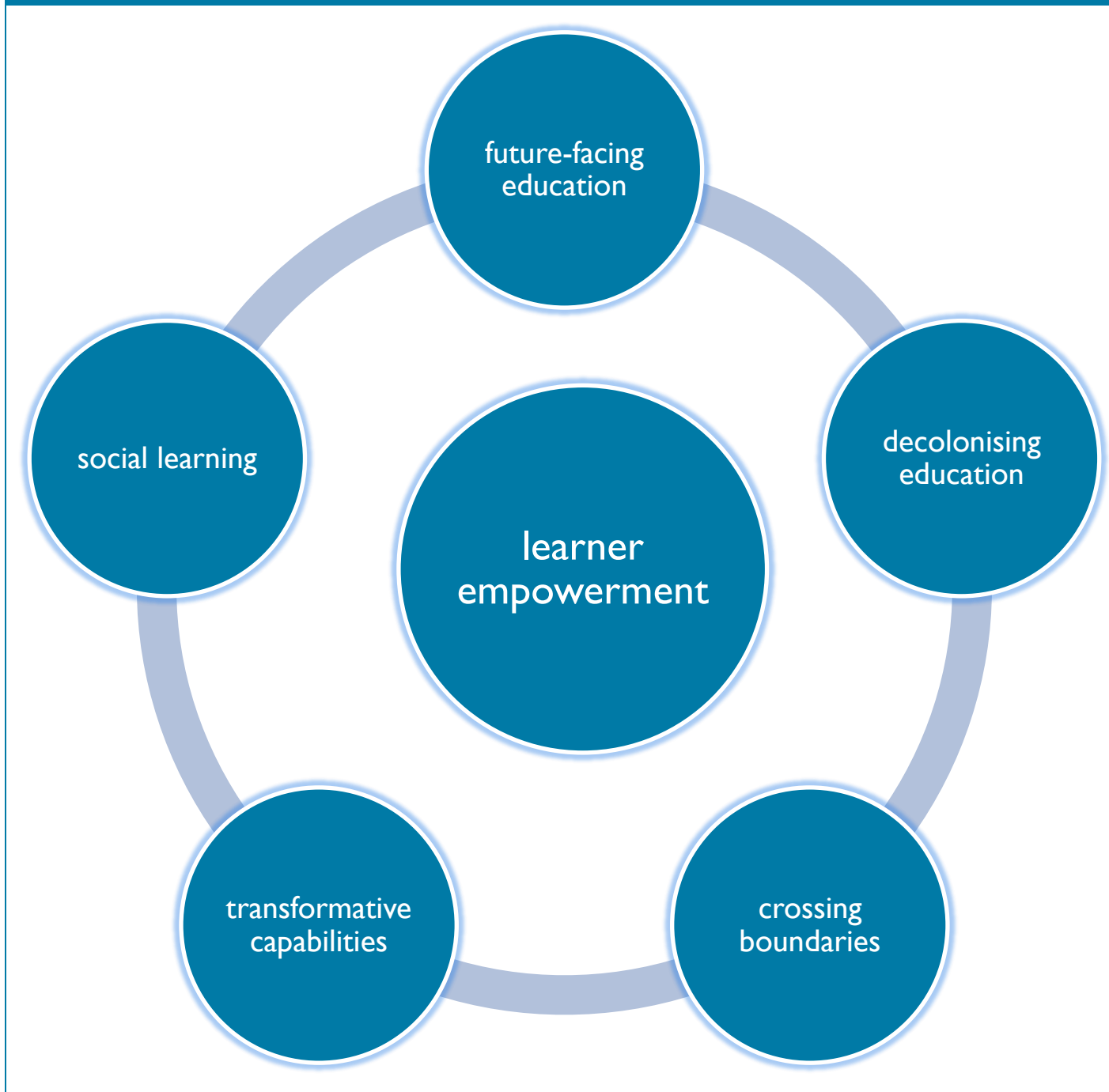
2. Growing edges: Identifying new pedagogical ideas

The section identifies important pedagogical challenges linked to the notion of 'flexibility' and presents them as six key 'new pedagogical ideas' positioned at the leading edge of future HE teaching and learning. They provide a 'big picture' that attempts to forecast and anticipate the emergent landscape for flexible pedagogy, with snapshots for each idea to show their foundations, influences, trajectories, pedagogic concerns and leading practices.

2.1 Finding 'new ideas' for flexible pedagogy

Developments in flexible learning have important implications for pedagogy, as HE responds to emergent technologies, changing expectations of stakeholders and new financial and delivery models. In this shifting education landscape, it is important to take perspective: not only to assess current practices and immediate agendas, but with an eye to the 'big picture' of the changed educational response taking shape in this terrain. This review identifies six 'new pedagogical ideas' that have cross-cutting significance for teaching and learning in the future of flexible HE. Viewing flexibility in terms of educational outcomes or ambitions, these ideas have the potential to shape key attributes for HE graduates and to inform future practice right across the HE curriculum. Indeed, much of their strategic value is found in their potential for application across the curriculum in its widest senses, including the designed curriculum, taught curriculum and received curriculum, as well as the broader student experience that includes informal learning and the co-curricular activities offered by HE institutions.
An initial task for this inquiry was to assess the ways in which any current pedagogical approaches could be seen as entirely new given the existence of inter-linked themes, springboards from earlier movements and divergent levels of embedding across different subject areas. The review process recognised the creative tension between practices steeped in prior education traditions and impulses from recent leading-edge experimentation, both of which combine to create the new frontiers for flexible pedagogy. The six new pedagogical ideas identified here were therefore selected on the basis of four key considerations:

- they are geared towards the 'bigger picture' and future strategic innovation in the curriculum, aiming to avoid the constraints of current discourse and problematisations;
- they are novel in the sense that they are not commonly practiced across HE, even where they are based in earlier streams of education thinking and practice;
- they demonstrate pedagogical concern with 'flexibility' in their focus on enabling learners to anticipate, prepare for and respond to conditions of complexity, uncertainty and change;
- they aim to reposition education, by making use of democratic and inclusive learning practices and drawing on pedagogies that can support change and innovation.

The review of policy documentation, scholarly literature and sector initiatives uncovered six touchstones for teaching and learning that speak to the notion of flexibility as a pedagogical priority, supporting people able to think, act and innovate across existing structures and in highly unpredictable scenarios (Diagram 1). These themes underline how the capability to be flexible applies across occupations and in an increasingly globalised arena, in which careers, technologies and lifestyles are in continual flux. For each idea or theme, there are associated policy discourses and initiatives which this report takes into account, while pointing to the deeper pedagogical ambitions and educational motivations behind them.

Diagram 1: Flexible pedagogies - new pedagogical ideas

future-facing education

social learning

learner empowerment

decolonising education

transformative capabilities

crossing boundaries

In Diagram 1, the theme of 'Learner Empowerment' provides an important connection point and is centrally positioned, in dynamic interaction with the other five themes, to underline the significance of the shifting learning relationships that are implicated in discussions of flexibility and pedagogy. One of the questions arising in this inquiry concerns the extent to which flexibility as an attribute is linked to flexibility in the pedagogy itself: there is an implicit sense of linkage in the literature and practice, although further investigation would be needed to explore this issue comparatively, as against more commonly used and deeply embedded or 'traditional' pedagogies.

What is apparent is that in the flexible learning arena, the balance between instruction and facilitation is being revisited in fundamental ways (Normand et al 2008), with implications for pedagogical dynamics and the learner-educator relationship. Powerful learning relationships will remain at the heart of flexible HE, as has been shown through both successful models of student support (eg the Open University) and in lessons from abandoned experiments (eg the UK e-University project) (Casey & Wilson 2005). Meanwhile, movements to support greater involvement and influence of students in teaching and learning have been foregrounded in influential sector reports and are providing levers for changing thinking in HE about the quality of education and the future of pedagogical practice (eg Gibbs 2012).

The learner empowerment theme recognises that the most innovative experimentation taking place in this area is geared more towards models of *'co-creation'*. Such models challenge the authority of the expert educator and make space for an enhanced contribution from the learner, by changing the dynamics of learning interactions as well as confronting the power frames that underpin the academic project as a whole, drawing on insights from critical education discourses. Its centrality among these six pedagogical themes is shown in the different ways it is reflected across them, taking cues from the diversity of learner cohorts and profiles in the new HE landscape.

Consultation input: learner empowerment and co-creation		
Director of teaching and learning	Senior lecturer	Director of studies
"You start with the input model (to be generalistic), but the minute you start involving students in actually changing whatever it is, you can create something brand new – and that in my experience is the great way to learn through flexibility as it forces them to think in the right modes. Co-creation is utterly rewarding to everybody and you go out of the room thinking 'we have made something that matters'."	*"There is a real need for universities to become learning organisations but they need the cultural space for that. Space is required for the educators to educate and challenge themselves. The key to this, I think, is co-design, co-creation and co-production of learning opportunities and possibilities, moving beyond the rigid structures we inhabit … and co-design must not just be with PWC or Goldmann Sachs."*	*"The concept of entrepreneurship … that you can create, you can change, that you don't have to accept things as they are, you can just get up and go, which what entrepreneurship is about – a lot of co-creation is arguably about embedding that concept of entrepreneurship – showing students that in the key thing they doing at the minute, which is learning and studying, they can be creators, they can be innovators."*

In the following sections, these six new pedagogical ideas are explored in turn, with an indication of their educational foundations and pedagogical focus, key influences and associated strands of scholarship, as well as snapshots of leading practice. A range of exemplars are provided, showing the flexibility of potential use contained within these ideas: the chosen snapshots embrace institution-wide initiatives, discipline-specific manifestos for change, generic toolkits and guidance frameworks. These are adaptable ideas and approaches that span the pedagogy of the classroom and that of the institution, as well as the various 'communities of practice' in HE, using tools and methods that would work across different disciplines and in both formal and informal learning contexts (see also Appendix 5.2).

It is important to note that these new pedagogical ideas are framed as 'growing edges' because they do not reflect dominant practice or mainstream thinking in HE. In several cases, their scholarly foundations have yet to be fully articulated and examples that illustrate comprehensive embedding in the curriculum are not always easy to detect, as they are slowly emerging into current practices and education discourses. In many cases, it is possible to identify both weaker (often policy-led) and stronger (invariably pedagogy-driven) forms of practice on the ground – and the evaluation of their impact and effectiveness is in its infancy. For the sake of this report, these six themes serve to frame some key ideas that serve as entry points into the future teaching and learning discussion, providing more democratic and diverse forms of education than the dominant pedagogical models that currently guide and reinforce the HE curriculum.

2.2 Idea one: learner empowerment

The idea of 'learner empowerment' addresses the challenge of changing the basis for interaction between educator and learner, to involve students more actively in the process of learning and thereby in the process of reshaping teaching and learning processes as well as the university. It is underpinned by the concept of flexibility in the move to reframe academic relationships, connecting students and educators in collaborative effort to recreate the 'intellectual commons'. It foregrounds the essentially political nature of education systems, seeking to engage learners not only in 'co-creation' of the academic project, but in challenging and changing social practices in their lives beyond HE.

The concept of 'co-creation' is used to indicate interactions that encourage collaborative and democratic input from students as stakeholders in shaping knowledge practices (Bovill et al 2011). The pedagogical ambitions behind learner empowerment are realised through the use of participatory, transformative and 'active' pedagogies, positioning students as peers with valuable contributions to make to curriculum design and teaching approaches, as well as the broader culture, practice and experience of learning in HE.

Several key influences and components currently influencing thinking and experimentation in this area include scholarly prompts as well as changes to education policy and practice in HE, such as:

- an increase in pathways for direct student engagement in curriculum development and quality assurance processes (eg the sparqs initiative in Scotland and recent QAA work in this area);
- scholarship and models from the radical pedagogy tradition, critical literature on the nature and role of HE and work in critical social theory (Boyer 1990; Neary and Winn 2009);
- growing recognition of capabilities students develop through their HE experience, connected with moves to extend the graduate transcript with new HE Achievement Reports (HEAR) (UUK 2012b);
- the recent wave of initiatives devised to enable students to operate as 'change agents' within the existing HE system and to lever changes of practice within their own institutions;
- expanded understandings of 'entrepreneurship' in supporting co-creation and democratic forms of education (as well as more recent developments to promote social ventures in HE institutions).

This landscape for student involvement and influence in UK HE is, in part, driven by a changed funding regime and prevalent discourse around the 'student as consumer' of the HE offer. It also connects with broader understanding of the need to engage with different needs, expertise, purposes and ambitions of learners, as participation in HE diversifies, moving decisively beyond the 'tabula rasa' notion of the undergraduate student and recognising the breadth of skills they bring to their HE experience. The focus on student input also provides some response to the historical blind spot, identified in evaluative reviews of HE policy, around using student perspectives to improve teaching and learning (CHERI 2007; NUS 2012).

As students take greater roles in shaping the curriculum, developments around this theme are increasingly critical in revitalising learning dynamics and reconfiguring learning processes. Cutting edge work in this area attempts not just to improve the presence and voice of students in shaping specific learning experiences or providing input to existing academic systems, but in reconnecting the academy with everyday realities, the interests of students and the priorities of its various stakeholder communities. This moves beyond what can be an illusion of the empowerment and influence of students on the HE system and instead seeks to create meaningful ways that learners can influence both their educational and their social futures.

The pedagogical challenge in this theme is to equip people with an understanding of the constraining hierarchies and transmissive or 'top-down' educational models that guide their HE experience, as well as the power and capabilities to challenge and shape the options before them. In this respect, learner empowerment provides an important cross-cutting theme that connects with a range of education movements (including ESD) that prioritise futures-oriented and emancipatory pedagogies.

Student as producer - University of Lincoln

This University of Lincoln initiative takes up the learner empowerment theme as the point of focus for an institution-wide initiative to embed undergraduate research across the university (2010-2013). The term 's*tudent as producer*' communicates an intention to advance the role of students in generating knowledge and deconstructing academic hierarchies. It aims to support and consolidate institutional practice and policy for research-engaged teaching as a foundation for the undergraduate curriculum. The initiative is guided by the need to address the challenge of enhancing HE teaching and learning practice through deeper integration with research activity, recognising the systemic differences in status between these two academic functions in HE.

The approach seeks to bring learners more actively into the development of the academic project of the university. Its pedagogical ambition is to enable students to be collaborators in the production of knowledge and meaning, rather than simply consumers of it. *Student as producer* seeks to create a 'radical framework for debates and discussion about policy and strategy for teaching and learning across the university, based on a radicalised political vernacular' (s*tudent as producer* website, as below). Its activities include strategic work in curriculum change, as well as events and projects led and initiated by students in all faculties and disciplines.

Its points of focus demonstrate some of the ways in which principles of 'learner empowerment' can support the collaborative spirit and interlinked character of flexible pedagogies, such as the move to generate dynamic and collaborative learning spaces and to use IT to support new forms of scholarship and knowledge creation. The *student as producer* ethos has a strong focus on the use of participatory and engaged pedagogies and modes of discovery with learners, to 'prepare them for a world of uncertainty and complexity, where they need to find forms of existing that lie outside the traditional formats, and in ways that lie beyond what a mainstream education may normally prepare them for' (s*tudent as producer* website, as below).

Student as producer is supported by the HEA through the NTFS scheme as well as building on the work of the *Reinvention* CETL for undergraduate research at the University of Warwick and Oxford Brookes University. It involves collaborations with partners at several institutions in the UK and countries such as the Netherlands and Australia. Its evaluation strategy uses a range of indicators covering aspects of staff awareness, understanding and commitment; measures of student satisfaction, success and progression, as well as project outputs and legacies by and for students; and progress in embedding the initiative into institutional strategies and processes, as well as external measures linked to quality assurance mechanisms.

Source: Neary and Winn 2009; http://studentasproducer.lincoln.ac.uk/

2.3 Idea two: future-facing education

The idea of 'future-facing education' communicates an educational vision concerned with enabling people to think critically and creatively and flexibly about future prospects, to generate alternative visions of future possibilities and to initiate action in pursuit of those visions. The theme taps directly into commentary about the lack of futures perspectives in education and the need for learners in HE to develop 'informed foresight' in relation to contemporary discourses about the future (Slaughter 2008). Moves for futures-focused education attempt to improve human prospects and quality of life through the development of skills and capabilities in learners that will help them to anticipate and challenge likely future scenarios.

In terms of pedagogical need, one of the important touchstones for learners is to have the confidence to address complex, uncertain and changeable global situations, through the use of engagement and change processes that help them to rethink and create different pathways for the future. Teaching and learning approaches linked to futures thinking include processes for understanding different perspectives and hopes about the future, envisioning alternatives to current scenarios, challenging social practices that constrain future outcomes, engaging stakeholders and planning ways to work towards positive change (Tilbury 2011a; Tilbury & Wortman 2004). In terms of educational practice, this approach takes a decisive step away from problem-solving approaches that are framed within the parameters of a visible or emerging challenge. Instead, it begins with processes for imagining alternatives, uncovering tacit beliefs and assumptions about the possibilities, and using 'envisioning' activities as the basis for actions that are more coherently aligned with the preferred goals identified.

Innovation in this area has been informed by international scientific, cultural and economic dialogues around education and sustainable development that are concerned with future prospects for humanity. Key pedagogical thinkers in this area have foreground the role of education in perpetuating and challenging existing socio-economic patterns that have damaging consequences for people and planet, with particular attention to the role of schools and the importance of equipping young people to explore the future (Hicks 2006). Certain developments can be highlighted as key influences on this theme:

- the emergence of 'futures studies' since the 1970s, in key scholarly publications and the concerns of organisations such as the World Futures Studies Federation to examine possible, probable and preferable futures and to embed relevant learning approaches into the curriculum;
- international dialogues in 'education for the future' that provide thematic principles for rethinking education, such as the UNESCO International Commission on Education for the 21st century, *Learning: the Treasure Within* (Delors 1996);
- growth of the Education for Sustainable Development (ESD) movement, with its focus on changing education systems, institutions and pedagogies to promote deeper engagement of people with sustainability challenges (see Appendix 5.4);
- trends in pedagogy geared to transformative learning, learner engagement, systemic thinking, developing capabilities and global citizenship (Tilbury and Wortman 2004; Ryan & Cotton 2013; Sterling 2011; Tilbury 2011a).

In the HE sector, the idea of future-facing education is not well known; the term 'futures' appears regularly in academic discourses, but pedagogical strategies in this area have scarcely entered the scholarship of teaching and learning discourse.

These pedagogical approaches have, however, gained prominence under the UN Decade of Education for Sustainable Development (2005-2014), accompanied by dedicated funding and engagement from governments worldwide (Jones et al 2010; Tilbury 2011b). As with most aspects of education, debates about the place of futures thinking represent a new frontier and also provide an interesting interplay with the role of historical understanding in society. This theme proposes additional learning dimensions in the overall attempt to navigate the tensions between tradition and innovation, to identify connections between the past, present and future and to examine the influences and perceptions involved in those dynamics (Tilbury 2011a).

Idea two: future-facing education – leading practice

It's a living thing – New South Wales Government, Australia

Macquarie University partnered with the New South Wales Government in Australia in 2003 to offer the 'It's a Living Thing' programme as a professional development process for HE graduates working in education and learning roles across a range of sectors, but who lacked any formal training in education. The participants were working mainly as environmental professionals in local councils, state government departments, NGOs, FE institutions and private consultancy firms as well as business and industry. The programme reached over 125 participants during the 12 month process, combining two-day workshops with follow-on workplace mentoring to support professional implementation.

The initiative engaged participants in 'futures thinking' processes to assist them in identifying preferred socio-economic and environmental futures and aligning their professional goals and actions accordingly. Pedagogical strategies for 'envisioning' took the participants on individual journeys to help construct, define and negotiate strategies for what they considered to be a more positive and sustainable world. Through the participative processes they were exposed to the breadth of different visions, life experiences and ambitions among people and considered how these factors shaped their expectations of the future. The process included two year plans to implement a range of actions in their professional roles and contexts.

Its evaluation process documented changes in participants' understanding and skills, as well as professional outcomes to improve impetus, structure and tools for implementation. It confirmed that the learning and participation processes had clarified the current stances and expectations of participants, as well as helping them to shape intended actions for the future:

"There is no doubt in my mind, that the programme redefined processes and possibilities in education in New South Wales. Its legacy can be felt still today. It developed roots which have withstood the test of time as well as changing political interests." (Syd Smith, participant and retired State Government Official – evaluation comment provided by private communication.)

It's a Living Thing provides an example of the ways in which futures thinking processes can engage people across sectors to make a difference in their professions and communities. It provides a model of ways to use flexible pedagogical approaches to help empower learners who have no background in education practice or pedagogical theory, to build hope, rethink their goals, construct plans and inspire action for more sustainable futures.

Source: Tilbury and Wortman 2004

2.4 Idea three: decolonising education

The idea of 'decolonising education' is concerned with deconstructing dominant pedagogical frames which promote singular worldviews to extend the inter-cultural understanding and experiences of students, plus their ability to think and work using globally-sensitive frames and methods. It has emerged as an urgent and important pedagogic need for HE, linked to rapid globalisation and the issues of cultural diversity and inclusivity this implies. As a learning challenge geared to embedding 'diversity' within the idea of flexibility, it includes efforts to 'internationalise' the curriculum through the inclusion of global examples, reach and content, but also moves past this to extend inter-cultural literacy among staff and students through their broader experience of HE, improving their ability to think and work using different cultural perspectives (Hyland et al 2008; Welikala 2011).

The pedagogical concerns linked to this theme involve recognition of the critical importance of the learning environment in nurturing global perspectives and fostering inclusivity and cultural interaction in the HE experience (Welikala 2011). Application of these principles requires significant changes to curriculum content and pedagogical practices, including the approaches that expose different values and aspirations among societies and cultural groups. Pedagogical innovation has been prompted by work in fields of citizenship education and global learning, seeking to develop forms of education that enable people to understand global-local connections and links between their lives and the experiences of other people worldwide, including the political, cultural, economic and environmental factors at stake and the wider implications for justice and equity (Pike & Selby 1988).

Efforts to 'decolonise' knowledge and research practices have been developing in recent decades in many aspects of university life and through the influence of several areas of scholarship and policy:

- innovation in research methodologies and in the focus and concerns of disciplines, drawing explicitly on expertise from the global south (Tuhiwai Smith 1999; Alvares & Faruqi 2012);
- insights into pedagogical practice from work in areas such as the teaching of global citizenship, race and ethnicity, globalisation theory, and associated critical theories of education;
- policy directives aimed at improving equity and inclusion in university life, linked to developments in equal opportunities as well as racial and religious discrimination (eg HEFCE 2012; HEFCW 2012);
- industry reports pointing to the critical need for inter-cultural literacy and competence among graduates in an increasingly globalised professional arena (British Council 2011; CIHE 2008).

As a pedagogical challenge, this moves far beyond the need for language skills or an understanding of global markets (although these are important) reaching towards an appreciation of the wider world and of diversity, as well as the mindset and capability to operate effectively in international settings. From within the HE sector, the needs have been articulated in several critical studies forecasting the urgency and importance of preparing students in this area (Hyland et al 2008; Lowden et al 2011; Ramsden 2008). The power of the HE institutional setting, overseas experiences and informal learning, are all highly significant arenas for promoting diversity, equality and participatory interaction across social and cultural groups.

To decolonise the HE learning experience also means creating more inclusive learning environments and encouraging the kind of informal learning that takes place through cross-cultural socialising and co-curricular activities. In these areas, as noted in one report on the internationalisation experiences of staff and students, UK universities still have some distance to travel (Hyland et al 2008). Additional complexities arise in recognition of the pedagogical and political issues around transnational education and rising participation in HE. As recent statistical reports and scenario development exercises have shown, HE is being significantly shaped by the development of transnational HE; in the UK recruitment expectations are linked to the growth of international students and high levels of participation among growing second and third generation minority and migrant communities (UUK 2012a, 2012c).

These trends present challenges at many levels, linked for example to the use of other languages in the delivery and experience of HE, as well as the exploitative relationships and knowledge hegemonies that are easily enacted or reproduced in the establishment of validation partnerships and curriculum development systems (Alvares and Faruqi 2012; Welikala 2011). It is critically important that pedagogy is considered at all levels of the HE transaction to address the patterns and traditions that have been transmitted through our education systems rather than taking them at face value, as well as consideration of who controls learning objectives, standards and practices in the surrounding corporate, professional and quality frameworks of HE. The ambitions behind this pedagogical idea have been expressed in Paulo Freire's work on pedagogy as the channel for 'conscientization' in order to respond critically to dominant cultural interests and construct alternative ways of life for future generations (Freire 1970).

Idea three: decolonising education – leading practice
Decolonising legal education in Malaysia

The impulse and agenda for decolonising the provision of legal education has been articulated by Faruqi (2012) as an agenda with implications for individual programmes and professional practice as well as national policy and legal frameworks. Drawing out several implications of globalisation and the colonial legacy in the way that law is practised and legal education is delivered in Malaysia, this approach points to many practical and intellectual issues, which also serve as points of engagement for a transformed educational response. Some of these issues for the discipline and professional practice include:

- building on national improvements in the provision of 'repatriated' law programmes and the development of legal literacy in the public domain;
- addressing implicit colonial legacies in the profession, including the use of expertise from the west and its influence on patterns of teaching staff training and recruitment;
- redesign of curricula to reflect local circumstances, knowledge and experiences, for example the place of religion and custom in the foundational understanding of law;
- improving the knowledge contributions of Asia and decentring the hegemony of western informing traditions in philosophy, psychology and scientific endeavour;
- embedding broader global perspectives in relation to the practice of international law and the agendas and discourses of human rights that underpin its practices.

In articulating this agenda in terms of the manifesto for change it communicates for an entire profession, this example demonstrates not a specific example of curriculum innovation but rather the breadth of engagement needed for genuine work in the decolonisation of education at HE level. It provides a set of initial prompts, questions and parameters that can be applied and adapted in the effort to transform education and learning in many other disciplines and perhaps most importantly, in enabling a rethink of western programmes about the ways that colonial legacies are reflected in their frameworks, content and overall design.

Source: Faruqi 2012

2.5 Idea four: transformative capabilities

The idea of 'transformative capabilities' has an educational focus beyond an emphasis on knowledge and understanding towards more engaged approaches to learning, taking the concept of capabilities as not just accumulated abilities but their deployment in both familiar and unfamiliar circumstances. This notion of capabilities connects with the concept of flexibility in its focus on type of adaptive abilities required to apply knowledge and skills, plus the refinement and development of those abilities based on experience and learning from unintended consequences.

The idea of transformative capability implies the capacity to learn, innovate and bring about appropriate change, connecting with aspects of the idea of 'competence', such as an appreciation of the contexts in which skills are used, as well as the values and choices around their use in real situations. It embraces 'lifelong' learning (that takes place throughout the lifecycle) in adult and community education, and recent thinking around 'life-wide' learning (across different spaces and settings – which in HE includes both on and off campus) (Jackson 2011). Education practice in this area also draws upon holistic models of human capability (including not just cognitive abilities but affective and spiritual dimensions) to equip learners with higher order capabilities to respond effectively to complexity, uncertainty and change.

Transformative learning theories have had a powerful influence on the discourse around this theme, promoting participatory pedagogies and critical reflection on assumptions and interpretations to engage not just the intellect but affect, identity, worldview, beliefs and values (Mezirow, 2000; Sterling 2011). This also connects with concepts of 'third order learning' through the integration of new contexts and perspectives for the learner, enabling them not only to see the world differently but to engage and act differently in it (Bateson 1972). Transformative learning approaches in education prioritise the use of critical reflection, challenge existing assumptions and lead to the creation of alternative meaning schemes. Several streams of thinking and practice contribute to this idea, with both longstanding and recent origins:

- traditions of experimentation and thought in progressive and alternative education, for example in Dewey, Montessori and Steiner, focused on 'whole-person', experiential and situated learning;
- thinking and practice in the area of 'transformative learning' and higher order capabilities, building on the work of Bateson (1972) and Mezirow (2000);
- aspects of the idea of 'competence' relating to the ability to contextualise and adapt knowledge and skills to situations, foregrounded in discourses such as the 'capability movement' in education (eg in the UK through the RSA and the HE for Capability movement in 1988);
- capability frameworks for human wellbeing that serve as tools to promote equitable forms of development but have uses in rethinking education (Nussbaum 2011; Walker & Unterhalter 2007).

Scholarship in this area has not yet been matched by the transfer of theory to examples of convincing embedding in the curriculum. Some of the critical discourse around transformative learning argues that the potential for embedding 'transformative capabilities' is very limited at HE level, citing the obstacles presented by conventional academic structures and systems (Sterling 2011). In many ways, the issues have resonance with those around inter-disciplinary learning, in that the promotion of innovative approaches in this area is often limited by the constraints of the learning environment. The pedagogical need is therefore for adaptable tools that articulate these kinds of transformative capabilities and that can be put to work in various ways both within and outside the conventions of HE. Perhaps most importantly, the transformative capabilities theme puts the spotlight on the capabilities of the educator (as the 'model') as critical to the effective development of these capabilities in the learner.

Educator competences – UNECE framework for ESD

As part of the United Nations Decade of Education for Sustainable Development (ESD), the United Nations Economic Council for Europe (UNECE) commissioned the development of a cross-European framework for educator competences to support practice and innovation across education systems. The intention was - rethink the transformative capabilities of educators as critical agents for pedagogical change in education systems that transmit an acceptance of unsustainable ways of life and education practices that deaden curiosity, action and innovation:

"Education should play an important role in enabling people to live together in ways that contribute to sustainable development. However, at present, education often contributes to unsustainable living. This can happen through a lack of opportunity for learners to question their own lifestyles and the systems and structures that promote those lifestyles. It also happens through reproducing unsustainable models and practices. The recasting of development, therefore, calls for the reorientation of education towards sustainable development." (UNECE 2011.)

To generate a more applied and holistic framework, the framework was developed using the four principles of the 'International Commission on Education for the 21st Century' report to UNESCO (Delors et al 1996) *'Learning: the Treasure Within'*:

Learning to know - refers to understanding the challenges facing society both locally and globally and the potential role of educators and learners (*The educator understands...*)

Learning to do - refers to developing practical skills and action competence in relation to education for sustainable development (*The educator is able to...*)

Learning to live together - contributes to the development of partnerships and an appreciation of interdependence, pluralism, mutual understanding and peace (*The educator works with others in ways that...*)

Learning to be - addresses the development of one's personal attributes and ability to act with greater autonomy, judgement and personal responsibility in relation to sustainable development (*The educator is someone who...*)

These four principles are then elaborated by mapping three key elements or characteristics viewed as critical to effective learning experiences in ESD:

- *holistic approach* - which seeks integrative thinking and practice;
- *envisioning change* - which explores alternative futures, learns from the past and inspires engagement in the present;
- *achieving transformation* - which serves to change the way people learn and the systems that support learning.

The UNECE ESD competency framework is a unique document based on leading education thinking, adaptable across all levels of education and prepared by a working group spanning 12 countries. Government nominated experts formed the group, representing education agencies and other stakeholders from member states across the wider European region. The framework was published in 2012 and was accompanied in 2013 by the provision of materials and workshop tools to enable education practitioners to road-test the framework and use it to analyse practice, initiate discussions and plan enhancement work for their learning activities.

Source: UNECE 2011; http://www.unece.org/fileadmin/DAM/env/esd/ESD_Publications/Competences_Publication.pdf

2.6 Idea five: crossing boundaries

The idea of 'crossing boundaries' involves taking integrative and systemic approaches to knowledge and learning. It recognises the need to transcend the disciplinary points of focus and specialist expertise that are embedded in the academic endeavour and its traditions, to support inter-disciplinary, inter-professional and cross-sectoral working. Its pedagogical connection with the notion of flexibility lies in the attempt to reconnect HE teaching and learning with ambitions for learners to be able to integrate and apply different kinds of knowledge, recognising the translation gap between the specialisation of disciplines and the complexities of 'real-world' scenarios.

This theme draws on a long and varied history of disciplinary migration and change in HE, as inter-disciplinary teaching and learning has been an ongoing impulse shaping the HE curriculum as part of the sector's responsiveness to societal, economic and industry concerns (Nissani 1997; OECD 1972; Thew 2007). In more recent formulations the theme of crossing boundaries has drawn upon these longstanding traditions, as well as newer developments, resulting in a range of prompts and influences:

- efforts to promote a 'post-disciplinary' landscape, supported by theoretical frameworks to develop unified science and systems thinking, which includes the various conceptions of inter-disciplinarity, multi-disciplinarity, pluri-disciplinarity and trans-disciplinarity (Chettiparamb 2007; Klein 1990);
- models of liberal arts education that have wrestled with curriculum design to accommodate both breadth of engagement and depth of specialisation (Klein 1990; Nissani 1997);
- curriculum and training development initiatives to promote inter-professional education and learning, for example across health, social care and education (Barr et al 2011; Gordon 2006);
- calls from industry and the business community for an enhanced HE response to equip graduates with the 'soft skills' to deal with complexity, 'wicked problems' and inter-professional working (ASC 2007; BITC 2010; IBM 2010; SKY 2011).

The 'real-world' emphasis and driver for curriculum change here is reflected in a focus on participatory, reflexive and applied pedagogies, as well as skills for engaging across sectors and professions and for involving people in genuine forms of stakeholder engagement. This includes sensitivity not only to different conceptual frameworks and professional interests but the ability to reflect on tensions between alternative sets of values and priorities, and to reconcile these influences into coherent responses. Pedagogical techniques include collaborative working in practice contexts, sharing perspectives and concerns on key issues and components to be addressed by multi-professional or cross-discipline groups, as well as methods for tackling stereotyping, competitiveness and unequal status in group learning dynamics.

In terms of the practicalities of changing HE teaching and learning, attempts to cross boundaries can be conceived, planned and delivered in various ways, including through specialist programmes that co-ordinate input from multiple academic departments; activities and assessments that engage groups of learners from different programmes; strategic institutional initiatives or strategies (including through informal learning and the co-curriculum) to foster cross-disciplinary learning and interaction.

Given that institutional structures and sector level benchmarks can militate against innovation in line with the 'crossing boundaries' theme (Thew 2007; Brooks & Ryan 2007), one of the most important pedagogical needs appears to be in the provision of tools that can be used and adapted for different settings and groups. This may go some way to enabling educators to experiment in their own learning activities, despite the lack of support structures within the formal curriculum architecture. This may assist in harnessing the enthusiasm for this type of work that is evident in many learning arenas and projects outside the formal structures of HE, particularly in community education and learning.

Idea five: crossing boundaries – leading practice

LinkingThinking for educators - WWF Scotland

The LinkingThinking initiative was funded by WWF Scotland and developed through collaborative work among a group of partners and writers (Sterling et al 2005). It provides an innovative resource designed to help develop understanding and skills for both educators and learners, with specific focus on 'systems thinking', guided by the idea that more connected and integrative ways of thinking are essential to living in a highly interdependent world.

The resource and toolkit that resulted from this project provide an introduction to systems thinking that is highly flexible and can be adapted for use within the curriculum, in stand-alone learning activities or for professional development and training. The development team worked from the belief that systems thinking is an ability or skill that can be taught and learned through the provision of appropriate tools and concepts. It includes separate study units for inclusion in learning activities as well as an independent toolkit of exercises and materials.

Its materials also provide explanations of key terms in the area of systems thinking, including concepts of holistic and relational thinking, positioning these ideas as complementary and unified approaches compared with more analytical and reductionist approaches that separate knowledge domains and tend towards the compartmentalisation of aspects of reality.

The initiative was guided by the assumption that contemporary problems are compounded by lack of ability to analyse the nature and consequences of inter-relationships, particularly between economic, social and ecological systems. It sought to respond to the need for citizens to have qualities of 'flexibility, resourcefulness, creativity, self-reliance and empathy, and the ability to participate actively and responsibly'.

Source: Sterling et al 2005; http://assets.wwf.org.uk/downloads/linkingthinking.pdf

2.7 Idea six: social learning

The idea of 'social learning' is concerned with developing educational cultures and environments that utilise the power of co-curricular learning spaces, informal learning and social interaction in HE experiences. In this theme, attention is given to flexibility in terms of the influence of the varied contexts in which learning takes place, in addition to (or in tandem with) the interactions triggered within the formal curriculum. An important component of this theme concerns the role of IT developments in extending the learning spaces of HE and the platforms that IT innovations are providing for more dynamic engagement of learners within the university setting, in both physical and virtual spaces.

In this emergent field, there is a growing scholarly literature attempting to consolidate understanding of thinking and practice around the ways that learning is enabled through the campus learning infrastructure (Boddington & Boys 2011; Temple 2007). Commentators in this area are examining how investments in educational infrastructure and facilities have expanded both physical and digital spaces leading to a rethink of how learning takes shape in - and is shaped by - those spaces, to better understand the relationships between social and spatial, as well as the implications for optimising learning environments (Boddington & Boys 2011). This relatively new and underdeveloped field considers how new learning spaces can serve as the locations for formal learning in the formal curriculum, but also enable informal learning outside the curriculum as individuals and groups interact to construct reality and determine their learning experiences.

In UK HE there have been noticeable moves to generate more pedagogically-driven learning spaces on campuses, influenced by educational and social thinking as well as pragmatic and policy considerations. Developments have been funded and established through the CETL initiative and related incentive schemes generating a range of experiments with new learning environments, such as simulated, immersive and external environments, as well as peer to peer and social learning clusters (SFC 2006; SQW 2011). As commentators have noted, the relationship between the physical infrastructure and its learning activities is perhaps better understood at school level than in HE and until recently there has been little other than anecdotal examples in the literature to explore how spaces in HE serve informal learning and community-building among students and to evaluate the impacts and benefits (Temple 2007). Developments in this area have profound significance at the institutional level and have been guided by several influences:

- scholarship in 'social learning' concerned with the social and cultural contexts and influences upon learning, drawing on thinkers such as Vygotsky, Habermas, Kölb and Wenger (Blackmore 2010);
- increasing focus on the personalisation of learning experiences and maximising opportunities for collaboration in universities, in line with expectations around student choice and education quality;
- developments in thinking and new initiatives under the banner of 'café-style' pedagogy (Cohen et al 2008) and 'free university' community-engaged movements in virtual and physical spaces;
- insights from critical theory, as well as practice-based models and experiential learning frameworks, to understand the situated nature of education as well as the influence of the 'hidden curriculum';
- recognition that IT developments seem to be prompting shifts of lifestyles, learning styles and thinking styles, towards more strategic, discovery-based learning but perhaps less competence in evaluation and critical appraisal (Watling 2009).

One of the fascinating dimensions of flexibility within this theme emerges in the vital role that IT can play in providing new forms of learning through virtual online spaces that can be deployed outside the formal curriculum. Although the flexible learning arena has not always taken up this radical pedagogical potential this is where IT can act as a significant positive enabler for innovation through the use of Web 2.0 tools geared to interaction and collaboration. Furthermore, the potency of these tools is in part due to their existence outside corporate control and therefore their highly adaptable nature as channels for engagement between technology and pedagogy, as well as participation and engagement across campuses, between universities and with other groups and organisations (Watling 2009). Additional possibilities stem from the variety of modes they offer, including the use of sound and image, extending potential pathways into critical pedagogy for those with different physical abilities and learning styles.

Perhaps the most striking feature of social learning is its growing presence as an institutional education concern and an imperative for organisational thinking about improving the experiences of students to enable this type of connectivity across people, groups and communities. The most ambitious efforts in this area, from the pedagogical point of view, see 'social learning' as an institutional lens in which teaching and learning practices are under review, prompting new pedagogical experiences that are profoundly student-centred and that build bridges and fracture hierarchies between educators and learners, between different specialists, and between universities and their surrounding communities. New initiatives around this theme take full account of the importance of these interactions within and outside the formal curriculum to ensure that social learning becomes central to the future experience and educational impact of HE by supporting learners to connect their HE experiences through learning, action and reflection.

Idea six: social learning – leading practice

Grand Challenges – University of Exeter

The LinkingThinking initiative was funded by WWF Scotland and developed through collaborative work among a group of partners and writers (Sterling et al 2005). It provides an innovative resource designed to help develop understanding and skills for both educators and learners, with specific focus on 'systems thinking', guided by the idea that more connected and integrative ways of thinking are essential to living in a highly interdependent world.

Building on the theme of engaging in new collaborations and interactions, the Grand Challenges programme goes beyond a content-led curriculum change initiative to engage more deeply with social learning as complementary to formal programmes of study. It provides all first-year students with the opportunity to work in inter-disciplinary research groups through an 11-day programme of learning activities, cultural, social and sporting events.

Learners are invited to choose one of several Grand Challenges themes on key global dilemmas such as wellbeing, climate change and international security. They then participate in groups with leading academics, external experts and postgraduate students, to apply academic knowledge to real-world situations. For each dilemma, several inquiry groups tackle specific aspects or questions and cogenerate their outputs using alternative formats such as policy papers, videos, debates, awareness campaigns, myth buster sheets, social media or performances.

Achievement and recognition are prioritised with participants offered a certificate for active participation and completion of a reflective skills review. University awards are linked to the process, as well as reflection of the achievements on the graduate transcript and special rewards associated with each dilemma. Additional benefits include the skills masterclasses, social events and campus festival that take place during the programme. Participating staff are encouraged by reflection of their work in the professional workload allocation and the prospect of new opportunities for professional networking.

Source: http://www.exeter.ac.uk/grandchallenges/

3. Institutional realities: Reorientating learning cultures

This section considers the implications for institutions when considering prospects for embedding the new pedagogical ideas identified in Section 2 into curriculum practice and institutional strategy. It considers pathways for change to address flexibility as a pedagogical priority for the future HE curriculum taking account of the multiple levels in the HE system.

Consultation input:: institutional change		
Senior lecturer	Director of studies	Senior academic coordinator
"What often impedes change and innovation within HE is not only educational policy and managerialism but also firmly embedded organisational routines and cognitive habits. These can militate against change and risk taking in pedagogy and curriculum design."	*"If you think about the transaction cost of change, there has to be a really strong driver for an institution to set off on change. Either the current financial model is collapsing (but that is embedded in a very commercial model of what the university is about), or it's about the big picture. But there is no big picture being sold, so why would an institution set off on change?"*	*"The downside of this emphasis is that it offers flexibility within a paradigm of inflexibility … A radical overhaul about the structure and delivery of higher education is needed … and these sorts of discussions are likely to require institutional and policy backing at the highest levels."*

3.1 Institutional enhancement challenges

In the literature on HE there is recognition of how universities, as loosely-coupled organisations with often contradictory policies and missions, contain multiple internal communities in which different groups co-operate - and compete for resources and power (eg Becher and Trowler 2001; Clark 1983; Trowler et al 2005). As noted in one review, learning development is 'extraordinarily context-dependent' and must itself be flexible if its aims are to be realised in the complex settings of HE institutions (Gibbs 2009). Changing the orientation of the curriculum to respond to new pedagogical ideas requires integration of macro, meso and micro parts of HE institutions, taking account of people, processes, experiences, resources and values – but with specific attention to both the macro level of 'programme design, institutional strategy and national policy' (Gibbs 2009) and the meso level of 'the department and workgroup' (Trowler et al 2005). Curriculum innovation is, therefore, always subject to systemic weaknesses arising from this complexity, in which the work of lone pioneers or worthy initiatives is easily sidelined by higher level agendas or abandoned at moments of staffing or organisational change.

The articulation of new pedagogical ideas in Section 2 contained clear pointers about the need to consider issues of institutional implementation for any form of pedagogic innovation – and indeed pointed to the importance of the institutional resources and infrastructure as a potential enabler for flexible pedagogies. However, achieving institution-wide curriculum change is notoriously challenging (Kandiko and Blackmore 2010; Pegg 2013; Ryan 2012) and requires an understanding of the non-linear *process of change*, as well as the potential *rationale for it* (or resistance to it) in the eyes of varied 'communities of practice' (Lave and Wenger 1998). In the HE institution this includes students, academic and professional staff, senior managers, as well as the growing range of external, professional and industry partners with a stake in the development and delivery of the curriculum. As indicated in one international review, curriculum reform initiatives are influenced by geographical position and academic profile, as well as by attempts to ensure that underpinning educational philosophies are reflected in the process (Pegg 2013).

Strategic approaches are necessary to ensure that investment in education enhancement leaves a legacy, given that HE teaching and learning is developed and managed at several levels, with the potential this brings for contradictory and competing policies and practices (HEA 2009; Smith 2005; Stevenson & Bell 2009). Reviewing evaluation reports and related literature shows clearly that when major sector-level enhancement initiatives are put in place without explicit 'systems' approaches or change strategies synergies between levels of activity are rare. This has been noted, for example, in the evaluation of the TQEF (HEFCE 2005), the CETL initiative (Saunders et al 2008; SQW 2011) and other studies of institutional enhancement (Thew 2007; Trowler et al 2005). Such reviews observe the difficulties of achieving transfer from the individual to the departmental level (eg in the NTFS scheme), from project level to the wider subject community (eg in the FDTL initiative) or from topic and/or disciplinary focus to wider institutional practice (eg in the CETL programme). Whether flexible learning initiatives are primarily geared to improving efficiency and choice in teaching delivery, or whether pedagogic concerns are also key drivers, the same messages apply about ways to plan effective pedagogical interventions in institutions.

3.2 Trends in institutional innovation

While the new pedagogical ideas outlined in Section 2 have started to appear in scholarly literature and academic practice, pioneering initiatives have confronted the challenge of achieving organisational shifts. To embed distinctive pedagogies that support these themes as cross-disciplinary education priorities requires attention to the various enablers and obstacles, for example around institutional strategy, assessment practices and learning infrastructure. In the institutional setting, flexibility becomes important not just as an attribute for learners and educators, but within the pedagogy of the institution itself and its strategies, systems and structures. Changing the cultures of HE institutions involves careful navigation in relation to academic freedom and institutional autonomy, given that cautions surround many centralising enhancement activities due to suspicion of their policy drivers in the current climate. However, as has been observed through this inquiry, that changing climate is also reflecting an urgent call and need for this kind of pedagogical innovation, with responses emerging on various fronts, such as the large-scale curriculum reform initiatives that have been put in place at prominent universities across the globe and in relation to a variety of thematic educational priorities (Kandiko and Blackmore 2010; Pegg 2013; Ryan 2012).

One pathway that has been increasingly prominent internationally is the development of institution-wide 'graduate attributes' (which serve as frameworks for many of the aforementioned curriculum reforms). The 'graduate attributes' approach encourages coherence in curriculum development across disciplines, through the articulation of generic themes such as tackling complexity, inter-disciplinary working and inter-cultural literacy. As commentators have noted, these statements provide clear strategic positioning often linked to institutional teaching and learning strategies, quality assurance processes and academic management systems. However, they often suffer from lack of conceptual and theoretical grounding not to mention difficulty in reaching shared understanding and moving beyond the type of staff engagement that merely pays 'lip service' to their pedagogical ambitions (Barrie & Prosser 2004).

These difficulties observed in the literature in relation to 'graduate attributes' are challenges common to any institution-wide initiative to rethink pedagogy and curriculum, as found in one recent multi-institutional project that sought to introduce ESD through quality assurance and enhancement systems (*Guide to Quality and Education for Sustainability,* Appendix 5.2). In initiatives of this kind, the sheer range of stakeholder perspectives, not to mention their different practical and educational points of focus and expertise, mean that an extended period of experiment and consultation is necessary to locate and embed change within the institutional mission and identity (Ryan and Tilbury 2013). This underlines the importance of integrated approaches to development and implementation to achieve some measure of successful embedding while also taking advantage of the potential gains that emerge from using flexible mechanisms, such as 'graduate attributes', in ways that make sense to institutional stakeholders.

The graduate attributes approach: University of Western Sydney (UWS), Australia

The UWS approach to reorienting education strategy has been developed around a series of graduate attributes that cover five key knowledge domains, articulated with corresponding generic skills as well as descriptors for the graduate capabilities they support:

- commands multiple skills and literacies to enable adaptable lifelong learning;
- 'Indigenous Australian knowledge' – demonstrate knowledge of Indigenous Australia through cultural competency and professional capacity;
- demonstrates comprehensive, coherent and connected knowledge;
- applies knowledge through intellectual inquiry in professional or applied contexts;
- brings knowledge to life through responsible engagement and appreciation of diversity in an evolving world.

Taking up the theme of flexibility and attempting to reflect local concerns specific to the institution, the initiative included the development of an 'indigenous' component into the graduate attribute framework. This move to enhance the applicability of the framework and to optimise its appeal to a range of stakeholders was accompanied by an extended strategy for development of the approach, as documented in internal policies and plans (UWS 2012).

The implementation approach sought to reflect the attributes across UWS curricula and through its Academic Standards and Assessment Framework as well as its Learning and Teaching Plan 2012-2014, to position the role of graduate attributes in 'a curriculum characterised by innovation, engagement and excellence' and ensure alignment with the Australian Qualifications Framework in the levels of study.

Source: UWS (2012): http://policies.uws.edu.au/view.current.php?id=00158

As indicated above, strategic institutional initiatives for curriculum change linked to flexible pedagogy themes are more likely to succeed with the adoption of 'systems' approaches and can take many years to achieve. Furthermore, the practical realities of attempting to bring flexible pedagogies alive are at times constrained by the physical campus infrastructure, its teaching spaces and investment options. Evaluative literature points clearly to the need for greater attention to these infrastructural influences, as well as to the part played by social practices, to compensate for the more usual focus in enhancement initiatives on the power of individuals to lever change.

Large-scale initiatives for changing teaching and learning in HE institutions tend to play out under the influence of 'disjointed strategies and tacit theories' for change (Trowler et al 2005). Arguably, this places an inappropriate burden of responsibility on the 'reflective practitioner' (Schön 1983) at the micro level and provides insufficient defence against the absorption of dominant teaching and learning regimes and practices. This includes the need for attention to the contexts in which programmes are developed and the power of assessment as a driver for pedagogy. As one recent report acknowledges, embedding the 'outcomes of a 21st-century education' (including some of the capabilities for complexity, uncertainty and change explored here) will be dependent on transformation in assessment practices (HEA 2012a).

Consultation input: assessing flexible pedagogies			
Senior lecturer	Professor	Senior lecturer	Director of teaching and learning
"The problem I have is that if you go to colleagues and ask if they are delivering all this, they would say they are, at teacher level - how do you say, from a flexible pedagogy point of view, you're not already doing this! People don't always appreciate that assessment then drives the pedagogy - and in terms of innovation, this is the issue. Thinking more holistically is one of the great challenges of a modular scheme. Where is the holistic part of the curriculum? Where do students get an opportunity to be more holistic in their thinking?"	*"We need to start with focusing on validating outcomes (here we would argue that graduates should be 'work ready plus', where the 'plus' can include graduates being sustainability literate, change implementation savvy and having a considered position on the tacit assumptions driving the 21st-century agenda – eg growth is good, consumption is happiness, ICT is the answer and globalisation is great) and then determining how to most validly assess the development of these capabilities. Only after this is sorted do we look at the most flexible and responsive learning design to enable students to develop the capabilities (outcomes) sought and an aligned support and delivery system."*	*"Flexible pedagogy is about participation not performance … Failure is an important part of learning and we tend to stress achievement or attainment rather than learning. Students and staff are emotionally and intellectually restricted accordingly. We have strict learning outcomes but little room for expressiveness, we have team work rather than group association and problem solving rather than problem exploration or, except in a few cases, genuine inter-disciplinary or trans-disciplinary problem-based learning …. We need a democratic learning culture in HE not a performative culture."*	*"The tyranny of the modular structure forces us to have these micro outcomes that we strive to assess and strive to write feedback against, but we just write the programme outcomes as if they were some vague rationale that is there because the form requires it – and we don't assess to them and we don't typically design the curriculum to them. There are great exceptions to that, but I've seen so many programmes that are fragmented – and then you say 'how do you actually deliver this programme' and you get an absolutely blank expression on everybody's faces … If we could actually shift the balance that way, that I think would make a difference."*

In taking forward the agenda outlined in this study so that 'new ideas' for flexible pedagogy become more firmly embedded in the flexible learning arena, further thinking will be needed about the appropriateness of curriculum architecture and associated assessment regimes. This includes attention to the 'big picture' view presented here of the flexible pedagogy landscape, as articulated by professional and industry stakeholders as well as academics. It will also require further integration of the findings of studies dedicated to the needs of learners at HE level, indicating that student interest, engagement and retention is connected to learners' need to be able to deal with contested knowledge and difficult concepts, to and complexity within uncertainty, and to engage actively with global issues to make a difference to their societies and professions in the future (CHERI 2007; Drayson et al 2013; Ramsden 2008).

4. Conclusion and recommendations

4.1 Closing comments

Framing flexibility as fundamental to HE learning dynamics recognises that both educators and graduates need flexibility at several levels to address societal, economic and environmental issues in an increasingly globalised world (GUNI 2011). This inquiry has identified several new pedagogical ideas that respond to the *'how'* and *'in what ways'* aspects of the original research question. It has also uncovered an overall context in which the *'why'* - the fundamental rationale for embedding flexible pedagogies - is now far more clearly articulated in an era of increasingly 'flexible' globalised HE. However, the extent of change in this direction will remain dependent on the use of strategic approaches that are context sensitive and take account of the complexities of teaching and learning enhancement within academic institutions. There are clearly implications with regard to academic leadership for the future that would merit further investigation.

This project has revealed several ways in which flexibility can be reconsidered and reframed as a profound pedagogical concern and has noted that the flexible learning arena can serve either to thwart or to enable construction of this distinctive 'big picture' for future pedagogical innovation in HE. It has identified a range of interesting practices, approaches, tools and interventions that should be usable and translatable in different settings in support of this larger pedagogical vision. These new pedagogical ideas linked to 'flexibility' reach beyond the individual classroom or learning context to revitalise the pedagogy of the institution and the HE system as a whole to gain traction across different subjects and in terms of the broader university learning experience. They appear to have appeal at several levels, for educators, learners and for employers, and intersect in several ways with existing agendas in 'flexible learning', improving the management rationale for their uptake in pursuit of an improved student experience.

New pedagogical ideas in an era of 'flexible' HE are those that will help to reorient academic practices and systems so that HE institutions can better fulfil their responsibilities as beacons for social change, not just through research and discovery but through their core educational purpose. Without them, educational practices promote understanding and skills for engaging with existing social practices but may not actually empower learners to improve quality of life, social conditions and human prospects across the globe. This future-facing approach to flexibility takes in ideas of responsiveness and adaptability, and recognises that as our institutional and technological systems change shape they may be both constraining and extending our own potential for flexibility setting an urgent pedagogical challenge that requires HE to respond.

The implications for those involved in HE, whether working at strategic level to shape the 'big picture' or directly involved in developing and delivering learning activities in HE, are exciting. There are indications of potential connection between pedagogies geared towards flexibility in the learner and flexibility in the very nature of those pedagogies - connections that can only be brought to life through the educator and their approach to the learning dynamic. The inquiry has also revealed several growing edges of scholarship, with new paths to investigate at conceptual, empirical and theoretical levels in order to ground these new pedagogical ideas more firmly in the literature around flexible learning and the future of HE. One of the most interesting 'next steps' is to engage in further discussions with those working in HE at various levels, to explore the potential of these new ideas and to understand some of the ways in which they can be embedded coherently in teaching and learning.

For all these new ideas there is an explicit aim of changing education systems and practices right across HE institutions to develop our pedagogies for complexity, uncertainty and change. Their focus on changing learning relationships and spaces, on extending and sharing perspectives and on taking an integrative approach to learning, all point to the need for deeper reorientation of HE teaching and learning. Flexible learning imperatives have the potential for endless new delivery methods, pathways for engagement and deployment of technologies, keeping students, educators and institutions busy (and doubtless increasing levels of 'digital literacy'). However, not all of these efforts bring democratisation and empowerment into the learning process, or foster adaptability and inclusivity in learners and educators - attributes which will be at the heart of any 'flexible pedagogy' in future HE that is worthy of the label.

4.2 Recommendations

The systems, cultures and practices of HE are complex, providing an array of levers and channels for change in education and pedagogy. Therefore, the recommendations from this report have been grouped at two levels to build capacity for flexible pedagogies at both sector and institutional levels.

To promote flexible pedagogy at the sector level:

- the HEA could support institutions by developing a series of 'roadshow' events and discussions based on the flexible pedagogy themes, with a view to establishing an online resource for good practices as well as guidance briefs for both students and educators;
- the QAA and HEA could work together with NUS to develop guidance on flexible pedagogy with the involvement of students. The QAA could then explore how its research and development work aligns with the flexible pedagogy terrain and could support future benchmarking activities;
- the HEA could examine ways in which future articulations of the Professional Standards Framework may reflect distinctive and ambitious capabilities linked to flexible pedagogy themes;
- the HEA could develop and disseminate exemplars and new pedagogical tools for more powerful 'co-creation' models to engage learners in constructing and questioning knowledge and learning;
- the HEA could convene seminars for conveners for postgraduate certificate HE programmes to explore dominant paradigms that influence pedagogical practice and to reflect fresh approaches aligned with flexible pedagogy themes within institutional CPD activities and programmes for teaching staff;
- the UK Funding Councils could undertake comprehensive scoping of the issues arising in relation to internationalisation and student learning experiences to help improve inter-cultural literacy and awareness of cultural influences in the HE system among staff and students;
- the UK Funding Councils could explore ways to incentivise social learning initiatives that use campus spaces, new technologies and involve local communities, using existing funding streams to foreground the place of flexible pedagogy themes outside the formal curriculum;
- the QAA could consider ways of linking flexible pedagogy themes with institution-wide flexible learning initiatives as a possible thematic priority for future institutional audits.

To promote flexible pedagogy at the institutional level:

- the HEA could ask its network of Pro-Vice-Chancellors for Teaching and Learning to help articulate pathways at the institutional level for responding to emerging flexible pedagogy themes;
- Directors of Teaching and Learning could explore appropriate ways of reflecting flexible pedagogy themes in Learning and Teaching strategies and through associated quality assurance processes and quality enhancement initiatives;
- Directors of Teaching and Learning could engage in exploratory discussions within their institutions at dedicated teaching and learning events to consider the relevance of flexible pedagogy themes in consolidating the distinctiveness of their curriculum portfolio and institutional profile;
- conveners of postgraduate certificate HE programmes could consider ways to address flexible pedagogy themes and to support the CPD needs of educators to take these pedagogical developments forward;
- senior managers responsible for the student experience could engage in strategic discussions within their institutions about the development of social learning, transformative capabilities and their reflection in student achievement records, for example through the HEAR.

5. Appendices

5.1 List of acronyms used

CETL	Centres for Excellence in Teaching and Learning
ESD	Education for Sustainable Development
FDTL	Fund for Development of Teaching and Learning
HEA	Higher Education Academy
HEAR	Higher Education Achievement Report
HEFCE	Higher Education Funding Council for England
HEFCW	Higher Education Funding Council for Wales
IT	Information and Communications Technology
NTFS	National Teaching Fellowship Scheme
QAA	Quality Assurance Agency
RSA	Royal Society of Arts
SFC	Scottish Funding Council
SPARQS	Students Participation in Quality Scotland
TLTP	Teaching and Learning Technology Programme
TQEF	Teaching Quality Enhancement Fund
UNESCO	United Nations Education, Scientific and Cultural Organization

5.2 Useful resources and tools

This Appendix provides an indicative range of website resource banks containing pedagogical tools and techniques, teaching guides and scholarly literature that relate to many of the 'New Pedagogical Ideas' for flexible pedagogy outlined in this report:

Centre for Academic Practice and Research in Internationalisation Resource Bank:
http://www.leedsmet.ac.uk/world-widehorizons/index_resource_bank.htm

Centre for the Advancement of Interprofessional Education: http://www.caipe.org.uk/resources/

Centre for Curriculum Internationalisation: http://www.brookes.ac.uk/services/cci/

Guide to Quality and Education for Sustainability in Higher Education: http://efsandquality.glos.ac.uk/

Inclusive Teaching Resource Network: http://caitlah.cal.msu.edu/itrn/sample-page/

Interdisciplinary Teaching and Learning Group: https://www.llas.ac.uk/projects/2892

Learning for the Future - Competences in Education for Sustainable Development:
http://www.unece.org/fileadmin/DAM/env/esd/ESD_Publications/Competences_Publication.pdf

LinkingThinking: http://assets.wwf.org.uk/downloads/linkingthinking.pdf

Multiworld - Non-Eurocentric Curricula:
http://multiworldindia.org/multiversity/non-eurocentric-curricula/

Reinvention - an International Journal of Undergraduate Research:
http://www2.warwick.ac.uk/fac/cross_fac/iatl/ejournal/

Teaching and Learning for a Sustainable Future: http://www.unesco.org/education/tlsf/

Teaching Citizenship in Higher Education: http://www.southampton.ac.uk/citizened/

Teaching Race and Ethnicity in Higher Education: http://www.teachingrace.bham.ac.uk/

The Language Café: http://www.languagecafe.eu/en/intro.html

UNEP Greening Universities Toolkit:
http://www.unep.org/training/publications/Rio+20/Greening_unis_toolkit%20120326.pdf

5.3 Education for sustainable development

One international movement that has made inroads in joining together the 'new pedagogical ideas' identified here, to reconnect HE with its societal responsibilities and contribution to economic and development agendas, is Education for Sustainability (EfS) or Education for Sustainable Development (ESD). ESD emerged from interaction between international dialogues about future prospects and the role of education in improving the human condition and shares an ambition similar to other well known 'adjectival' education movements (such as peace education and citizenship education) in seeking to re-envision pedagogy, both directly through learning dynamics and the approaches used 'in the classroom' and more broadly through reorientation of education systems and their associated professional practices.

Taking its cue from global forums concerned with the scale and urgency of sustainable development challenges, ESD is now visible worldwide, at all levels of education, working to reorient education systems and pedagogical practice. It aims to equip people to respond to critical global scenarios more effectively, by envisioning alternatives and using emancipatory approaches to social-structural change (Hesselink et al 2000; UNESCO 2002; Tilbury and Wortman 2004; UNESC0 2009; UNESCO 2010; Tilbury 2011a). The focus in ESD is on tackling 'sustainability' not just conceptually or through research: its primary focus is pedagogic, to respond to sustainability as a learning agenda for societies and an imperative for rethinking education.

An established international literature in ESD points to its understanding of 'sustainability' as trigger for engaged, critical pedagogical practice across the curriculum and educational 'core business' of HE (Blewitt & Cullingford 2004; Corcoran & Wals 2004; Jones et al 2010; Ryan & Cotton 2013; Sterling 2011; Tilbury 2011b). These approaches deconstruct educational thinking and practices that reproduce exploitative relationships across societies and with the natural environment. ESD promotes a 'whole-of-institution' approach to changing education systems and learning relationships, including the need for professional development and support academic staff in reframing curricula and pedagogy. It draws upon and integrates pedagogical principles aligned with the 'new pedagogical ideas' outlined in this report, as demonstrated in a review for UNESCO during the UN Decade of ESD (2005-2014) (Tilbury 2011a).

In UK HE, ESD has gained prominence in recent years and sector agencies have recognised its relevance for the revitalisation of HE through plans and incentives to support the sector in this agenda. For example, the HEFCE has included sustainability in its strategy and business planning since 2005 (see HEFCE 2011), while the HEFCW works with the Welsh Assembly government to mainstream sustainability across public bodies). In teaching and learning, the HEA *Strategic Plan 2012-2016* (HEA 2012b) positions ESD as one of its cross-cutting priorities and the QAA included ESD in its revised *UK Quality Code for HE* (QAA 2012). Signs of demand-side 'pull' are evident in the views of students about the place of sustainability in their HE experience and the graduate profile, as studies carried out by the National Union of Students and Higher Education Academy point to growing student interest in gaining sustainability skills and working for ethical employers (Bone and Agombar 2011; Drayson et al 2012, 2013).

The literature in ESD demonstrates the scale of the challenge in embedding such pedagogy-led approaches in the HE curriculum (Cotton and Winter 2010; Harpe and Thomas 2009; Ryan and Tilbury 2013; Sterling 2011) and an international study by the *Global University Network for Innovation* (GUNI) evidences the worldwide nature of this challenge (GUNI 2011; Tilbury 2011b). Nevertheless, interest from industry, governments and HE stakeholders suggests that ESD is focused on the pedagogical approaches they value in the future HE curriculum and the attributes they seek in future HE graduates (ASC 2007; BITC 2010; British Council 2011; IBM 2010; IPPR 2009; Ipsos-MORI 2010; SKY 2011).

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