Introduction
The purpose of this paper is to provide an overview of the factors which may effect, stimulate or be the cause of curriculum changes in higher education (HE) in Scotland. This overview leads to a series of questions which could be used to encourage debate within and across institutions on strategic developments, which may enhance and inform the development of and support for the curriculum. The paper will begin by offering a definition of the term ‘curriculum’ before identifying the current areas of influence on how the curriculum, in its broadest sense, is shaped and delivered. This paper will provide an outline of some of the different approaches to the design and delivery of the curriculum which enhance the student experience in Scottish higher education, but which will of course have a wider relevance to HE in the UK and perhaps beyond.

Curriculum - What are we actually talking about?
To begin debating how to develop and support the curriculum, it is first both necessary and desirable to clarify what we mean by ‘curriculum’. In HE, the term curriculum is widely used by students, academics, management, and policy makers. It seems that the meaning of such a well used word shifts across contexts. We have chosen three common conceptions to illustrate this: curriculum as product, curriculum as process, and curriculum as vehicle.

Curriculum as product
Curriculum is often conceptualised as ‘product’ which is an almost entirely discipline-focused orientation (Fraser and Bosanquet, 2006). The structure and content of a programme of study are dominated by industry and professional regulation requirements. This conception of curriculum is often associated both with professional body requirements and with the employability agenda.

Curriculum as process
The static nature of curriculum as ‘product’ is contrasted with an emergent definition (Knight, 2001) which prioritises interaction and community over content and structure. In this conception, a far broader and more holistic understanding of curriculum is evidenced relating not only to what is taught, but also to the composite of academics, of students themselves, and of pedagogic approaches. This use of curriculum embraces a far more dynamic and process-based perception (Fraser and Bosanquet, 2006) focusing on the wider teaching and learning environment. This has the potential to offer a variety of student experiences, mediated by the students themselves.
Curriculum as vehicle

One final use of the term 'curriculum' that we would propose is that of curriculum as vehicle. This orientation recognises the centrality of the curriculum as a fulcrum between high level policies and the students that these policies are intended to serve (see Figure 1). Such a conception recognises the importance of curriculum, in the sense of both product and process, as the driving force supporting the delivery of institutional agendas and priorities.

![Figure 1: Curriculum as vehicle](image)

We suggest that these conceptions of curriculum are not mutually exclusive and will continue to be more or less useful at different times and in different academic contexts. However, if we are to be successful and even visionary as we take forward the Enhancement Theme of 'Developing and Supporting the Curriculum', it is more important than ever that we recognise the variety of conceptualisations and develop a shared language and understanding of the various meanings of curriculum (Fraser and Bosanquet, 2006).

In the sections that follow, you will see that we shift between the possible conceptions of curriculum; as we discuss influences we are thinking in terms of curriculum as vehicle, whereas in our discussion about curricular choices and decisions our frame of reference is that of curriculum as process. We do not suggest limiting or prescribing how the term curriculum should be understood, and we do not reject traditional interpretations. However we do recognise the importance of continuing to be explicit about the sense in which we are using this term in order to allow new meanings to emerge, which may serve us even better as we take forward our ambitions for developing and supporting the curriculum.

What factors affect and influence curriculum?

It is widely understood that HE exists in a turbulent economic, political and social context. The pressure for change is a constant one. Recognising and understanding the factors that influence curriculum from within and outwith the institutional context provides a sound rationale for decision making in relation to planning and designing curriculum. These factors themselves can be isolated and examined one by one, but the true complexity and richness lies in their fluid interplay. If we focus too much on any one of the factors, no matter how pivotal it may seem, we are in danger of forming a distorted view and of reaching a skewed conclusion about the whole. Given the confines of this paper, we present a diagram as a starting point for unravelling the main factors influencing the curriculum, using connected concentric circles which we hope express the
dynamism and interplay among the factors. The following section focuses on a selection of these factors as exemplars of how this model could be used to inform structured institutional, cross-institutional and sectoral discussion around supporting and developing the curriculum.

Figure 2: Factors influencing curriculum

Our choice to place the student at the heart of our representation of factors influencing curriculum is an obvious one, given that students are influenced by and themselves exert influence upon all of the other factors. We have found Ulriksen's concept of the 'implied student' (Ulriksen 2009) to be a useful one because it allows us to acknowledge that we make many assumptions about students; what they will be like, what they will know, how they will learn and how they will interact. Different programme structures and modes of study are associated with different understandings of the implied student and we base important decisions about curriculum upon
those assumptions. The hidden curriculum (Jackson, 1990) is a closely related concept, referring to the implicit expectations of how students will behave and think, the rules of academic engagement, and the tacit understanding of what is valued in HE institutions (Ulriksen, 2009). The increasingly diverse student population from a wide range of social, cultural and educational backgrounds means that our awareness of the dynamic interaction between the elements in the learning, teaching and assessment mix should be heightened.

The Scottish Government (2011) emphasises the importance of the need for flexible curricula to facilitate wider access to HE. The White Paper (Scottish Government, 2011) cites Glasgow Caledonian University, Edinburgh Napier University, Robert Gordon University and the University of the West of Scotland as modelling good practice in this area. However, we know that students arriving at university from a variety of educational backgrounds may not at first be equipped with the social, emotional and academic resources required to flourish in their HE academic careers (Low and Cook, 2003, Cree et al, 2009). We need to be sure that despite our best attempts to design flexible and accessible curricula, students are not disadvantaged by unspoken attitudes, beliefs and expectations that comprise a hidden curriculum that may be even harder to negotiate than the 'official' one.

Our diagram (Figure 2: Factors influencing curriculum) highlights a number of key external, national and international factors (shown as block arrows) potentially exerting pressure on different areas of the concentric circles. One of the least explored of these is the Curriculum for Excellence which represents a transformation good practice in Scottish education for young people aged 3-18. It is of interest in our context on two fronts; first of all because of the lessons to be learned about wide-scale nationally prescribed curriculum reform and implementation, and secondly because of the impact that the completely revised learning outcomes and experiences will have on Scottish school pupils and their readiness for study in HE. Once again the concept of the implied student is significant because we need to recognise that our expectations for students must change if those expectations are to continue to be relevant to curricular decision making.

The goals of the new curriculum are clearly stated: ‘The Curriculum for Excellence aims to enable young people to develop the knowledge, skills and attributes that will allow them to demonstrate four key capacities - to be successful learners, confident individuals, responsible citizens and effective contributors’ (Education Scotland, 2011). This process-focused curriculum is replacing its predecessor which was more content and product-focused. The implications of the Curriculum for Excellence for HE are currently being explored by Universities Scotland’s Task Group (Scottish Government, 2011). Their findings may prompt us to consider how we place boundaries around our curricular provision, and how we specify entry requirements to our programmes in order to accommodate the Curriculum for Excellence principles.

By placing these four key capacities at its heart, the Curriculum for Excellence seeks to equip pupils with the necessary attributes to enable them to take their place in society and to progress their learning and skills development in not yet known environments. This development within Scottish primary and secondary sectors is consistent with some of the work in the tertiary sector resulting from the previous Enhancement Theme relating to graduate attributes.

**Trends in curriculum development**

The range of factors illustrated in Figure 2 can already be seen to be shaping curricula across institutions with some key trends emerging. Globalisation continues to leverage international and transnational partnerships in programme delivery and open access education. The recent report from the Online Learning Task Force (OLTF, 2011) asserts that collaboration across subject disciplines, regions and institutional groupings will enable the UK Higher Education sector to continue to compete internationally.
Developments in available technologies have enabled disseminated models of curriculum such as the Scottish Disseminated Model for Undergraduate Learning Disability Nursing. In this model, Edinburgh Napier University, the University of Stirling and Glasgow Caledonian University collaborated to support learning disability nursing practice in Scotland. Further case studies of collaborative programmes are available from the recent OLTF report (2011). See: www.hefce.ac.uk/pubs/hefce/2011/11_01/11_01.pdf.

New graduate and postgraduate pathways are emerging that enable 'efficient, flexible learner journeys' (Scottish Government, 2011). In Scotland our undergraduate provision continues to be centred on the four-year degree, although further education provision may challenge the existence of first-year study at university. Examples of other degree programme structures, such as the new two-year undergraduate degree available in England (for example, the University of Buckingham) and the seven-year Melbourne Model, lay out coherent progression routes from school to doctoral studies. Some of these pathways may prove attractive in Scotland, enabled by the well embedded Scottish Credit and Qualifications Framework (SCQF). See:

- University of Buckingham: www.buckingham.ac.uk/about/twoyear
- SCQF: www.scqf.org.uk/The%20Framework.

Within the wider UK HE sector there is a significant movement towards student engagement which considers students as active partners in shaping their learning experiences. Initiatives such as 'Student as producer' (University of Lincoln) and 'Students as change agents' (University of Exeter) provide examples where institutions have embraced this philosophy explicitly and widely across the institution. Smaller but not less significant examples of meaningful student engagement may be at a simple level such as choice of assessment, and range through to fairly radical empowerment where students are influencing what, when and how to learn. Our institution (Edinburgh Napier University) provides an illustration of an open access resource bank which enables examples of meaningful student engagement to be shared across the sector. These examples suggest a flexible process-based notion of curriculum that challenges the traditional approach to defining the content, process and structure of the learning process in HE. See:

- Student as producer, University of Lincoln: http://studentasproducer.lincoln.ac.uk/
- Students as Change Agents: http://as.exeter.ac.uk/support/educationenhancementprojects/current_projects/change/
- Edinburgh Napier University (Learning, Teaching and Assessment Strategy): http://staff.napier.ac.uk/LTA

The University of Aberdeen offers an example of large-scale curriculum reform. Key aspects resulting from this are increased curriculum flexibility, an extended portfolio of co-curricular opportunities for students, a more flexible programme of entry to programmes, and enhanced support for students. The examples in this section illustrate that curriculum development by its very nature must be iterative and reflexive, making the precise outcomes for students and for institutions difficult to predict with any certainty. See: www.abdn.ac.uk/curriculum-reform.
Curricular choices and decisions - practicalities

Within any curriculum development there are choices to be made at a practical level, many of which are encapsulated in the Curricular Choices diagram (Figure 3).

An emerging approach we would like to suggest for informing the discussion around design and delivery of the curriculum is that of the 3E Approach. Originally developed within the context of a cross-institutional HE-FE project as a means of helping practitioners to redesign their courses to increase learner autonomy, choice and engagement as detailed recently (Smyth et al, 2010), the 3E Approach has been adapted in various ways across the sector. This includes staff development to guide progress in implementing institution-wide learning and teaching initiatives, as the curriculum model for a number of programmes under development, and in adapted form as the 3E Framework (Smyth et al, 2011) to benchmark good practice in technology-enhanced learning.

The 3E Framework is based on a simple notion of an enhance-extend-empower continuum to effectively support learning, teaching and assessment across disciplines and levels of study. In summary the three broad stages within the continuum are:

- **enhance**: introducing simple and effective ways to actively support students and increase their activity and self-responsibility
- **extend**: further activities that facilitate key aspects of students' individual and collaborative learning and assessment through increasing their choice and control
- **empower**: developed levels of engagement that require higher order individual and collaborative learning that reflect how knowledge is created and used in professional environments.

While originally developed to support the enhancement of learning and teaching through blending classroom and online opportunities, the 3E Approach to curriculum design has facilitated the introduction of activities that foster active student engagement in learning without appearing threatening or unachievable to staff and students. The value in a transformative approach such as this also helps to support students' development from being passive recipients of education through to becoming active participants and co-creators of their education.

The current Enhancement Theme creates opportunities for institutions and individuals to explore and focus specifically on the development and support of the curriculum. An approach that we are developing to support learning, teaching and assessment along the extend-enhance-empower continuum is to:

- consider curriculum as a vehicle for institutional agendas and priorities (Figure 1)
- consider the internal and external factors influencing curriculum (Figure 2)
- review the practical choices associated with curriculum development (Figure 3).
Figure 3: Curricular choices

What next?

Preparation of this paper has led to a number of questions, as yet unresolved, which we offer for debate within and across institutions.

1. Which of the external factors affecting curriculum (see Figure 2) are likely to be of most significance as we take this Enhancement Theme forward and how can we develop our curriculum to accommodate their influence?

2. What kind of boundaries should be around the curriculum and who should be ultimately responsible for shaping the curriculum?

3. Should we be prioritising global citizenship over discipline-focused curricula?

4. How can we achieve the optimal balance between the core curriculum (for example for professional registration) and a curriculum of choice for students?

5. How will Curriculum for Excellence change our understanding and expectations of students and how should higher education institutions prepare for those changes?
References and useful resources


Useful websites

The Two Year Degree, University of Buckingham
www.buckingham.ac.uk/about/twoyear [accessed 6 February 2012].

Curriculum for Excellence

Learning, Teaching and Assessment Resource Bank, Edinburgh Napier University
http://staff.napier.ac.uk/LTA [accessed 6 February 2012].

Melbourne Model

SCQF
www.scqf.org.uk/The%20Framework [accessed 6 February 2012].

Students as Agents of Change project, University of Exeter
http://as.exeter.ac.uk/support/educationenhancementprojects/current_projects/change/ [accessed 6 February 2012].

Student as Producer, University of Lincoln
http://studentasproducer.lincoln.ac.uk/ [accessed 6 February 2012].

TESEP in Practice: the 3E Approach
www2.napier.ac.uk/transform/TESEP_3E_Approach.pdf [accessed 6 February 2012].

Curriculum Reform, University of Aberdeen
www.abdn.ac.uk/curriculum-reform [accessed 6 February 2012].

University benchmark for the use of technology in modules: the 3E explained
http://staff.napier.ac.uk/services/academicdevelopment/TechBenchmark/Pages/3E.aspx [accessed 6 February 2012].