Curriculum for Excellence: Impact on higher education Final Report

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## Glossary

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>CFE</td>
<td>Curriculum for Excellence</td>
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<tr>
<td>DSC Steering Committee</td>
<td>Developing and Supporting the Curriculum Steering Committee, taking forward the Enhancement Theme for SHEEC</td>
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<td>SHEEC</td>
<td>Scottish Higher Education Employability Committee - Standing committee of universities for employability matters</td>
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<td>HEIs</td>
<td>Higher Education Institutions</td>
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<td>HE</td>
<td>Higher Education</td>
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<td>FE</td>
<td>Further Education</td>
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<td>SQA</td>
<td>Scottish Qualifications Authority, responsible for Scottish qualifications developments and examinations in schools and colleges</td>
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<td>QAA</td>
<td>Quality Assurance Agency for Higher Education, safeguarding standards and improving the quality of UK higher education</td>
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<td>SCQF</td>
<td>Scottish Credit and Qualifications Framework</td>
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<td>QDTs</td>
<td>Qualification Design Teams, for revising and developing qualifications with the Scottish Qualifications Authority (SQA)</td>
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<tr>
<td>NVivo software</td>
<td>Enables researchers to gather and analyse qualitative data from mixed methods</td>
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<td>CPD</td>
<td>Continuing Professional Development</td>
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<td>HEA</td>
<td>Higher Education Academy</td>
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<td>Scotbacc</td>
<td>Scottish Baccalaureate</td>
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<td>AH</td>
<td>Advanced Highers</td>
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<td>UCAS</td>
<td>University Central Admissions System</td>
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<td>OU</td>
<td>Open University</td>
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<tr>
<td>BGE</td>
<td>Broad General Education; years one to three of curriculum</td>
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<tr>
<td>National 4 and National 5</td>
<td>New SQA qualifications to replace Standard Grades from 2014</td>
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<td>HN</td>
<td>Higher National qualifications</td>
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<td>L&amp;T</td>
<td>Learning and Teaching</td>
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<td>LLL</td>
<td>Lifelong Learning</td>
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<td>VLE</td>
<td>Virtual Learning Environment</td>
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<td>ITE</td>
<td>Initial Teacher Education</td>
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1. Executive summary

1.1 This report contains the findings from an exploratory study, commissioned from the School of Education, University of Glasgow and Vivienne Brown Associates by the Enhancement Theme ‘Developing and Supporting the Curriculum’ (DSC) Steering Committee, on Curriculum for Excellence (CfE) and its impact on higher education (HE). The study ran from January-June 2013.

1.2 The purpose of the study was multiple: to investigate existing levels of knowledge and understanding within and across the higher education, college and school sectors on the potential impact of Curriculum for Excellence on universities, and on the extent, focus and form of preparation for CfE; to identify priority areas for discussion and further development, particularly for the HE sector; and to explore the value of using a sectoral approach, with the involvement of schools, colleges, universities and sectoral organisations.

1.3 In this context, we asked the following questions in the study:

1. What is the anticipated impact of Curriculum for Excellence on universities, with particular reference to learning, from the perspectives of staff in, and working with, schools, further education colleges and universities?

2. Are staff in HEIs preparing for the anticipated impact? If so, how?

3. What examples of good practice can staff in HEIs identify to help prepare for the anticipated impact?

1.4 There was a clear willingness from the majority of HE respondents to engage with the learner outcomes of CfE, and from the majority of respondents across the sectors to work both within and between sectors to facilitate future collaboration through training and information CPD, and through cooperative and co-creative CPD. Respondents gave their views on what the impact of CfE might be on learners, and on what they thought the focus of preparation might be in HE. The findings offer a guide to the perspectives and priorities of the respondents in this study, and are presented under five themes: provision of learning and skills; student experience (including personalisation); access and admissions; collaboration on CfE; and ‘unknowns’.

1.5 It was not within the timeframe or scope of this small study to identify a representative sample so it cannot be assumed that the findings reflect the views of all school, college and university staff in Scotland. However, the study does provide firstly an indication of the range of views that may be in the ‘population’ as a whole (whether positive, negative or neutral and whether expressed by one, several, most or many in the study’s sample), and secondly where further, larger studies are needed (outlined with suggested methodologies and funding model in Next Steps, below).

1.6 The study identified examples of ongoing preparatory work in HEIs, including the allocation of CfE lead responsibilities to existing senior staff; establishing internal CfE working groups; and organising, hosting and participating in national cross-sectoral CfE events. Similar examples of CfE preparatory work have been captured through the early results of the contemporaneous Universities Scotland survey on how institutions were responding to the recommendations in the 2012 Universities Scotland report Beyond the Senior Phase, University Engagement with Curriculum for Excellence.¹

Provision of learning and skills

1.7 The overwhelming majority of respondents were very open to gaining a greater understanding of the provision of learning and skills in each other’s sectors. Ongoing developments in teaching methods and assessment in HEIs, many of which HE respondents saw as aligning with the philosophy of CfE, were not well known by respondents in schools and colleges in their professional roles. Additionally, misconceptions about different sectoral priorities in developing skills or knowledge in learners were also evident. Most school respondents strongly supported the development of a skills continuum throughout the learning system, using shared approaches to profiling and e-portfolios to link CfE’s Four Capacities with the HE Graduate Attributes, although most of the college respondents, who had been working on employability skills portfolios, were unaware of HE development work on graduate attributes. By the same token, most HEI lecturers were not familiar with the essential skills agenda in the college sector. Despite concerns over inconsistencies between the Broad General Education (BGE) and the Senior Phase of CfE, school respondents saw CfE as a driver for lifelong learning, a view shared by some HE respondents. Most HE respondents were open-minded, withholding judgement on the likely future impact of CfE on existing pedagogical developments until they had started working with new entrants from the Senior Phase.

Student experience (including personalisation)

1.8 The majority of respondents from all three sectors viewed CfE as very positive for the student learning experience, because it encouraged teachers and lecturers to offer more creativity in learning and teaching, more interdisciplinary working, and a wider variety of ways to conduct assessment to support continuity and progression for learners. Several HE respondents referred to the potential to minimise overlap or duplication in learning at SCQF Level 7 as a positive example of progression in practice. Some HE respondents welcomed the potential for CfE outcomes to produce higher levels of meta-cognitive skills, although some respondents from schools and colleges worried that, without a commitment to personalisation throughout the learning system, the individual learning and pastoral needs of some learners may not be met post-CfE Senior Phase.

Access and admissions

1.9 Access and admissions were mentioned frequently across the sectors, mostly in relation to differing interpretations of information about current UCAS applications processes, individual university admissions and wider access policies. Most respondents across the sectors knew that admissions policies were already under regular review and anticipated further revision once more was known about future CfE applicants. But there were concerns that CfE developments could potentially further complicate this already challenging scenario, including a concern, expressed by some schools and HE respondents, that learners may not be accessing appropriate careers advice in the face of the current complexities of admissions, with potentially detrimental implications for their future university and employment choices. Most respondents from schools and colleges spoke of the need to profile pupils’ skills, not just in the Broad General Education but throughout the Senior Phase, to provide better evidence for the HE selection process. While most HE respondents thought it likely that some HEIs would continue to require a [minimum] number of Highers at one sitting (particularly in the more competitive disciplines) to demonstrate knowledge, rather than skills, for competitive entry, some acknowledged that their institutions were already offering flexible contextualised admissions by drawing on a mix of skills and subject

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2 Four Capacities: Successful Learners, Confident Individuals, Effective Contributors, Responsible Citizens.
3 Graduate Attributes reflect university characteristics and those of their student body, as they are designed to be flexible and recognise the autonomy of HEIs.
grades. The fact that HE admissions were already catering for competing applicants from a variety of educational systems, including overseas, was emphasised by several HE respondents.

**Collaboration on CfE**

1.10 Most respondents from all sectors were able to give examples of what they regarded as successful cross-sectoral collaboration (although without systematic evidence) either specifically on, or related to, CfE. In all three sectors a majority of respondents offered enthusiastic support for the development of training CPD within their own sectors, and as a necessary precursor to between-sector collaboration. They also perceived a need to foster a more cohesive approach to leadership, policy-making and developmental work within and across the sectors, as the basis for effective collaboration at all levels. Allied with this was the need to remove existing impediments to collaboration, not all due to CfE, but which respondents perceived may be compounded by CfE. Areas seen as requiring urgent attention included addressing inconsistencies in admissions policy and practice, and in assessment and advanced entry, and resolving inconsistencies between Broad General Education and the Senior Phase.

**Unknowns**

1.11 Although there was anecdotal evidence in the study that some more recent pedagogical development in universities was influenced by CfE, it was clear that much of the uncertainty around its impact on HE was due to a lack of evaluative research on CfE-related areas, in particular the impact of CfE on learner outcomes; secondary or college to higher education learner transitions in the CfE context; and progression from BGE through Senior Phase and into HE.

**Conclusions**

1.12 The enthusiasm of respondents across the sectors for increasing the influence of CfE by collaborating, in the interests of learners, was very heartening, though with the caveat above (1.5), and also a mark of great success for its instigators. However, the apparent lack of knowledge and understanding from schools and colleges about the extensive developments in HE pedagogy, and their complementarity with CfE, indicates that HE needs to publicise these developments more effectively in the interests of between-sector collaboration. There was an as-yet unrealised potential for continuity of skills assessment across the sectors through school profiling, employability skills (colleges) and Graduate Attributes (HE) and into the workplace. A number of ongoing operational issues relating to access and admissions needed to be resolved cross-sectorally at senior level. While there was an abundance of goodwill from nearly all respondents to finding out more about how other sectors work, some drew attention to the need for a flexible cross-sector mechanism to aid communication as a prerequisite for systemic collaboration to prepare for the impact of CfE in HEIs. CfE is seen as offering the opportunity, in the interest of both learner progression and staff understanding, both to identify variations in current usage and meaning and to work to establish a shared language. Staff from all sectors were concerned that they did not know what the impact of CfE on learner capacities, knowledge, skills and outcomes would be and were only able to make educated guesses at this stage. This was an impediment to HEI staff in preparing for CfE and in identifying their own needs for professional development.
2. **Next steps**

2.1 The next steps are derived from the study findings and our conclusions in respect of the aspirations of the respondents. The study is too small to be definitive about the next steps, with three exceptions: the urgent need for independent empirical research on the impact of CfE on learners and learner outcomes; an awareness-raising campaign aimed at schools and colleges about pedagogical developments in universities and their complementarity with CfE; testing, through case study research, the organic, bottom-up cross-sectoral collaborative model (see below and Appendix 8 issued separately). This in turn would provide evidence to inform HEIs’ planning and management of ongoing curricular development and innovation.

2.2 The study offers the following model for beginning a process of harmonisation and coordination between the sectors in the interests of systemic learner progression and optimising staff input to an evolving process of curriculum renewal.

2.2.1 **Within-sector collaborative CPD (as precursor for between-sector work on the impact of CfE)**

(i) CPD training for CfE: cross-sector senior level collaboration to clarify processes for each sector and the links between the processes, as a basis for the provision of common information to each sector, with the opportunity to contribute ideas about the whole system.

(ii) CPD co-creation for learner progression: developing an institutional/sectoral approach to the above.

(iii) CPD training for staff: increasing knowledge levels and understanding about other sectors’ culture, priorities and work (especially pedagogy) through, for example, exchange visits as part of regular work; and rolling out HEA Sponsorships Programme.

2.2.2 **Between-sector collaboration**

CPD co-creation: harmonising systems/processes to achieve cross-sector learner progression using 'third spaces', to include the following priorities for action.

(i) The creation of a between-sector leadership team of senior managers and practitioners with the capacity to drive and support CPD and ‘third space’ working, and to raise funding for research and development.

(ii) Cultural exchange meetings to include working to establish shared language and meanings for supporting learners and staff through the transitions, and providing an opportunity for HEIs to lead part of the evolution of CfE.

(iii) Creating opportunity for greater dialogue and understanding on:

- the connections and transitions from BGE - Senior Phase - HE
- the balance between knowledge and skills (led by schools).

(iv) An awareness-raising campaign by HEIs aimed at schools and colleges about pedagogical developments in universities and complementarity with CfE.

(v) The continuing refinement of admissions policies and practice in HEIs, and Fair Access conferences (led by colleges).

As explained in the Methodology and Appendix 8, the above within-sector collaboration takes place within each activity system (sector) where the object of activity has first to be resolved as a prerequisite to working effectively in the ‘third space’ with people from other sectors. The object will be different for each area of work.
(vi) Co-creation and development focusing on:
• skills profiling and assessment
• alignment of CfE Four Capacities/Graduate Attributes
• learning transitions and first year curriculum, pedagogy and assessment
• efficacy and relevance of careers support in CfE
• translation of student personalisation in the Senior Phase to undergraduate programmes.

(vii) Testing, through case study research, the above organic, bottom-up collaborative model in tune with managing evolving curriculum innovation, to provide evidence-based resources to inform curricular planning and development in HEIs.

(viii) Cross-sectoral independent empirical research on:
• impact of CfE on learner outcomes
• meaning and value of the CfE Four Capacities for HEIs
• secondary school/college CfE (BGE and Senior Phase) to HE curriculum, learning and assessment transitions
• skills progression from BGE through to Graduate Attributes.

(ix) A further quantitative survey, informed by this study, with a larger and representative sample from all three sectors.

3. Introduction
(with a caveat to the study findings)

3.1 This report contains the findings of an exploratory study on the Curriculum for Excellence (CfE) and its impact on universities, commissioned by the Quality Assurance Agency for Higher Education (QAA) as part of the work of the current Enhancement Theme, Developing and Supporting the Curriculum (DSC). The study was conducted from January-June 2013 by the School of Education, University of Glasgow and Vivienne Brown Associates. The DSC Steering Committee leadership came from Professor Alyson Tobin, University of St Andrews and the study was facilitated by Thelma Barron, Assistant Director, QAA Scotland.

3.2 We chose to take a cross-sectoral approach to inform the study because HEIs will be working with the learner outcomes from a new curriculum and qualifications being delivered in schools and in colleges. We present here a synthesis of the perspectives of a small sample of forty-three staff with an interest in or responsibility for CfE in schools, colleges or universities. Data was gathered through three sector-based focus group interviews, individual interviews, online discussion forums and surveys, and responses to online briefings.

3.3 Respondents were asked to identify and discuss the key issues and probable priority areas for development for HEIs in respect of CfE. HE respondents were able to provide examples of ongoing curricular and pedagogical developments that they thought were likely to be consistent with CfE philosophy and practice, as well as examples of cross-sector collaboration related to other developments but not specifically CfE-inspired. Three overarching themes were identified as significant for preparation for CfE by the HE focus group, which were consistent with themes emerging from the school and college focus groups, namely: provision of learning and skills; student experience (including personalisation); and access and admissions. Two cross-cutting themes emerged from an analysis of all the data gathered in the study: collaboration for CfE and 'unknowns'. These five themes inform the structure of the report throughout.

5 www.enhancementthemes.ac.uk/enhancement-themes/developing-and-supporting-the-curriculum/curriculum-for-excellence-and-its-impact-on-higher-education
3.4 It was not within the timeframe or scope of this small study to identify a representative sample so it cannot be assumed that the findings are reflective of the views of all school, college and university staff in Scotland. For example, there was a disproportionate number of senior staff in the sample: 50 per cent of college and university staff were lecturers and, from the schools, 35 per cent were teachers. This and other respondent characteristics such as type of HEI, subject taught, number of years in teaching and so on - which could potentially influence respondents' perspectives - were not aspects of either the sample selection or data analysis, as would be possible, and necessary, in a larger study. However, the value of studies of this type is that they can uncover the unknown or unexpected and provide an indication of firstly the range of views that may be in the 'population' as a whole (whether positive, negative or neutral and whether expressed by one, several, most or many in the study's sample), and secondly where further, larger studies are needed.

3.5 Since its introduction in 2003, CfE has aimed to ensure that all children and young people in Scotland aged three to 18 years develop through the Four Capacities the attributes, knowledge and skills they will need to flourish in life, learning and work, as successful learners, confident individuals, responsible citizens and effective contributors. CfE is designed to change the ways young people learn, as they are increasingly expected to contextualise their learning to a variety of situations and apply their knowledge to the wider world, thus further developing their skills and understanding throughout their learning and working lives.

3.6 The purpose of this exploratory study is to:
- investigate existing levels of knowledge and understanding within and across the sectors on the potential impact of CfE on universities
- investigate the extent, focus and form of preparation for CfE in HEIs
- identify priority areas for discussion and further development, particularly for the HE sector
- explore the value of using a sectoral approach, with the involvement of schools, colleges and universities and sectoral organisations.

4. **Curriculum for Excellence**

4.1 The CfE is designed for young people between three and 18 years and comprises Design Principles and a framework to build a new curriculum, comprising a Broad General Education (BGE) from three to 15 years followed by a Senior Phase. The BGE statements of the Experiences and Outcomes describe national expectations of learning and progression in eight curricular areas. BGE taking place from the early years is represented by learning across all of the experiences and outcomes to the third curriculum level, together with those selected for study at the fourth level, as far as is consistent with each child or young person's needs.

4.2 In the Senior Phase, there is provision for learners to have more choice - over the pace of their learning for example - as well as studying to greater subject depth, with curricular provision that encourages more opportunities for multi-disciplinary and inter-disciplinary subject working. Senior Phase is also designed to encourage personalised curricula, through a tailored programme of learning that leads to qualifications; continued development of skills for learning, life and work; and opportunities for planned personal achievement, managed by the school and provided, if needed, by other local learning providers and partners.

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4  The Experiences are used to assess progress in learning and set ongoing, challenging standards whilst the Learning Outcomes represent what is to be achieved.
4.3 Since 2003, when CfE was introduced, schools have been implementing the Experiences and Outcomes for the Broad General Education and the Senior Phase developments (Curriculum for Excellence Management Board, 2011). Implementation also includes the introduction of National 4 and National 5, the replacement qualifications for Standard Grades from 2013-14, and dual running years for these and revised Highers until 2014-15 with the introduction of revised Advanced Highers in 2015-16. During this period, schools have also implemented related curricular developments, including, for example, Assessment is for Learning and Getting it Right for Every Child.

4.4 It is also appropriate to note that the implementation of CfE - though not its principles - has been a source of concern among schools and lecturers with regard to 'resources, support and information, workload and timescale' (EIS, 2013). Implementation has also been inconsistent across local authorities and schools. But it is also important to recognise that CfE is an evolving process and is likely to continue to change, develop and be refined before it is fully embedded, over the next decade and beyond. Learner characteristics can be expected to reflect this evolutionary process too.

4.5 In September 2014, when the UCAS 2015 entry admissions cycle begins, it will include applicants from the first cohort of learners to experience the first full cycle of CfE, who are due to leave school at the end of S5. In 2011-12, full-time students from Scottish schools constituted approximately 174,000 of the 253,000 students attending Scottish universities, of whom 78,000 were under 20 years old (Scottish Funding Council, 2013). The number of CfE students expected to enter Scottish universities from 2015 onwards is therefore proportionately significant to the total entrants to year one, and it is important to recognise that they are likely to have (revised) expectations based on their experiences of CfE, as to how their learning in higher education is organised, provided, assessed and taught.

4.6 Scottish HEIs have begun to prepare for CfE, with much of their work over the last two years necessarily focusing on admissions, including the recalibration of admissions criteria for CfE, and the publication of information aimed at the early cohorts of entrants coming through CfE. This year, surveys undertaken by Universities Scotland show a widening and strengthening engagement of HEIs with regional partners, including councils, local education authorities and associated schools, through (for example) the establishment of regional working groups and events, including, in at least one case, best practice symposia. In addition, staff at many HEIs are involved in the development of a range of opportunities for Senior Phase school pupils. These include, for example, credit-rated participation in the university curriculum; collaborative development, delivery and in some cases hosting of Advanced Highers in particular disciplines, often through participation in an Advanced Highers Hub; involvement in Scottish Baccalaureates, through sharing of practice or delivery of interdisciplinary projects in specific disciplines; and taster sessions and workshops for BGE pupils. This year has also seen a small number of institutions running one-day conferences or symposia typically with presenters drawn from across the sectors, offering the different perspectives of CfE, and aimed at engaging a wide range of staff.

4.7 It is too early to say exactly what the characteristics of CfE students will be, but it is probable that as CfE evolves, so too will the skills, knowledge, attributes, capacities and expectations of this sizable cohort of Scottish entrants to universities, though this has yet to be proven through empirical research.

7 Learning and Teaching Scotland (2011) Curriculum for Excellence Fact File - Senior Phase
www.educationscotland.gov.uk/Images/FactfileSeniorPhase_tcm4-670944.pdf
8 EIS (2013) Final results of National CfE Survey Confirm Teachers’ Concerns
www.eis.org.uk/CfE/CfE_survey_Final_results.htm
9 Scottish Funding Council (2013) Facts and Figures
5. Parallel curricular developments in the HE and college sectors

5.1 For HEIs, there are major IT developments in the delivery of courses, combined with pedagogic review and innovation, alongside more diverse learner cohorts, as well as developments to support a more flexible curriculum. In addition to new market conditions, politically, economically and pedagogically, there are increasing demands from industry, workplaces and in research. Solutions to ongoing challenges to widen access and excel in (commercial) innovation continue to be encouraged through new Outcome Agreements (Scottish Funding Council, 2013)\(^{10}\).

5.2 In his report *Developing and Supporting the Curriculum: A synthesis of the second year of the enhancement theme, 2012-13*, Professor Terry Mayes identifies two broad approaches to the development across the sector of the HE curriculum. He notes that 'Both derive from the acknowledgement that the curriculum, and its supporting processes, must adapt significantly to more fully equip our graduates for employment in the modern world, and provide the values and capabilities that will underpin their lifetime contribution to society. Both are therefore implementations of the need to more explicitly address within the curriculum itself graduate attributes and the outcomes of Graduates for the 21st Century'\(^{11}\). The first approach targets the development of graduate attributes directly within each programme, while the second approach offers students more flexible, personalised pathways for broader outcomes, encouraging interdisciplinary learning and extending to co-curricular activities, and more extensive use of recognition of prior learning. Such developing approaches to the HE curriculum appear to broadly complement the CfE philosophy and to offer potential for positive synergies with CfE, which could benefit the student experience.

5.3 As noted above, all institutions across the HE sector are engaged in the ongoing development of curriculum and its supporting processes. One recent example of a remodelled, more flexible curriculum is that of the University of Aberdeen\(^{12}\) that was carried out in response to the external changing context and internal drivers for excellence.

5.4 For colleges, there are challenges in regionalisation (Scottish Government, 2012)\(^{13}\), with mergers in estates, staffing and curricula across campuses to form 14 new college regions. Within capped budgets, the colleges' Outcomes Agreements encourage more learner-centred provision for skills and learning (Scottish Government, 2011)\(^{14}\), as well as economically relevant vocational learning, apprenticeships and employability support, to combat youth unemployment. Colleges are also implementing CfE where appropriate and supporting articulation for some students to progress to higher education, without duplication of study at any given Scottish Credit and Qualifications Framework (SCQF) level.

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10 Scottish Funding Council (2013) www.sfc.ac.uk/web/FILES/Funding_Outcome_Agreements_2013-14/University_Sector_Outcome_Agreements_2013--14_Summary.pdf


12 www.abdn.ac.uk/about/curriculum-reform.php


6. Research to inform curricular change in universities

6.1 In their review of the literature and research on curriculum change in universities, De la Harpe and Thomas (2009) found few successful examples of comprehensive large-scale curriculum change in universities but were able to identify conditions helpful to such change. Radloff and De la Harpe (2007, p1) noted that the effectiveness of any curriculum change initiative in universities relies 'heavily on the willingness of academic staff to engage in this work and where necessary to change the way they design, teach and assess within their discipline'. While the impact of CfE on universities is expected to go beyond the first-year experience, Nelson and Gift's (2005, p1) work on the importance of transition pedagogy in the student experience from school to university is helpful for wider curriculum change. They found a need for a 'wholesale rethinking' of approaches in a foundation curriculum 'renewal' and cite the need for 'all student-facing activities' to be fully coordinated. They cite McInnis (2003, p13) who writes 'bridging the gaps between academic, administrative and support programs is a substantial challenge for many universities'. Bovill et al's work (2011) investigating the involvement of students in curriculum design also offers some useful perspectives on the renewal process.

6.2 Briggs et al (2012) examine the complex liaison in universities needed for students to succeed as higher education learners but also their progress to appropriate courses. They note that the transition to university from schools and colleges 'offers considerable challenges to all the parties involved' because, although partnerships can be formed between the sectors, 'students from a particular school or college may scatter to a range of universities'. For Scotland, arguably such bridging arrangements and shared understandings about the curriculum have the potential to impact across Scotland's universities and student population.

6.3 Baumfield et al (2009), in their report for Learning and Teaching Scotland on CfE Experiences and Outcomes, found: 'A concern with improved transition, the promotion of connections across the curriculum and the development of methodologies to promote active learning, collaborative work and critical thinking were welcomed by practitioners across the sectors of education. Feedback from stakeholders acknowledges the benefits of closer cooperation between sectors in addressing national policy priorities' and that 'It is important that an alignment between curriculum, pedagogy and assessment is prioritized'.

6.4 There is not, as yet, independent empirical evidence available for universities on the extent and level of success of the CfE implementation in schools and colleges, or on the variability and diversity of CfE provision in BGE and Senior Phase, to guide the approach in HEIs to curricular development. The intended outcomes for learners by the end of the Senior Phase are also still unclear.

6.5 Both university and staff in other sectors can therefore at this stage only anticipate students' learning needs and expectations at university. They can only assume that CfE will produce students who are more independent learners, more critical thinkers and more adept at working across subject disciplines. The implications of these assumptions for how students could approach their learning, for what their expectations of university curricula and learning and teaching will be, and for how the mapping of their skills and attributes onto institutional Graduate Attributes will work in practice, are at the time of writing still not known.

6.6 Similarly, HE staff can only anticipate the implications for university approaches to learning, teaching and assessment and the professional support they will need to enable them to connect with the CfE student during transition and in the first year. The implications for staff development and training can therefore also only be anticipated.

6.7 This exploratory study is informed by the context and research outlined in the Introduction and therefore seeks to answer the following questions:

- What is the anticipated impact of Curriculum for Excellence on universities, with particular reference to learning, from the perspectives of staff in, and working with, schools, further education colleges and universities?
- Are staff preparing for the anticipated impact? If so, how?
- What examples of ‘good practice’ can staff identify to help prepare for the anticipated impact?

7. Methodology

7.1 To answer the research questions on the impact of CfE on universities, this exploratory study employs a qualitative methodology designed to facilitate the opportunity to contribute for respondents from the three sectors (schools, colleges and universities) that are individually and collectively responsible for learners. The methodology encouraged the respondents to focus on their perspectives in relation to their own sector and to express their views openly. In this respect, the study draws on an approach derived from Activity Theory (AT) and expansive learning (Engeström, 2001). AT requires that for between-sector collaboration to work, each sector has to agree on its own ‘object’ for collaboration, necessitating that within-sector exchange is carried out first. This is done in order to lay the basis for a collective ‘object’ such as, for example, coherent and transparent admissions to HE.

- AT assumes that there is no set procedure to follow or training in order for the sectors to progress with CfE. Instead they have to learn together, to co-create something new - for example, a collaboration - from their collective experiences.
- Integral to the process is that expansive learning, collaboration and co-creation occur in a ‘third space’, that is, in neutral ‘territory’ between the sectors, where the collaboration has a much better chance of success, once the preparatory work has been carried out.

For further explanation of AT as a theoretical framework, and details of the sample, methods, data analysis and ethical approval, see the appendices, especially Appendix 8, published separately.

7.2 In this study, respondents were asked, from the perspective of their own sector, for their experiences and perceptions of the ‘challenges and opportunities/ drivers and barriers of Curriculum for Excellence for students, staff and the curriculum in the HE sector, with regard to learning and qualifications’; and then to group these experiences and perceptions into strengths and weaknesses (or drivers and barriers) in respect of that impact. They were then asked to group their experiences and perspectives into themes, which they created for themselves. Only at the end of the focus group interviews, after respondents had identified the issues they thought were key to the impact of CfE on universities, did the focus group leaders (researchers) ask them about any unexplored issues identified by Core Group members from the pre-focus group interim report discussions.

8. Findings

Please note: the findings need to be read with the caveat in paragraph 1.5 of the Executive Summary regarding the small sample size.

8.1 The findings set out below were obtained by analysing the data from the three focus group interviews, for schools, colleges and universities, respectively, and then cross checking with data derived from other sources.

8.2 From the analysis of data gathered through the focus groups, five overarching themes emerged. When the rest of the data gathered from respondents (also grouped into their sectors) - through individual interviews, online discussion forums and online survey responses - were analysed, no further themes were identified as significant. The time limit for the study did not permit a full comparative analysis of the perspectives in this study, for example between different types of university.

8.3 In relation to the questions about anticipated impact and staff ‘preparedness’, the three over-arching themes that emerged from the participants were:

- Provision of learning and skills
- Student experience (including personalisation)
- Access and admissions.

8.4 From the data, the researchers identified a further two cross-cutting themes, which were:

- Collaboration on Curriculum for Excellence, both between and within the sectors
- Unknowns.

Provision of learning and skills

8.5 Respondents identified the potential for wider systemic change, building on existing synergies in pedagogy between the sectors, to create a more continuous progression in skills, values and attributes, including the development of the autonomous learner. In each of the sectors, there are assessments designed to help learners to recognise their skills development, but there is scope to develop greater linkage and continuity between the sectors in their use of profiles and e-portfolio activities, and to explore progression and profiling between the Four Capacities, Employability Skills Profiles, and Graduate Attributes. More dialogue and understanding is required on the different sectoral perspectives and priorities on the balance between knowledge and skills, and on ongoing developments in the curriculum and in pedagogy, particularly in the HE sector. If achieved, such a cultural change would not only support learner transition to HE more effectively, but would also allow CfE to fulfil its potential as a driver for lifelong learning.

8.6 Several HE respondents commented on the potential in CfE to synergise with the ongoing curricular and pedagogical developments in the sector. One HE respondent observed that the Experiences and Outcomes of CfE seemed ‘to address HEIs’ thinking styles on responsible learning’. There was also the suggestion from one HE respondent that HE and CfE pedagogy were already starting to coalesce: ‘whether intended implicitly or explicitly’ in first year undergraduate programmes, where universities have long been using pedagogies like formative assessment and cooperative learning. Another HE respondent thought that CfE would help ‘promote the need for revised paradigms in how we offer learning opportunities to students, including stronger and more directional actions in shifts to autonomous learner mode’. A school respondent spoke of the benefits of CfE for learner transitions and that it had created ‘the idea of the highway of progression...interwoven by the subjects and learning opportunities’, as well as reinforcing the value of cross-disciplinary and interdisciplinary approaches and using shared outcomes across
disciplines. Other HE respondents anticipated that 'many students will have stronger IT and information literacy skills than previously'. It was suggested by school and some HE respondents that another potential for CfE was as a driver for lifelong learning. One HE respondent talked about '(the) sense of ambition of CfE (as) something HE is comfortable with...[there is] high optimism...that CfE can provide a better basis for lifelong learning. [There is a] sense we can integrate better collaboratively around that agenda'. Most HE respondents in the study were open-minded, withholding judgement on specific CfE-driven changes to their existing pedagogical developments until they had started working with new entrants from the Senior Phase. At the same time, though, several HE respondents wanted to emphasise that universities have to cater for learners from a wide range of learning systems already. Only a proportion of new entrants would be progressing from Scottish schools and colleges, with the balance drawn from a wide range of different countries, all with their own curricula.

8.7 However, there were some respondents from across all three sectors who were unaware of the developments in skills in other sectors. For example, most of the college respondents who had been working on employability skills portfolios were unaware of HE development work on graduate attributes. By the same token, most HEI lecturers were not familiar with the essential skills agenda in the college sector, and one respondent in HE also thought there was a question as to 'whether the Four Capacities are suitable precursors for higher education (Graduate) Attributes'.

8.8 Perceptions of the value placed by CfE on knowledge, as compared to skills, was a source of debate. One school respondent was of the view that CfE 'does not push knowledge away or relegate it...it is about more emphasis on cognitive skills - to apply and use the knowledge that's in there' but others in colleges thought that 'the "Skills" agenda is not being pushed enough'. This was needed, they thought, because 'students are not very effective at showing their knowledge through application and therefore (are not) demonstrating their skills of interpretation, evaluation and analysis in the subject'. Another said: 'surely a rounded education is the best way to cope with the future as only a few subjects rely on a bank/level of knowledge', and there were some worries that 'knowledge (alone) goes out of date very quickly'. Some HE respondents expressed concern over what they perceived as a tension between a skills focus in CfE and the need for a certain level of subject knowledge for entry to HE, dependent on discipline. Although one emphasised that there is 'no need to differentiate skills and knowledge as they are two sides of the same coin', this view was not widely shared across the sectors. The knowledge versus skills debate came up regularly in different contexts, as expressed by this HE respondent: 'curriculum models (in schools and colleges) are down-grading knowledge and focusing on skills instead' and as a result 'HE should be making more noise about knowledge specification in the curriculum in schools and in our own entry information for applicants'.

8.9 Another area of difference in perception relates to HE and the ongoing developments in curriculum and pedagogy. One HE respondent explained: 'Universities have moved on - it is just that we have not publicised the fact that we have!' Certainly, there was clear evidence that respondents from schools and colleges were unaware of some of the developments, and where respondents were able to speak with more knowledge and were impressed, their information had come from their own children at university and not through professional networks. As one HE respondent explained, there are examples of a wider variety than ever of teaching methods in universities, comprising 'a mixed economy, with lectures, groups, peer reviews of essays, interactive sessions, active research, tutees, role plays, video revisions and peer comments' and 'students are asked constantly for their feedback on the course and this is fed into the redesign of the curriculum'. Flexibility in university curricula and teaching methods was highlighted by one HE respondent, who pointed out that 'whatever you do has to be flexible enough to cope with entry by people from any context from across the world'. However, college respondents in particular appeared unaware of the flexibility that universities provide for their students.
The student experience, including personalisation

8.10 In the views expressed there emerged a tension between HEIs responding to the potential curricular and pedagogic challenge of more autonomous, better-equipped learners entering HE, and the perceived need, linked to widening participation and fair access agendas, for HEIs to improve pastoral and academic support for students from disadvantaged backgrounds. A further important issue identified was how to avoid overlap in learning, teaching and assessment, between Advanced Higher and SCQF level 7, and in articulation arrangements, and the need to improve clarity in progression.

8.11 HE respondents noted that CfE encourages more 'creativity in learning and teaching' for students, especially through 'more experience of interdisciplinary ways of working' and 'different ways of learning, teaching and assessment.'

8.12 Suggestions to improve continuity in learning across the sectors through progressive learning teaching and assessment, and curricular structural arrangements, included the following from colleges:

- avoiding overlap in learning, teaching and assessment between sectors, which would help universities tap into the skills of learners without repeating their learning
- recognising that the 'growth in 2+2 and 3+1 curriculum arrangements are adding to the complexity and potential for overlap' and that greater clarity in progression and purpose is needed'.

8.13 A barrier to continuity was also identified by one school correspondent in that 'adjustments had to go all the way back through the system to primary education, if we are to be successful' although solutions were offered through more effective use of current 'e-portfolios, profiles of work, more habitual skills recognition, responsibility for learning, sharing learning intentions, peer and self-assessment'.

8.14 Of concern to all three sectors - although without any evidence - was that students, after CfE experiences, might find their experiences in HE disappointing. One of the college participants recounted that head teachers in their feeder schools have noticed the increased level and amount of questioning from young people and they themselves have found that students are: 'extremely demanding in the questions that they are asking, the probing nature of them'. But most HE respondents welcomed the 'strong emphasis on meta-cognition skills through Curriculum for Excellence', which they anticipated would mean students would be 'better equipped to participate more effectively in higher education'.

8.15 There was a perception by some respondents in the other sectors that there was weaker pastoral support for some students in HE than in schools and colleges. They linked this to their concerns about fair access and disadvantage, and worried that there needed to be 'more recognition of the very different places students come from in terms of their confidence (academic and social) and their resilience/stickability related to background and other factors.' They wanted to be reassured that 'the learning needs of each individual student (in HE) (included) pastoral support, accommodation of more diverse learning styles and learning tutor support…including the opportunity to discuss their learning with an adult tutor who knows them well'.

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8.16 Admissions remains the current focus of sectoral attention, as the most visible and urgent area for change, as HEIs review and revise their admissions policies in preparation for the first CfE cohort in 2015. Respondents variously identified the potential benefits of developing a skills profile to support the selection process in HEIs, to provide much needed evidence of the impact of CfE on learners’ experiences, knowledge and skills. Ideally, this should extend beyond the CfE Four Capacities in the BGE, to include the Senior Phase. A more contextualised admissions process could also complement the potential increased flexibility in progression routes which CfE may bring, including existing contextualised approaches for wider access. However, skills profiling needs to be balanced by subject knowledge, accorded due weight, in accordance with the demands of the discipline. The implications for university admissions of the flexibility afforded by CfE to pupils to study for Highers over one or two years remained a matter for ongoing deliberation, particularly in the context of highly competitive subjects. Amid the complexity of current changes in admissions procedures, the importance of ensuring availability of and access to effective careers guidance was highlighted by both HE and school respondents.

8.17 Most respondents across the sectors knew that admissions policies were already under regular review and expected there to be further amendments once more was known about HE applicants with CfE qualifications and learning experiences. Admissions was the most mentioned topic for most respondents across the sectors, not least due to their attempts to distinguish between current and ongoing challenges in admissions processes, and those which are anticipated and likely to add to the debate through CfE developments.

8.18 Firstly, there was evidence of different perceptions on the applications process for entrance to HE.

- Respondents from schools and colleges suggested that a skills profile, drawing upon the CfE Four Capacities, could be a valuable guide to learners’ potential, in addition to qualifications; the respondents wanted to see this as part of future competitive and contextualised admissions processes.

- Their hope was that as CfE progressed, so admissions policies and recruitment practices would also change to accommodate skills as well as qualifications evidence of the learning experiences of applicants, thereby helping to resolve what at present seemed to be different cultures working with the same UCAS system.

- To most college respondents, it seemed that implementation of the new qualifications had been pushed forward too quickly by a small group and were not as radical as they had hoped for. From cross-sectoral meetings they had attended, they had gained the impression that the school representatives, who were in the majority, were influenced by what they thought universities wanted for entry from the new qualifications.

- One HE respondent's view was that there was potential for greater flexibilities for progression routes to HEIs to inform contextualised admissions for wider access, but others wanted to be sure that students brought a level of subject knowledge to university and could learn at the pace their courses demanded. Generally, HE respondents recognised their reliance on Highers as the main currency and were often self-critical about this. As one respondent explained: 'irrespective of students' other achievements it boils down to resources and workloads, so crude selection is required - it (admissions) has to work as a blunt tool'.
8.19 Secondly, there were examples of misunderstandings by some HE respondents, particularly about what was meant in the Senior Phase by learners choosing to sit Higher qualifications at their own pace of learning, as well as about the content of the revised Highers. With highly competitive admissions in some subjects, such as Veterinary Medicine, sitting Highers in a single year has the connotation of returning to the '2 term dash' - the knowledge transfer-based learning associated with the current Higher examinations. Others from HE wanted to see an end to this because it resulted in too many students lacking the meta-cognitive and critical skills which they seek.

8.20 Thirdly, some of the HE respondents highlighted several factors which, they said, discouraged significant admissions changes at this stage, particularly the following.

- Insufficient evidence to date of the impact of CfE on learners' experiences, knowledge and skills.
- The growth in high quality international and EU applicants for funded places meant, as one HE respondent explained, that 'it is hard to get staff focused on (CfE and Admissions) because HEIs are pushed very hard to attract international students'.
- HEIs already recruit learners from a wide range of learning systems so are used to managing a wide variety of qualifications and supporting evidence in the applications process.

8.21 There was some evidence of more contextualised flexibilities in admissions policies in practice by drawing on a mix of skills and subject grades to support the fair access agenda and the Positive Destinations targets in their local schools. One HE respondent explained how this could be achieved through 'increasing numbers of pre-offers in disciplines across the academic spectrum and more engagement in localities about offers' but s/he also said that these approaches tended to be from post '92 universities, as part of their widening access agenda.

8.22 HE and schools both made strong representations for an effective career guidance system to work more closely with future admissions development and recruitment practices, in order to help learners understand and simplify early on the complexity of choices they face - especially concerning the implications of subject choices and pace of learning in schools and colleges on their future education applications and career options. One HE respondent said 'This (i.e. importance of careers advice) is getting lost amongst the debates on entry qualifications and curriculum structures'. School respondents wanted to know: 'If we want young people who are future looking and entrepreneurial why are we not going beyond the 'pupil/student voice' and genuinely involving them 'in joint working and decision making about their (choices in) learning?' Some college respondents, though, as a result of recent work with students around cross-disciplinary skills, were finding that 'The learners are gradually starting to talk the language of employability and are able to articulate why it is important in securing their future prospects'. The importance and relevance of the recent work in HEIs on 'soft-skills' development and Graduate Attributes was referred to frequently by different HE respondents throughout the study.

Collaboration on Curriculum for Excellence

8.23 Collaboration came across as a key factor in universities' anticipation and preparation for CfE, and was evidenced by most respondents in each of the sectors making positive reference to it in a variety of contexts throughout the study. In fact, CfE itself was commonly described by HE respondents as a positive pedagogical development because it encouraged collaboration between sectors 'by offering a joined up approach to learning and progression', as one respondent said.
Importantly, within-sector collaboration on CfE was seen by several respondents across the sectors as a necessary foundation for cross-sectoral work, particularly if the sectors are to coordinate their developments in teaching and learning.

8.24 Within the overall theme of collaboration, the following four sub-themes emerged from the data: successful collaboration; further opportunities; removing impediments to collaboration; and within-sector collaboration.

Successful Collaboration

8.24.1 Even though the sample in this study was small, respondents from HE were able to give examples of what they regarded as successful cross-sectoral collaboration either specifically on, or related to, CfE (although without systematic evidence). These were:

- HEIs delivering qualifications at SCQF level 7 (for example, Advanced Higher and HE modules) for schools and colleges
- CSI (Crime Scene Investigation) interdisciplinary project for schools
- ENgage in ENgineering
- PASS (Programme Assessment Strategies) project in Nursing, Midwifery and Social Care
- awareness raising conference on CfE (QAA/HEA organised by university)
- cross-disciplinary conference on CfE (QAA/DSC Enhancement Theme organised by university).

8.24.2 In general, there was enthusiasm for more collaboration, for an increase in dialogue between universities, schools and colleges and for further opportunities for information sharing and shared CPD on learner progression. In relation to such dialogue, some HE respondents sought ‘genuine discussion about skills and attributes and how this development relates to learning’ and ‘to explore assessment’. Most respondents from all three sectors seemed to favour cooperative, creative CPD as the way to proceed rather than CPD as training.

8.24.3 The following funded examples, not CfE-driven, were identified by individual respondents from across the sectors as models of successful cross-sector collaboration related to teaching and learning, and student experience (parenthesis indicates the sector where an individual or group gave the example):

- HEIs delivering in schools subject-related, study skills, student life and confidence-building workshops (HE and schools)
- widening participation projects including 'High Flyers', 'Lift Off' and 'LEAPS' (HE)
- 'IT 4U' to engage students in computing science (HE)
- familiarisation events for prospective students and 'bridging' summer schools (HE and schools)
- shared CPD and teachers' professional learning through postgraduate work (HE)
- colleges' articulation agreements with universities (colleges).

Examples of strategic partnerships were also cited:

- School/college partnerships
- Local Authority Community Planning Partnerships, encouraging Single Outcome Agreements
- Regional Coherence Funding Partnerships.
Further opportunities

8.24.4 Further opportunities for cross-sectoral collaboration were already available through what one school respondent described as: 'clear mechanisms for sharing good practice', such as working groups comprising local authorities, schools and colleges 'to address the impact of Curriculum for Excellence on learning and teaching'. However, some said that for these to become effective there needed to be 'a joined up and co-ordinated approach to CPD' from senior levels within and between the sectors.

8.24.5 There was general agreement among respondents that there was simply insufficient or even no collaboration in one or more vital areas related to CfE. These included (parenthesis indicates where an individual or group mentioned the area):

- Senior Phase developments (some respondents from all sectors)
- CfE's implications for first year curriculum design (HE)
- advanced entry to year two or three (HE)
- admissions guidelines and decision patterns (HE and schools)
- preparation and information provided for HE applicants at school and college (HE)
- employability skills (schools and colleges)
- profiling, assessment of skills, including Four Capacities and Graduate Attributes (all sectors)
- curriculum, learning and assessment at transition to university (all sectors)
- the knowledge/skills balance in the curriculum (all sectors).

8.24.6 School respondents explained that they wanted: 'Universities, colleges and schools (to) work together to explore assessment practice...because the Senior Phase (is) compounding the qualifications-led agenda'. Again, joint CPD was suggested (in the HE focus group) for closer discussions to get to grip with the details of implementing the Senior Phase.

8.24.7 Some HE respondents worried about information available for HE applicants, which they perceived to be of poor quality and too late, although they said they were heartened that recent admissions statements by universities in Scotland 'show signs of getting through'. They considered that a further untapped opportunity for collaboration is with parents and families of students, and this point was also emphasised by the college focus group.

8.24.8 Respondents from schools and colleges perceived a lack of collaboration on employability skills for young people and the need to tackle these on a continuum from early years through all stages of education - including working with employers.

Removing impediments to collaboration

8.24.9 Respondents were very keen to remove what they perceived as impediments to cross-sectoral collaboration. For HEIs and colleges in the study, respondents perceived the main impediment to be the separate working of national bodies. Accordingly, they requested that sector leaders at policy-making and implementation levels communicate more effectively throughout and across the sectors, to ensure that practitioners are not left with partial pictures. Collaboration between the sectors at the highest levels was seen as a prerequisite for effective collaboration in the whole of the Scottish education system, so that there is: 'information sharing and making sure we’re all singing from the same hymn sheet' (colleges). Implicit here is also recognition of the importance of coordinating developments. Other impediments mentioned were not all necessarily
due to CfE but the general perception across the sectors was that CfE was compounding them. These included (parenthesis indicates where an individual or group raised the issue):

- the real, or perceived, difference in learning and teaching cultures between sectors
- the market-oriented political and economic environment. For example, students were looking at 'parity of esteem' between providers rather than the appropriateness of learning on offer (some schools)
- differences in the way sectors are working currently can impede communication between staff (colleges and schools)
- CfE's impact is not seen as being as high a priority by HEIs and colleges as it is by schools (HEIs and colleges)
- inconsistencies in CfE between BGE and the Senior Phase (schools)
- lack of information and understanding about the priorities for pedagogical development in each sector (all sectors).

Within-sector collaboration and CPD

8.24.10 In the view of respondents, many of the above opportunities and impediments needed first to be addressed by within sector CPD before effective between-sector collaboration was possible. Priorities for within-sector CPD included: the lack of knowledge and understanding they had about CfE (HE and colleges) and about sectors' different priorities as well as what several respondents perceived as different learning and teaching cultures, together with the differences in the way sectors were working because these could impede communication between staff in the same sector (HE, college and school). While ongoing preparation for CfE in HEIs included allocating CfE lead responsibilities to existing senior staff and establishing internal CfE working groups, respondents also saw within-sector CPD as a means to develop collaboratively institutional and sectoral perspectives on CfE and its implications.

8.24.11 Already within the HE sector, several respondents spoke about ongoing efforts in their institutions to resolve CfE-related concerns, for example: '(bringing) key people from Admissions and from learning and teaching together to find a way forward'. However, the experience of some college respondents was that post '92 universities tend to engage with them more at a local level, but that different types of university have different priorities, which may in turn impact on their approach to CfE.

8.24.12 Some respondents in all three sectors anticipated with enthusiasm that CfE will facilitate learner transition both within and between school or college and HE because it will enable: 'a genuine discussion about skills and attributes and how this development relates to learning, as it is about both system and personal progression'. According to several respondents, schools have already experienced this: 'In some areas there is a clear through-line of content and knowledge that allows each learner/teacher/sector to understand its place and role (within the School)', which adds further evidence to the value of within-sector collaboration.

Unknowns

8.25 Within universities, schools of education delivering Initial Teacher Education will have direct exposure to the curricular changes and pedagogy associated with CfE, and to the emergent impact on learners. However, as yet there has been no cross-sectoral independent evaluative research on the impact of CfE on learners. The consequent gap in knowledge and understanding is fundamental to much of the current uncertainty around cross-sector collaboration and makes it difficult for HEI staff, either to make preparations or to identify their own needs for professional
development. Nevertheless respondents were able to articulate some broad questions in relation to learner progression and outcomes from CfE and to the Broad General Education and Senior Phase in relation to preparation of the learner for, and transition to, higher education. These are as follows:

**Learner progression and outcomes from CfE**

8.25.1 Some HE respondents wanted to know: 'what skills and knowledge a young person has learned irrespective of which subject they have come through' and 'how (CfE) is going to change the student?...What do we have to do around it?' There was agreement that: 'without research into pedagogies it will be down to conscientious lecturers'. Meanwhile, universities already developing their own curricula needed to be informed more, before making further adjustments in response to school-based issues, said an HE respondent. A few school respondents talked about the 'challenge of capturing and using meaningfully the picture of a learner’s progress to facilitate better admissions and sustaining him or her once at HEI', and were also unclear how they were to present wider achievement, future potential and the role of qualifications in these contexts.

**Broad General Education and Senior Phase in relation to preparation for, and transition to, HE**

8.25.2 From some HE respondents there were questions related to, for example, the way the Senior Phase is constructed, how the CfE flexible route-ways would articulate with the work of admissions staff, what the core elements of CfE are and how HE would respond to the different cadres of students for example, around pace of learning. Some school respondents enquired: 'What are the knowledge, skills and experiences that would better equip students to cope with the challenges of HE?' Colleges were also unclear about the Senior Phase, but speculated that: 'there wasn't going to be a huge, huge difference in the youngsters (going to the universities)', although in terms of teaching methods in CfE they might be 'more demanding, more questioning'. They worried about: 'putting (students) on the back foot for preparation for university' (but this may have been due to misunderstanding of how Highers will be delivered). A number of respondents requested research on secondary/college to higher education learner transitions in the CfE context, of similar depth and scope to that already carried out on primary to secondary transitions.
9. Conclusions

9.1 We set out to identify the anticipated impact of Curriculum for Excellence on higher education, with particular reference to learning, from the perspectives of staff in, and working with, schools, further education colleges and universities. We wanted to find out if and how staff were preparing for the anticipated impact and whether there were any examples of relevant 'good practice' they could provide which would help others prepare. The conclusions and our recommendations for next steps serve as an alert to the range of possibilities and challenges for HEIs and the other sectors in respect of the impact of CfE on future students. These need to be tested with a larger sample that is also representative.

9.2 Respondents were given a variety of opportunities to express their views and some were also able to share their perspectives with others in their sector. The purpose of this was to explore the value of using a sectoral approach, with the involvement of schools, colleges, HEIs and sectoral organisations. From the data analysis, the findings were grouped under five overarching themes. Three of these - provision of learning and skills, student experience, and access and admissions - represent the respondents' characterisation of the main elements of the anticipated impact of CfE on learners, qualifications and staff preparation. The other two cross-cutting themes - collaboration on CfE and 'unknowns' - emerged strongly from the data analysis as both providing and impeding a way forward. As a qualitative study, our first conclusion is that the data and findings need to be checked with a wider sample size.

9.3 From the themes, the following conclusions can be drawn in addressing the study questions:

9.3.1 Provision of learning and skills

(i) There was a lack of knowledge and understanding from schools and colleges about the extensive developments in HE pedagogy to date and their complementarity with CfE. This could impede productive collaboration and indicates that HE needs to publicise the developments in schools and colleges too.

(ii) HE respondents were not yet sufficiently advanced in their developments for CfE to have produced case studies of their preparations.

(iii) There was a perceived cultural gap between the sectors (and within the HE sector) expressed in particular through the emphasis on knowledge or skills relative to each sector, which could develop into an unnecessary impediment to between-sector preparations for the impact of CfE in HE. 'Fair access' to HE was another example of a perceived cultural gap.

(iv) It seems that CfE offers the opportunity, in the interest of learner progression and staff, both to identify variations in current usage and meaning, and to work to establish a single set of shared meanings.

(v) School respondents saw their aspirations for lifelong learning potentially coming alive with HEIs behind the CfE philosophy. HEI respondents were also open to this but wanted first of all to see evidence of the impact of CfE on learners.

9.3.2 Student experience (including personalisation)

(i) There was an as yet unrealised potential for continuity of skills assessment across the sectors, through school profiling, employability skills (colleges) and Graduate Attributes (HE) and into the workplace.

(ii) It was not clear how student personalisation in the Senior Phase would translate, or connect, to the undergraduate programmes.
9.3.3 Access and admissions

There were a number of ongoing operational issues that needed to be resolved cross-sectorally at senior level for HE staff to be able to engage in meaningful preparation for the impact of CfE. These included admissions policies and practice, the shape and structures of the connections and transitions from BGE through Senior Phase to HE, and the efficacy and relevance of careers support in CfE.

9.3.4 Collaboration

(i) There was an abundance of goodwill from the respondents to find out more about how other sectors work and how they could collaborate more systemically to support learners and each other in the preparation for CfE in HE. Two models of CPD were suggested for this: training and information, and cooperation and co-creation.

(ii) HE and college respondents perceived the need for policy-makers and implementers across the sectors to commit to the whole of the Scottish education system - currently they can be left with partial pictures.

9.3.5 Unknowns

Respondents identified the following as areas where further work was required to generate knowledge and understanding of the impact of Curriculum for Excellence on learners, in order to inform appropriate curricular and pedagogic development in HE.

(i) Staff from all sectors were concerned that they did not know what the impact of CfE on learner capacities, knowledge, skills and outcomes would be and were only able to make educated guesses at this stage. This was not sufficient to enable HEI staff to make preparations or identify their own needs for professional development.

(ii) A number of respondents requested research on secondary to HE learner transitions in the CfE context, of similar depth and scope to that already carried out on primary to secondary transitions.

(ii) Some staff from all sectors expressed confusion about how progression will work from BGE into and through Senior Phase to HE.

9.4 It was not expected that school and college respondents would be in general unaware of the wide-ranging pedagogical developments in HE and their complementarity with CfE. The level of preparation for the impact of CfE on universities was lower than expected, for the reasons given here, and it was disappointing although not surprising that case studies were not available. Admissions is causing more concern than expected. Personalisation was not a subject of discussion in any depth but respondents from all sectors wanted to keep it on the agenda and considered it important. The enthusiasm of staff across the sectors for increasing the influence of CfE by collaborating in the interests of learners was very heartening and a mark of great success for its instigators.