



Enhancement-led Institutional Review

University of Abertay Dundee

MARCH 2012



© The Quality Assurance Agency for Higher Education 2012

ISBN 978 1 84979 605 7

All QAA's publications are available on our website www.qaa.ac.uk

Registered charity numbers 1062746 and SC037786

Enhancement-led Institutional Review

University of Abertay Dundee

Introduction

1 This is the report of an Enhancement-led Institutional Review (ELIR) of the University of Abertay Dundee (the University) undertaken by the Quality Assurance Agency for Higher Education (QAA). QAA is grateful to the University for the willing cooperation provided to the ELIR team.

ELIR method and report

2 The ELIR method was revised during 2007-08 following extensive consultation with the Scottish higher education sector. Full detail on the method is set out in the *Enhancement-led institutional review handbook: Scotland (second edition) 2008* which is available on the QAA website.

3 ELIR reports are structured around three main sections: the management of the student learning experience; institution-led monitoring and review of quality and academic standards; and the strategic approach to quality enhancement. Each of these three sections leads to a 'commentary' in which the views of the ELIR team are set out. The three commentaries, in turn, lead to the overarching judgement on the level of confidence which can be placed in the institution's management of academic standards and the quality of the student learning experience. A summary report is also available in printed form (from QAA) and from the QAA website.

Method of review

4 The University submitted a Reflective Analysis (RA), which provided the focus for the review. The RA was supported by a number of accompanying documents including a submission from the University of Abertay Dundee Students' Association and case studies on the Masters in Professional Practice in Computer Games Development, the Postgraduate Certificate in Higher Education Teaching, and new approaches to engagement characterised by the Thinking Module in the School of Social and Health Sciences and the Expert Witness project in the Dundee Business School. The case studies were chosen to demonstrate the University's approach to enhancing the student experience. The ELIR team also received the report of the University's previous ELIR which took place in 2007.

5 The preparation of the RA was overseen by a steering group chaired by the Pro Vice-Chancellor (Academic Development) with the President of the Students' Association as Vice-Chair. Membership was drawn from across the University, including senior representatives from each school and central services. The RA was approved by Senate in December 2011.

6 The ELIR team visited the University on two occasions: the Part 1 visit took place on 8 and 9 February 2012 and the Part 2 visit took place in the week beginning 12 March 2012.

7 The ELIR team comprised: Ms Kari Arbouin, Professor Peter Bush, Professor Rae Condie, Mr Rory Herron, Mr Chris McIntyre, and Mr Tom Ward. The review was managed on behalf of QAA by Ms Stella Heath, Assistant Director, QAA Scotland.

Background information about the institution

8 The University of Abertay Dundee has its origins in the Dundee Technical Institute which opened in 1888. The Dundee Institute of Technology, as it was known from 1988, applied for university title in 1992 and the University of Abertay Dundee was established in 1994. The academic structure of the University comprises the Dundee Business School; the Institute of Arts, Media and Computer Games; the School of Computing and Engineering Systems; the School of

Contemporary Sciences; and the School of Social and Health Sciences. The University aims to contribute to the economic and social wellbeing of Scotland and the UK while developing areas of international excellence. The University has a small portfolio of collaborative activity with the majority of the University's collaborative programmes being delivered at local partner colleges. The University's main overseas partnership is with the Systematic Educational Group International (SEGi), Malaysia.

Institution's strategy for quality enhancement

9 The University's strategic approach to quality enhancement is set out in the Strategic Plan 2011-15, which presents a vision for the development of graduates equipped with the attributes and attitudes to contribute significantly to future economies. The University states that it is committed to providing for each student: excellence in teaching and learning; high quality learning facilities; a supportive and listening institutional culture; and the development of graduate-level employability and enhanced life skills.

Management of the student learning experience

Key features of the student population and the effectiveness of the institution's approach to managing information about its student population

10 In 2011-12 the University had an on-campus population of 5,111 students. 84 per cent of these were full-time undergraduate students, 7 per cent part-time undergraduate students, 7 per cent taught postgraduate students, and 2 per cent postgraduate research students. Since 2006-07 student numbers have grown by over 1,000 and recruitment onto all programmes has continued to increase steadily.

11 Of the 2011-12 student population studying in the UK, 84.7 per cent of students are from the UK, while 10.6 per cent are from elsewhere in the EU and the remaining 4.7 per cent are from overseas. 31 per cent of students are from the local area with approximately 4 per cent entering the University from a Scottish college with advanced entry into year 2 or 3 of a degree programme. The population also consists of 29.8 per cent mature students.

12 In September 2011, 186 of the University's students were studying at Adam Smith College, Fife and 40 students at Stevenson College, Edinburgh. There were also approximately 120 students studying on the University's programmes at the Systematic Educational Group International (SEGi), Malaysia.

13 The University has an online management information system which provides a range of datasets on admissions, registrations, progression, destinations and withdrawals. Detailed reports are produced to support the work of particular committees as well as being used extensively for management information purposes. However, the University acknowledges that further work is needed to make the most effective use of its data, particularly in relation to the progression and retention of specific student populations (see paragraph 56).

The effectiveness of the institution's approach to engaging and supporting students in their learning

Student representation

14 The Students' Association indicated that it has very good access to the senior management of the University, with positive and supportive one-to-one relationships, but also noted that these relationships operate more effectively than the formal representative structures. The University has a system of class representatives who report to the school Student Councils (see paragraph 50) which consist of the Director of Academic Programmes, the Chair of the School Learning and Teaching Committee, and class representatives from all programmes at all

levels. Since the 2007 ELIR the training of class representatives has been enhanced by the introduction of an annual student representatives conference, which provides training for class representatives led by the Students' Association and supported by the University and Student Participation in Quality Scotland (sparqs). However, although student representation at the local level is adequate, student awareness of and engagement with student representative structures is limited and variable, and it is unclear how matters raised in the school Student Councils are actioned. The University is encouraged to find mechanisms to support student engagement with the representative system.

15 The Students' Association comprises two sabbatical and six non-sabbatical officers. The sabbatical officers are members of the main University committees, including the Senate and University Court. The University policy is to include a student representative on every Quality Review panel and this role is usually undertaken by one of the Students' Association sabbatical officers. Due to the workload of sabbatical officers, the capacity of the Association to engage with student representative structures and the institution at a strategic level is limited, and the University is encouraged to work with the Students' Association to develop a more effective strategic partnership.

Student feedback

16 Evaluation of student feedback is undertaken at both the module and programme level, and the use of questionnaires is required for every programme and module. The University has ongoing concerns that completion rates can be low and it is currently evaluating an online system for gathering student feedback with a view to improving response rates and enabling a more sophisticated analysis of the data. The University anticipates implementing the new system for the 2012-13 academic session.

Feedback to students on assessed work

17 The University has identified feedback on assessed work as an area which needs development. Working in collaboration with the Students' Association, the University has implemented a guaranteed timescale for returning assessments. While students indicated their awareness of this policy, they also reported that it was not being implemented consistently. However, they were positive about being able to approach tutors for discussions if they felt that the feedback they had received was insufficient or unclear. As part of the University's strategy to improve feedback on assessed work, each school has its own assessment design and feedback strategy. These school strategies encourage staff to consider the design of assessments and their role in programme delivery, as well as using feedback as a developmental tool to promote learning and facilitate improvement in subsequent work.

Support for university entry

18 All applicants are provided with access to an online applicants' portal once they accept an offer from the University. This provides support for the process of transition from secondary and further education to the University. A summer school and a bridging programme are also available for those students who may require additional support in their transition to higher education. Student Services provide targeted support for international students including the provision of English language courses.

19 The University has recently strengthened the transition process from college to University in partnership with four local further education colleges: Angus College, Dundee College, Adam Smith College and Elmwood College. In January 2012 the University introduced a new initiative which aims to make the transition between college and university more seamless. The University employs two transition advisers whose role is to support the successful transition of students into higher education. The advisers spend part of the week at the partner colleges and one day per

week at the University. Each transition adviser provides information to partner college students about the University's programmes and delivers preparatory workshops on, for example, creative thinking and essay writing. The advisers also arrange for students located within the colleges to visit the University.

20 Students expressed satisfaction with the University's support for their adjustment to life at the University, and those students who had made the transition from further education colleges were particularly positive about the support they had received. Since the 2007 ELIR the University has strengthened its induction arrangements. The transition advisers initiative, although at an early stage, has positive potential.

Student support services

21 Since the 2007 ELIR the University has adopted a one-stop-shop approach to the delivery of its student support services by situating all services in the Library Building. This has helped to increase their visibility and accessibility for students and enables staff from the different support services to work more closely together. Although there has been no formal evaluation of the impact of the relocation, there is evidence that there has been an increase in demand for services such as counselling and the specialist advice, advocacy and support provided for students with disabilities. In the context of planned growth and diversification of the student body, the University is encouraged to ensure that Student Services has sufficient capacity to cope with such growth.

Research students

22 The postgraduate research student community is overseen by the Research Degrees Sub-Committee (RDSC) which reports to the Senate through the Research and Knowledge Exchange Committee (RKEC) (see paragraph 53). This allows the strategies for research development to be linked with matters of relevance to research training. RDSC is chaired by a member of the professoriate and the Vice-Chair acts as the strategic link between the centre of the University and schools regarding operational aspects of strategy, policies and procedures. RDSC oversees the quality of the research student experience and monitors the implementation of personal development planning (PDP) and the provision of student and supervisor training.

23 Research, Enterprise and Innovation Services (REIS) offers a one-stop-shop approach for support and advice on all stages of the research degree process and coordinates research degree provision, including the application of regulations and quality assurance procedures. Training for new research students includes a skills audit and a programme of training events. Each student has six-monthly formal progress reviews and progress reports are considered by the school research committees, monitored by RDSC. This enables supervisory teams and the University to respond to students' needs and allows any necessary remedial action to be taken before problems become acute.

24 The University recognises the difficulty of imbuing a sense of community in a dispersed research student population and in gaining their views through the student representative processes, which are often focused on undergraduate and taught postgraduate student experiences. The University monitors and reflects on its management of the research student experience through reporting to RDSC, whose membership includes student representatives from each school. The University has identified that further work is required to confirm the effectiveness of its monitoring and representation arrangements, which it is encouraged to pursue. Nonetheless, during the current ELIR postgraduate research students were positive about what they described as a friendly, supportive and integrated academic community. They indicated that they particularly value the weekly seminar series and the social learning spaces provided by the University.

The effectiveness of the institution's approach to promoting the development of graduate attributes, including those relating to employability, in all of its students

25 The University has identified the development of Abertay Graduate Attributes (AGAs) as being increasingly important. The University's Assessment Strategy focuses on enquiry-based assessment and project-type activities and examinations that specifically promote the development of AGAs. AGAs are embedded in the 2011-15 Strategic Plan and are highlighted within the strategic objectives for learning and teaching. Schools have mapped the AGAs into their provision at programme and module level through module descriptors, module handbooks and programme handbooks. Students have opportunities to participate in business competitions, work-based projects, field studies, work-based simulations, voluntary work, and part-time employment. In some cases work placements are integrated with students' programmes.

26 The University emphasises the importance of graduate employability in the context of the local area, which provides over 30 per cent of the student population, and which includes relatively high levels of unemployment and areas of social deprivation. The Strategic Plan 2011-15 aims to enhance the employability of the University's graduates by enabling them to develop the skills of self-reflection about their learning and the ability to communicate their portfolio of acquired skills with confidence. Students recognised the University's commitment to developing their employability skills and graduate attributes, although there was a lack of awareness of the terminology of graduate attributes.

27 Overall there is a clear institutional commitment to articulating Abertay Graduate Attributes at the strategic level and to embedding these in operational planning and the curriculum.

The effectiveness of the institution's approach to managing the learning environment

28 The University has made significant investment in the physical environment to support learning and teaching. It has developed learning spaces and social areas which complement pedagogical methodology and enhance the learner experience. For example, the White Space project uses a combination of specialist resources and flexible learning spaces to provide simulations of professional working environments. The success of White Space was recognised in a Scottish Funding Council (SFC) funded research project exploring effective working environments in further and higher education.

29 The Strategic Plan 2011-15 identifies specific goals and targets related to the development of the estate and the learning environment. The Estates Strategy explicitly refers to providing flexible environments for teaching, learning, research and knowledge transfer activities, and commits to supporting the digital learning environment. Information Services, which comprises the Library, computing services and media services is located in the Library Building and provides a wide range of resources for students, supported by an enquiry desk. Recent developments in the Library Building include a reduction in the archival stock of print material which has enabled the expansion of student work areas and seminar spaces as well as an increase in computing facilities and internet access, and there has also been a recent upgrading of information technology hardware.

30 The virtual learning environment (VLE) has become an important aspect of the learning environment for students. The VLE is integrated with the records system through which students gain access to modular information for their programmes, and functionality was upgraded in 2011. Schools have set minimum levels of expectation that staff use the VLE for a variety of purposes, including as a repository for online learning materials, a definitive source of module information, and the means for coursework submission. Although there is some variability between modules and programmes in the extent to which these minimum expectations are being met, the University considers that it now provides a more consistent experience for students. The University also considers it has developed greater staff confidence in the use of technology, evidenced by the increasing use of more innovative tools such as blogs, wikis, and

simulations which respond to students' expectations of more complex use of these technologies. Students were very positive about the VLE, noting that it was particularly useful in enabling them to work offsite.

31 Overall the University has a coherent approach to the development of its learning environment, and students are positive about the learning spaces and the provision of computing facilities. Students are particularly positive about the University's VLE, which provides easy offsite access to learning resources.

32 Students expressed ongoing dissatisfaction about the lack of University sports facilities. The University is currently in discussion with Dundee City Council and Dundee College about taking a partnership approach to the provision of sports facilities across the City. If successful, this coordinated approach could provide a potentially positive outcome for the University's students.

The effectiveness of the institution's approach to promoting equality of opportunity and effective learning for all of its students

33 The Strategic Plan 2011-15 includes the aim of ensuring that the student profile is diverse and varied. It sets out the University's commitment to diversity, to widening access and to encouraging lifelong learning. The University's Equality Statement reflects these commitments. The Equality and Diversity Sub-Committee (EDSC) works to promote equality of opportunity and diversity in all aspects of the University's business. EDSC is supported by task groups on disability and age; gender and sexual orientation; and race and religious belief. Action plans have been developed for each of these areas. The University applies an equality impact assessment procedure to relevant policies, and briefing sessions about equality and diversity are available to all staff through seminars and online tutorials.

34 The University works with partner organisations, such as the Scottish Wider Access Programme (SWAP) East, Lift Off (Schools for Higher Education Programme), and local colleges and universities to prepare prospective students for entry to university and to support their transition into higher education. The Tayside and Fife Articulation Hub (TFAH), which is chaired by the Pro Vice-Chancellor (Academic Development), links four local colleges (Dundee College, Angus College, Elmwood College and Adam Smith College) with the University of Abertay Dundee and the University of Dundee to promote articulation to degrees from HNC and HND programmes.

35 The University is part of a 2011 Higher Education Academy change programme on developing an inclusive culture in higher education. The University is using the programme to focus on the development of teaching materials and styles that are as inclusive as possible by design, and are only adapted to meet additional support needs by exception rather than as a rule.

36 Student Services provides English language support for international students and runs a number of weekly workshops which provide contextualised learning and development. Student Services and academic staff work in partnership to offer support for students and the academic tutors have a coordination, liaison and problem resolution role. The Disability Service, which is part of Student Services, is validated by the Student Awards Agency for Scotland (SAAS) to undertake assistive technology and needs assessments which enables the University to support students with a range of disabilities and additional learning needs.

37 Overall the University recognises the different support requirements of its student body and is taking active steps to ensure equality of opportunity for all of its students.

The effectiveness of the institution's approach to supporting and developing staff to promote effective learning for their students

38 The University is committed to supporting its staff in order that they can effectively support student learning. University, school and programme inductions are provided for new academic staff at all levels. All schools have implemented workload planning and the balance of time allocated to teaching, research, administration and external commitments is negotiated with the head of school. The workload plan is adjusted to enable specific personal development, such as participation in the University's Postgraduate Certificate in Higher Education Teaching (PgCertHET), or when a member of staff wins an external research grant.

39 The PgCertHET was revised and relaunched in 2010. The programme has been updated in line with the Strategic Plan 2011-15, is accredited by the Higher Education Academy, and incorporates a range of optional modules offered on a flexible delivery basis by the University of Dundee. This is a successful, although informal, arrangement between the two universities. The launch of the revised PgCertHET is a positive development and the University is encouraged to formalise its arrangement for the award with the University of Dundee to ensure the sustainability of the arrangement.

40 Participation in the PgCertHET is a contractual requirement for all new members of academic staff who are new to higher education and who do not possess an equivalent qualification. The University also has a policy that all postgraduate research students acting as teaching advisers and with a significant teaching load are required to take the core 30 credit module of the PgCertHET, though there is a lack of clarity about what constitutes a significant teaching load, and in practice it is not compulsory for teaching assistants to undertake this module.

41 The Pathways Performance Management System (Pathways) is the University's appraisal and staff development system. Its purpose is to help maintain a focus on objectives related to the Strategic Plan and clarify behaviours expected within the workplace, and is the mechanism by which individual and institutionally focused staff development and training needs are identified. Staff were positive about the Pathways framework which was reported to be a more helpful mechanism than previous arrangements for assisting individual staff to discuss their development requirements. However, the University does not yet appear to be using Pathways to help it to establish overall training and development requirements for its academic staff. In addition, there is no central academic development unit to coordinate or deliver academic development activities. There is no centrally located development or training in place for roles such as that of academic tutor, although local support from senior school staff is provided and valued. While the Organisational Development Sub-Committee (ODSC) has a remit for staff development, there is no institutional policy or strategy for staff development. Institutional provision is limited and, apart from the PgCertHET and the annual Quality Enhancement Conference, the majority of training and development opportunities available to staff are externally delivered.

42 At the time of the current ELIR the draft Staff Development and Training Framework was available. The draft Framework brings together a number of elements that encompass all formal policy, procedure and statement documents relating to the training and development processes of the University including the management of staff, development and training, induction, probation, and performance management. The Framework had a target date for approval by January 2012, but at the time of the current ELIR, it had not yet been approved.

43 Overall, the University makes available a range of academic staff development opportunities. However, staff development needs are not coordinated at the institutional level and the University is encouraged to take forward the development of the Staff Development and Training Framework as a matter of priority.

The effectiveness of the institution's management of the student learning experience on collaborative programmes

44 The University has approximately 350 students registered on University of Abertay Dundee courses studying in other institutions. Over 200 of these are studying in colleges in the Dundee, Fife, Angus and Mid-Lothian areas, the remainder are taking the University's programmes at overseas partner institutions. The majority of these latter students are on dual degree programmes with the Systematic Educational Group International (SEGi), Malaysia, which was itself the focus of a QAA audit of the University's overseas collaborative provision in 2010.

45 Students on collaborative programmes delivered at local partner colleges have equivalence of experience with on-campus students at the University. They have the same entitlement as on-campus students to access services such as the Library and the VLE. They can access the University's student services, mitigating circumstances are managed in the same way as for on-campus students, and there are equivalent student representation arrangements.

46 Overall, although the University does not at present have a strategy for the expansion of its collaborative activities (see paragraph 77), there are good local relationships and ongoing discussions between staff in schools and the partner institutions regarding the management of the student learning experience.

Institution-led monitoring and review of quality and standards

Key features of institution-led monitoring and review at the institution, and the extent to which these arrangements meet sector-wide expectations

47 The University's approach to assuring and maintaining standards and delivering high quality provision is characterised by the interplay of formal processes for the approval, annual monitoring and periodic review of programmes; a nested committee structure at University and school levels; a framework of regulations and policies applied uniformly to all University programmes wherever they are delivered; and the use of external reference points at various stages of a programme's cycle.

48 Senate has ultimate responsibility for quality and standards and it discharges this through the committee structure including: the Quality Assurance Committee (QAC); the Quality Enhancement Committee (QEC); the Research and Knowledge Exchange Committee (RKEC); the Research Degrees Sub-Committee (RDSC); the Portfolio Planning Committee (PPC); and the Planning and Resources Committee (PRC). Schools operate with a committee structure that is similar to that of Senate, with school level teaching and learning committees undertaking at a local level the broad university-wide responsibilities of QAC and QEC (see paragraph 87). The roles and remits of the various committees are explained in the University's quality assurance and quality enhancement handbooks. Staff are generally aware of the remits of committees and understand the relationships between them. The committee structure has been fairly stable in recent years, although since the 2007 ELIR the PPC has become a full committee of Senate, the RDSC now reports to the RKEC, and the University has established a formal Collaborative Provision Sub-Committee (CPSC), reporting to QAC, which replaces the former task group. The University has continued to reflect on the possible merger of QAC and QEC, particularly as assurance and enhancement functions are combined at school level in the school teaching and learning committees (see paragraph 71). However, the University is cautious about such a change given the confidence it has in the robustness of the quality assurance arrangements led by QAC.

49 The annual reporting system is working effectively and school reports are on the whole reflective and analytical. Nevertheless, there is still scope to increase the reflective and evaluative elements of the programme reports. While the arrangements for annual monitoring seem rather cumbersome, with each school teaching and learning committee reporting, through school boards, to both QAC and QEC on assurance and enhancement matters separately, the system is robust and well understood.

50 The six-yearly cycle of institution-led Quality Review (QR), which applies to all the University's taught programmes, is comprehensively described in the Quality Review Handbook and is clearly understood by staff. The QAC determines the timing of reviews within the six-year cycle. Review events are based around a self-evaluation document which is produced by the programme team and a series of meetings with a panel, chaired by a senior member of academic staff or a member of Court. Each panel includes at least two external senior academics, professionals and practitioners as appropriate, together with a student member. Student involvement is viewed positively by the Students' Association and students are full members who contribute effectively to the review team. The Quality Review Handbook outlines the role of panel members. The school is responsible for ensuring the documentation is appropriate for consideration by an initial scrutiny panel, established by the QAC. The self-evaluation document is required to address academic standards; curriculum design; assessment; student learning opportunities; links with the school's quality enhancement planning; relevance to University strategy and policy; the student experience; underpinning by research and/or scholarly activity; support services; and continuing professional development (CPD) programmes. There is an exhaustive checklist of the evidence base programmes are expected to supply. In preparing for the review programme teams are expected to consult with the school Student Councils to obtain student views (see paragraph 14). Review panels make judgements of confidence or no confidence in academic standards and judgements on a four-point scale in the areas of teaching and learning, student progression and learning resources. Additionally, panels may award an exemplary judgement to particular features of activity. Panel reports are submitted to the QAC and Senate, and schools are required to produce a development plan, monitored by QAC via the annual reporting process, of matters to be addressed.

51 The University has established a range of activities to prepare staff and students for the Quality Review process including annual discussion workshops for all panel chairs and briefing events for panel members. These activities are designed to ensure panels are consistent in their processes and understand the judgements they are applying. Staff are positive about the support they are offered, and particularly value the opportunity to observe review panels prior to being members. Heads of school are proactive in developing their own staff in relation to various aspects of the quality agenda, and they find the regular briefings provided by senior administrative staff to be useful.

52 Although the Quality Review process includes a pre-review event with senior staff from student support services to consider student support matters, the Quality Review process does not apply directly to these services and there are no arrangements in place for periodic review of the individual student support services themselves. The University is encouraged to ensure that it has appropriate mechanisms in place to review student and related central services on a regular basis.

53 Oversight of postgraduate students is the responsibility of the Research Degrees Sub-Committee (see paragraph 22), although responsibility for individual students is located within the supervisory team in the relevant school whose research committee monitors student progress. The regulations for the admission, registration, supervision, training and assessment of research students, which are detailed in a comprehensive research degrees handbook, meet sector expectations and are being effectively applied.

54 Overall the University's processes for monitoring quality and academic standards are robust, meet sector expectations and are applied consistently across the institution. The range of preparatory activities in relation to periodic Quality Review reflects good practice in developing staff understanding of and commitment to the Quality Review process.

The extent to which the institution's monitoring and review arrangements include consideration of all students

55 The principles underlying the arrangements for the monitoring and review of programmes are applied to all the University's taught programmes wherever and whenever they are delivered. The formal arrangements do not distinguish between different student groups, although these are taken into consideration during the programme development and approval stages. While arrangements for programme approval where partners are involved are slightly different from the approval of University delivered courses, the University quality arrangements do not fundamentally distinguish between collaborative programmes or programmes expected to recruit significant numbers of part-time or international students.

56 While the quality management arrangements cover all the University's programmes, and thereby all students, the management information system does not currently support the differential analysis of progression for diverse student groups. The University acknowledges that the development of an enhanced database would enable it to undertake more sophisticated analyses of progression and attainment of its diverse student populations (see paragraph 13); however, a short-term working group which was set up to address this issue is currently in abeyance, and the University is encouraged to progress the work of this group as a matter of priority.

The effectiveness of the institution's approach to self-evaluation including the use made of external reference points

57 The processes described in the Quality Assurance Handbook and the Quality Enhancement Handbook indicate how the University adopts self-evaluation as a key element in the development, approval and enhancement of its curriculum. The report of the Quality Assurance Committee (QAC) to Court on the operation of its periodic review processes; the action plan following the 2007 ELIR; the recent debate and consultation leading to the approval of a new Strategic Plan from 2011; the lengthy discussions on the Academic Calendar; the ongoing debate as to whether the Quality Assurance Committee and the Quality Enhancement Committee should merge; and the evolution rather than the stagnation of projects such as White Space further exemplify the University's commitment to self-evaluation.

58 The University's self-evaluative approach is informed by a range of external reference points. At the approval stage new programmes are calibrated with the level descriptors of the Scottish Credit and Qualifications Framework (SCQF), subject provision is developed through reference to the QAA subject benchmark statements, and programme specifications are presented as the formal statements of programme structure, assessment strategy and pedagogy. The University is guided by the UK Quality Code for Higher Education (the Quality Code), and the Quality Assurance Committee maps University quality management processes against the relevant sections of the Quality Code. A task group or working party of the relevant Committee considers revised sections of the Quality Code and recommends changes as necessary for implementation in the following session. The University's view is that wherever possible programmes should be accredited by a professional, statutory or regulatory body (PSRB), and has made changes to its own regulatory framework to accommodate the requirements of external bodies such as the British Psychological Society.

59 Overall the University has a self-evaluative approach and has appropriate arrangements in place to ensure it takes account of external reference points.

The effectiveness of the institution's approach to the management of information to inform the operation and evaluation of its monitoring and review activity

60 The University's policy is that all management data required for quality processes is provided centrally by the Registry and follows a standardised template. The Senior Management

Group and the Quality Assurance Committee receive a number of management reports on matters such as admissions, recruitment, progression and retention, the provision of formative feedback, and module-level adherence to moderation policies. Registry staff are willing to provide additional information on request, although such additional data is not available routinely. In general the University makes effective use of management information for programme monitoring and review purposes.

The effectiveness of the institution's approach to setting and maintaining academic standards including the management of assessment

61 Academic standards are set at the point of formal programme approval, and the comprehensive Programme Approval Handbook explains in some detail the processes of programme design and approval. Following initial development within the school, proposals are considered initially by the Portfolio Planning Committee (PPC) for assessment in terms of University strategy and policies, business case and resource requirements. Academic approval follows a sequential route similar to that for programme review, and involves detailed work in the school to produce a formal proposal which is considered by a University scrutiny panel prior to consideration by a formal programme approval advisory panel (PAAP), which includes senior academic membership from other schools, two external academic members and an external professional practitioner whenever appropriate. The outcomes of the PAAP are considered by Senate for formal approval and QAC monitors any changes required by the panel. The development and approval stages are firmly grounded in the Academic Infrastructure, with the Programme Approval Handbook pointing to the SCQF, the relevant sections of the Quality Code, and the subject benchmark statements.

62 The proposed programme specification forms a main focus of the PAAP's discussion, and PAAPs frequently recommend changes. The programme specifications are expected to outline the programme philosophy, learning outcomes at both module and programme level, engagement with the Abertay Graduate Attributes, the assessment strategy, the links between research and teaching, and programme management. The processes explained in the Programme Approval Handbook are unambiguous and thorough, and following changes to the process in 2010-11 more recent reports have been shorter, focusing on key recommendations, and have an increased emphasis on enhancement through invited comments from the panel chair and external members on matters such as innovation and engagement with the teaching and learning strategy.

63 The University's approach to programme change recognises the difference between relatively minor and major changes. In the case of the former, for example the natural evolution of modules or improved efficiencies to structures, approval is made by the school board following discussion between the school's director of academic programmes and the Chair of the Quality Assurance Committee to establish the scale of changes required. Approval is made only on receipt of scrutiny and written support by the external examiner(s). A Programme Change Approval Panel (PCAP), comprising internal senior staff, is established for more significant changes. PCAPs do not include external members, but must consider written support from external examiners prior to approval. However, the University does not have fixed criteria to determine whether changes are major or minor. There would be benefit in the institution producing guidance on the definitions of what constitutes a major and a minor change.

64 University regulations are regularly reviewed with any changes confirmed annually by an academic regulations editorial board (AREB) for consideration and approval by Senate. Boards of examiners, through their chairs, are briefed by the Registrar to ensure that they are aware of any changes to the regulations as approved by Senate and to ensure consistency of operation.

65 The University has institution-wide regulations governing the reporting of grades, criterion-referenced assessment arrangements and the classification of awards. Details of the specific arrangements for each module are approved via the formal module approval process. The Quality Enhancement Committee publishes guidance on assessment strategy around which

schools individually develop their own strategies. The guidance relates to all undergraduate courses, and provides a framework in which to place the volume and types of assessment for each semester.

66 External examiners are appointed to all levels of programmes by Senate on the recommendation of the Quality Assurance Committee (QAC) following detailed scrutiny by the External Examiners Task Group (EETG). The appointment process, the criteria for appointment, the duties of external examiners, and details of their induction are contained within the External Examiners Handbook. The University distinguishes between subject examiners, who are involved in the scrutiny of students' work and the moderation of assessment and module grades, and programme examiners, whose role is to ensure the appropriate application of regulations governing awards, progression, deferral and repeat. External examiners are appointed for four years and may include, in appropriate circumstances, professional practitioners or industry experts. Guidance is available to schools on the volume of activity allocated to external examiners, with the EETG required to approve duties as well as nominations in its recommendations for appointment to the QAC. The main responsibility for the induction of external examiners lies with the head of school.

67 Each external examiner is required to submit a proforma style annual report, addressed directly to the Principal of the University. This proforma includes sections on information received, the appropriateness of students' assessments, the quality and standards of the programme, the operation of the board, and administrative matters. There is an additional section for examiners whose responsibilities cover collaborative provision. The University responds to these reports through programme team contributions to the programme annual report, a copy of which is sent to the relevant external examiners. It is the responsibility of the school in compiling its annual reports to assure itself that the comments from the external examiners have been appropriately addressed. The QAC receives an annual report from EETG that summarises the overall outcomes from external examiners' reports, highlighting institution-wide issues and features of good practice. In line with the revised external examining section of the Quality Code, arrangements will be put in place in the near future so that students can access external examiners' reports and responses from programme teams via the University Portal.

68 Overall the University has appropriate arrangements for setting and maintaining academic standards.

The effectiveness of the institution's approach to managing public information about quality and academic standards, including the linkage with the institution's monitoring and review arrangements

69 Many of the University's published documents on academic provision remain in print form, although the University is moving significantly to web-based provision. The schools have overall responsibility for ensuring that the prospectus is accurate on programme matters, much of which is derived from the programme specifications agreed at the programme approval stage. Further checks are undertaken by the school coordinator, and then the Student Recruitment Office where final entries are prepared for publication. Overall responsibility for the accuracy of the website and Portal lies with the Director of Communications. Students reported that publicity materials, on the whole, were accurate and informative. The University is currently developing an operational statement regarding the checking and authorising of new materials which should be helpful in the University's preparations for meeting the requirements of the Key Information Set (KIS).

The effectiveness of the institution's approach to linking its monitoring and review processes to its enhancement arrangements

70 Schools undertake annual monitoring of programmes and are expected to produce both an annual quality assurance and a quality enhancement report each year. These reports go to the

Quality Assurance Committee (QAC) and the Quality Enhancement Committee (QEC) respectively and they are expected to highlight examples of good and/or innovative practices within the school. The quality assurance report includes information about learning and teaching in relation to progress made against the Strategic Plan and school operational plans. The quality enhancement report includes feedback on three key areas: enhancing provision; capacity development (including staff development); and stakeholder engagement. Both reports are designed to focus on relevant issues and there is guidance for staff in compiling them. In the quality enhancement report schools are expected to include a case study of good practice or innovation. The template for external examiner reports has also been developed to encourage the identification of good and/or innovative practice within programmes, and these reports are scrutinised by a QEC task group.

71 The University recognises that it needs to undertake further work in linking the overarching analyses of school quality assurance annual reports to the QAC and the QEC to the broader enhancement agenda, and continues to consider how to best integrate the work of these two committees (see paragraph 48). The ongoing review and revision of annual reporting has facilitated the production of annual school reports which enable the two committees to offer Senate a broader reflection of university-wide issues and good practice.

72 Overall the University's monitoring and review processes make a contribution to enhancement.

The effectiveness of the institution's approach to monitoring and reviewing its collaborative activity

73 The University currently has a relatively small portfolio of collaborative activity. However, by 2015 it intends to have in place further developed local, regional, national and international collaborations which will enhance learning and teaching, research, and professional practice. A number of collaborative relationships with local colleges are also likely to change as a consequence of the outcome agreements with the Scottish Funding Council regarding regional coherence.

74 Since the 2007 ELIR, the University has appointed a Director of Partnerships who heads a small Partnerships Office and chairs the Collaborative Provision Sub-Committee (CPSC). These changes provide a more secure focus for overseeing the collaborative partnerships, and the University is encouraged to ensure that these developments continue to provide effective institutional oversight in the context of the revised strategic approach to collaborative activity.

75 Arrangements for the approval and annual monitoring of collaborative activities follow the pattern of arrangements for on-campus provision. There are detailed arrangements in place for the approval of prospective partner institutions which are explained in the Collaborative Procedures Handbook. These include the development of a business case through the Planning and Resources Committee (PRC) and an academic case via the Collaborative Provision Sub-Committee (CPSC), and then the Quality Assurance Committee (QAC). New collaborative programmes are subject to the same programme approval process as that for on-campus programmes.

76 After approval, all collaborative programmes fall within the quality management of a nominated school, which is responsible for ensuring that the key elements of quality assurance, monitoring and review apply as if the programmes were delivered on-campus. As with on-campus provision, schools are responsible for ensuring that annual monitoring takes place and for including collaborative provision in the school annual report. The CPSC considers each annual report and is therefore in a position to identify for the QAC, and then Senate, any significant cross-institution or high level matters emerging through the reports.

77 The Quality Review Handbook states that collaborative provision and formal partnerships will be reviewed within the subject and programme context of their operation, in parallel with the annual monitoring process. However, while the University normally reviews partner programmes within the Quality Review time framework, it has yet to agree a formal process for institutional review (see paragraph 46). The University developed a special three-day review format for its review of Adam Smith College in 2011. This involved consideration of institution-wide issues on the first day followed by separate discipline-based review panels on the following days focusing on delivery, assessment, academic standards, the student experience, and infrastructure support. The University acknowledges that it has not yet developed specific plans for the regular institutional review of its partners, but, in the light of the apparent success of the method adopted for Adam Smith College, the University is considering adopting a similar method for an imminent review of the Systematic Educational Group International (SEGi), Malaysia.

78 Overall, the University has robust processes in place for managing its collaborative provision. The success of the review model used for the recent review of Adam Smith College is noted, and the University is encouraged to consider applying this model across all of its collaborative partnerships.

Strategic approach to quality enhancement

Key features of the institution's strategic approach to quality enhancement

79 The University's approach to quality enhancement is set out in the Strategic Plan 2011-15. The development of the Strategic Plan involved a wide range of staff and represents a substantive shift in the University's direction. It is comprehensive and includes a number of high level institutional objectives for each of five key areas: teaching and learning; research and knowledge exchange; the portfolio of programmes; student experience; and support services. Objectives related to teaching and learning make explicit reference to innovative learning environments and the use of active enquiry and project-based learning as well as reaffirming the University's commitment to the Abertay Graduate Attributes.

80 The Strategic Plan also identifies a series of outcomes that, it is anticipated, will result from the successful realisation of its objectives. These outcomes are expressed as broad statements and lack explicit quantitative detail. For example, one of the teaching and learning outcomes states that by 2012-13 enquiry-based learning will form the majority of student contact time. The absence of detailed guidance means that schools may have difficulty in relating the plan to local disciplinary demands and developmental needs, and the University is encouraged to ensure it provides staff with support in interpreting and operationalising the high level objectives in the Strategic Plan.

81 The Secretariat has administrative responsibility and the Director of Operations executive responsibility for checking progress against the objectives within the Strategic Plan, although the precise means by which this will be achieved had not been determined at the time of the current ELIR. A proposal for monitoring and evaluating the implementation of the Strategic Plan was due to be considered by the Court during the current ELIR.

82 In the summary audit of the progress made under the previous Teaching and Learning Plan 2007-11, schools had been asked to report on the extent to which they had met the Strategic Plan's targets for learning and teaching. These were expressed mainly in quantitative terms, for example schools were asked about the percentage of modules where graduate attributes had been embedded in the assessment schedule. Schools responses were brief, quantitative and shed little light on the extent to which the student experience had been enhanced. In developing a strategy for monitoring the delivery of the Strategic Plan 2011-15, the University is encouraged to ensure that it has appropriate evaluative mechanisms in place for determining the extent to which its operational plans are delivering the University's strategic objectives.

83 As the objectives for learning and teaching have been included within the Strategic Plan 2011-15, the University has not developed a specific learning and teaching plan or strategy to replace the previous Teaching and Learning Plan 2007-11. It has, however, expanded on specific aspects of the student learning experience in the document *Quality Enhancement: A Strategy for Learning and Teaching*. This document provides a concise overview of the University's aims for learning and teaching. It sets out the University's broad approach, identifying four key underpinning themes: the student experience; teaching and learning; research and knowledge exchange; and portfolio development. More specifically, it identifies three areas of activity through which it intends to realise its aims. These are the Abertay Graduate Attributes (AGAs); Assessment and the Academic Calendar; and the linkages between teaching and research.

84 The Assessment and the Academic Calendar section of the document *Quality Enhancement: A Strategy for Teaching and Learning* focuses on recent changes to assessment practices and submission dates. At the time of the 2007 ELIR, a considerable review and revision of the modular scheme used across the University was underway. The 2007 ELIR report encouraged the University to continue with these revisions and, in doing so, the University has now produced guidance on the balance of coursework and examinations and reduced the overall number of examinations that students are required to sit. A key outcome of the modular scheme review has been the introduction of a wider range of approaches to assessment, more closely aligned to the nature and expectations of the particular discipline than was previously the case. These innovations have necessitated changes to the regulatory structure and, subsequently, the examination timetable and coursework submission dates have been rearranged to avoid over-burdening students at specific times of the academic year.

85 *Quality Enhancement: A Strategy for Teaching and Learning* builds on these developments and encourages schools to adopt a variety of assessment methods including short tests, formal examinations and coursework. In particular, the University requires that all students engage in enquiry-based learning and project-based activities for a significant proportion of their programmes, and are assessed appropriately. The University considers these approaches to learning, teaching and assessment to be important in the development of graduate attributes and independent learning skills.

86 The University's approach to the enhancement of learning and teaching, therefore, emphasises the role of graduate attributes and approaches to assessment and research-teaching linkages, reflecting the recent national Enhancement Themes.

The effectiveness of the institution's implementation of its strategies and policies for promoting quality enhancement across the institution

87 At school level, the learning and teaching committees, which have responsibility for both quality assurance and enhancement (see paragraph 48), are chaired by the directors of academic programmes (DAPs). The schools' DAPs are members of the QEC, providing the link between institutional and school levels with regard to quality enhancement. DAPs are also members of the QAC, as are the heads of schools. One of the DAPs' key responsibilities is to ensure that quality assurance procedures are undertaken appropriately for all of the programme provision within the school. The DAPs therefore have an important role in the implementation of enhancement initiatives, and are pivotal in linking quality assurance and quality enhancement within and across schools.

88 The implementation of the Strategic Plan 2011-15 is primarily carried out through the development of school operational plans, which are the individual schools' responses to the strategic objectives set out in the Strategic Plan. The operational plans follow a common format, with actions, targets and completion dates set alongside the institutional strategic objectives. School operational plans are a recent development, and a number are still in draft form, so it is too early as yet to determine what impact these may have on learning and teaching practice at the local level.

89 The University's quality assurance processes and procedures are well established and robust. However, the University has only recently begun to develop its strategic approach to learning and teaching, as set out in the Strategic Plan 2011-15, and it is still in the process of developing an enhancement-focused culture. The University is now seeking to address this through the delivery of the 2011-15 Strategic Plan, which has the potential to enhance the student experience.

The effectiveness of the institution's use of external reference points in its approach to quality enhancement, including the extent to which the institution's approach is informed by national and international practice

90 University staff engage with the national Enhancement Themes through a variety of internal and external events and activities. The Quality Enhancement Committee (QEC) has oversight of planning and implementation in relation to the Themes and the schools can apply for funding from the QEC to undertake Themes-related projects. The Postgraduate Certificate in Higher Education Teaching (PgCertHET) encourages those participating to develop innovative approaches to learning, teaching and assessment in line with the Themes, and the University has recently published a collection of these with the aim of providing a source of ideas for, and reflection on, enhancement-led practice.

91 In 2008-09, a number of QEC working groups were established to progress projects supporting the development of a University of Abertay Dundee graduate profile. These were: the graduate attributes and citizenship; assessment and the graduate attributes; and diversity, internationalisation and the graduate attributes. Subsequently, funding associated with the national Enhancement Theme Graduates for the 21st Century was used to progress and integrate the range of projects and initiatives associated with the development of the Abertay graduate profile.

92 The University holds an annual quality enhancement conference, and in 2010 and 2011 the focus for the conference was on activities related to the Graduates for the 21st Century Theme and linkages with the Abertay Graduate Attributes. It is evident that the Abertay Graduate Attributes play a central role in the approach to learning and teaching across the University, and engagement with the Theme has facilitated a planned approach to embedding graduate attributes across programmes.

93 Since the 2007 ELIR, the University has developed a broader range of approaches to assessment, notably in the assessment of coursework delivered through enquiry-based learning and team projects. The school operational plans detail assessment strategies which are relevant to the disciplines studied such as: moot court debates in law; the assessment of practical skills in forensic science; simulations in nursing; and real projects commissioned by external clients. The development of these more innovative forms of assessment has been supported by the University's engagement with the Integrative Assessment Theme.

94 Overall, the University is making effective use of external reference points in its approach to quality enhancement.

The effectiveness of the institution's approach to identifying, disseminating and implementing good practice in the context of its strategic approach to enhancement

95 Dissemination of good practice at the institutional level is primarily carried out through the Quality Enhancement Conference, which is an annual event designed to highlight new approaches to learning and teaching and enhancement-related initiatives. The Conference assists staff in developing and updating their academic practice and responds to needs identified by the schools. It includes areas such as the national Enhancement Themes, pedagogy and technology. It involves staff, external specialists and invited speakers. The Conference provides a valuable opportunity for sharing innovative practice and challenging current orthodoxies.

96 The Abertay Learning Network is an online repository of information about quality enhancement activities taking place across the University. It includes recent projects, case studies, research, and links to relevant external sources, and enables staff to share examples of innovative practice.

97 The University, in collaboration with the Students' Association, has recently introduced the Higher Education Academy and National Union of Students endorsed Student-led Teaching Awards. This series of annual awards recognises outstanding contributions to the student learning experience by staff, and provides students with the opportunity to vote for lecturers nominated for awards in a range of categories including creative or innovative teaching. It also includes an award for the member of staff who has provided the best platform for employment. The final awards ceremony is a high profile event and an important opportunity for staff to be able to disseminate, and gain recognition for, good practice. The awards are an externally funded project at present; however, the University is committed to continuing the scheme once external funding for the project ends.

The effectiveness of the institution's approach to enhancing collaborative provision

98 Support and development is offered to staff in partner institutions primarily through visits made by University staff. For example, University staff recently delivered workshops on the Abertay Graduate Attributes and assessment at Adam Smith College. In 2010 the QAA conducted an audit of the University's partner in Malaysia, SEGi. The audit report noted that University staff maintain excellent working relationships with colleagues through visits. There is an associate lecturer scheme available to all staff at partner institutions and, in 2012, it is intended that the Postgraduate Certificate in Higher Education Teaching will be made available to college staff in Scotland. It is also intended that it will be made available in a modified form for SEGi staff, probably through online delivery.

Conclusion

Effectiveness of the institution's management of the student learning experience

99 The Students' Association is positive about its working relationship with the University, although this operates more effectively through individual relationships than formal institutional structures. The workload of the sabbatical officers means that their capacity to engage with the institution at a strategic level is limited, and the University is encouraged to work with the Students' Association to develop a more effective strategic partnership.

100 Since the 2007 ELIR the training of class representatives has been enhanced. Student awareness of, and engagement with, student representative structures is limited and variable. It is also unclear how matters raised in school Student Councils are actioned. The University is therefore encouraged to find mechanisms to support student engagement with the representative system.

101 The University has strengthened its induction arrangements, and students making the transition from further education colleges are particularly positive about the support they have received. The University has recently employed transition advisers to support students articulating from further education colleges and this initiative, although still at an early stage, has positive potential.

102 The one-stop-shop approach to the delivery of student support services has been beneficial, and the relocation of Student Services to the Library Building has helped to increase its visibility and accessibility. The University is encouraged to ensure that Student Services has sufficient capacity to cope with the planned growth and diversification of the student body.

103 There is a clear institutional commitment to articulating the Abertay Graduate Attributes at the strategic level. They are highlighted within the strategic objectives for teaching and learning set out in the Strategic Plan 2011-15, and they are embedded in operational planning and the curriculum.

104 The University has a coherent approach to the development of its learning environment, and students are positive about the learning spaces and the provision of computing facilities. Students are also very positive about the University's virtual learning environment, which provides easy offsite access to learning resources. There is, however, ongoing student dissatisfaction about the lack of University sports facilities. The planned partnership with Dundee City Council and Dundee College aims to take a coordinated approach to the provision of sports facilities across the City, and offers a potentially positive outcome for the University's students.

105 The University makes available a range of academic staff development opportunities. However, staff development needs are not coordinated at the institutional level and the University is encouraged to take forward the development of the Staff Development and Training Framework as a matter of priority. The launch of the revised Postgraduate Certificate in Higher Education Teaching is a positive development and the University is encouraged to formalise its arrangement for the award with the University of Dundee.

Effectiveness of the institution's arrangements for institution-led monitoring and review of quality, and academic standards of awards

106 Overall, the University's processes for monitoring quality and academic standards are robust, meet sector expectations and are applied consistently across the institution. The periodic Quality Review process is robust and well understood by staff, and the range of preparatory activities the University offers in relation to Quality Review reflects good practice in developing staff understanding of and commitment to the process. Student support services are involved in Quality Reviews, but the periodic Quality Review process does not apply directly to these services and there are no arrangements in place for the periodic review of the individual support services themselves. The University is encouraged to ensure it has appropriate mechanisms in place to review student and related central services on a regular basis.

107 The University's management information system does not currently support the differential analysis of progression for diverse student groups. A short-term working group which was set up to address this issue is currently in abeyance and the University is encouraged to progress the work of this group as a matter of priority.

108 The University has in place different processes for approving major and minor changes to programmes. However, the University currently has no fixed criteria for determining whether changes are major or minor, and there would be benefit in the institution producing guidance in this area.

109 Since the 2007 ELIR the University has strengthened its arrangements for the monitoring of collaborative provision by the establishment of the Partnerships Office and the Collaborative Provision Sub-Committee. These changes provide a more secure focus for overseeing the quality and standards of partnerships, and the University is encouraged to ensure these developments continue to provide effective institutional oversight in the context of the revised approach to collaborative activity. The University is also encouraged to consider applying across all of its collaborative partnerships the successful review model used for the recent review of Adam Smith College.

Effectiveness of the institution's implementation of its strategic approach to quality enhancement

110 The University's quality assurance processes and procedures are well established and robust. However, the University has not yet established a well developed culture of quality

enhancement. The Strategic Plan 2011-15 seeks to address this and its delivery has the potential to enhance the student experience. The high-level objectives within the Strategic Plan are expressed as broad statements, and the University is encouraged to ensure that staff have sufficient support in interpreting and operationalising these within the context of each school's disciplinary demands and developmental needs. In developing a strategy for monitoring the delivery of the Strategic Plan, the University is encouraged to ensure that it has appropriate evaluative mechanisms in place for determining the extent to which its operational plans are delivering the University's strategic objectives in relation to teaching and learning.

111 The University engages positively with the national Enhancement Themes, particularly in relation to the Graduates for the 21st Century Theme which has facilitated a planned approach to embedding graduate attributes across programmes. The Integrative Assessment Theme has been beneficial in supporting the development of more innovative forms of assessment.

Overarching confidence judgement

112 The findings of the ELIR indicate that there can be **confidence** in the University's current, and likely future, management of the academic standards of its awards and the quality of the student learning experience it provides.

The Quality Assurance Agency for Higher Education

QAA Scotland
183 St Vincent Street
Glasgow
G2 5QD

Tel 0141 572 3420
Fax 0141 572 3421
www.qaa.ac.uk

RG 954a 08/2012