



**TOGETHER AT THE HEART
OF SCOTTISH EDUCATION**

Engagement between schools and universities

Universities
Scotland



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Universities have long been committed to engaging with schools. They have established strong and enduring partnerships over centuries and continue to play a central role in the formulation and delivery of education policy and practice. This report adds further weight to the fact that universities across Scotland are supporting, encouraging and resourcing local and international communities through the work that they do with schools and other educational partners.

The different ways in which schools and universities interact varies. The report does not attempt to suggest that one size fits all; however it does show that a great deal of effort goes into sustaining synergies between different parts of the Scottish education system.

We are deeply indebted to Vice-Principals and colleagues across all of Scotland's universities who responded to Universities Scotland's call for evidence circulated to all universities in February 2010. The body of the report draws upon the responses gathered from all institutions. The survey requested information on the different types of engagement with schools, the support given to helping student progression and transition into university as well as assistance with a broad range of areas including curriculum development, staff development, the development of partnerships, and other information that may be relevant.

Scottish universities are currently working in local communities and will continue to be central to developing and supporting people of all ages, places and schools across Scotland. This report contributes to other research which illustrates that Scottish universities, in partnership with schools, make an enormous contribution to developing people, excellence, raising aspirations and being a real resource of hope, nationally, internationally and locally.

The examples provided in this report are not exhaustive but they are sufficient to debunk any myth that suggests that Scottish universities are not forging strong partnerships with schools and communities. Universities are very much a part of Scottish civic society through diverse and varied forms of engagement including work with schools.

When you add to this the fact that many universities have now evidence-based the contribution they are making to local, national and international economies then it is clear that the continuing importance of universities to economic and social development at home and abroad should not be underestimated.

The report was instigated by a request from the Cabinet Secretary for Education and Lifelong Learning in response to a similar report produced by Universities UK. Universities in Scotland continue to produce and provide internationally aware graduates, create knowledge as part of an international effort, provide a professional, skilled and a highly trained workforce, contribute to Scotland's international presence and significance, sustain a research base for Scottish business and make a significant contribution to social mobility. They continue to balance international and domestic responsibilities during financially challenging times and they continue to engage with local schools and communities in a multitude of different ways across Scotland and beyond.

Professor Grant Jarvie

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& representative for Universities Scotland on the Curriculum for Excellence
Management Board

This report aims to present the depth and range of the ways in which universities engage with schools in Scotland. Curriculum for Excellence represents a fundamental reform of the education system in Scotland. As it enters the implementation phase for secondary schools in 2010, universities and schools will be able to capitalise on these enduring partnerships to ensure the transformation is both smooth and successful for every one of Scotland's 300,000 secondary school pupils.

This report focuses on universities' engagement with secondary schools and pupils aged between eleven to eighteen. The case studies cover a wide range of activities and are reflective of the universities' distinctive approaches to engagement with schools and their diverse missions. However, there is also a great deal of consistency across the sector. We have therefore summarised the case-studies under five broad headings:

- 1: Enriching the learning experience.
- 2: Widening participation: raising aspirations and awareness of higher education.
- 3: Supporting the transition to higher education.
- 4: Supporting and implementing curriculum reform.
- 5: Teacher training and continuing professional development.

1: Enriching the learning experience

The role of universities in helping pupils to learn does not begin with entry to university, nor does it stop there. In fact, from training teachers to helping to develop courses and adding extra colour to the classroom, one way or another the experience of every school pupil in Scotland is enriched by universities. Many hundreds of schools benefit and well over 100,000 pupils get some of their learning directly from a university.

Helping to deliver learning

Universities have a direct role in developing and in some cases delivering the school curriculum and in providing complementary support for pupils while they are studying. This happens in a number of ways:

- **Curriculum delivery.** Not every school can teach every subject at Standard Grade, Higher and Baccalaureate level. Through on-campus classes, distance learning or e-learning universities help to make a broader subject choice accessible to every pupil in every school.
- **Curriculum enhancement programmes.** As well as supporting and delivering parts of the core curriculum, universities often offer complementary learning opportunities such as modules, short courses or one-off sessions.
- **Revision, study and exam 'schools'.** Universities offer pupils extra classes and resources to help them with their learning. These cover skills such as effective ways to revise, study skills and help and support on how to get the best results in exams. Such opportunities are timed to fit in with school holidays or the school exam diet.
- **Access to facilities.** Universities regularly make their learning facilities available to schools. This can mean access to the university library, IT facilities, labs and studio space. It lets pupils access cutting-edge resources which might be unavailable in their schools.

The University of Aberdeen has a programme called S6@Uni, run by the Centre for Lifelong Learning, which aims to help support schools by offering additional Advanced Higher courses where supply is limited. The Centre liaises with schools, education departments and academic departments to organise events at the University to help deliver the Advanced Higher curriculum. Pupils can take distance learning courses at the University of Aberdeen while remaining in their secondary school.

The University of St Andrews welcomes daytime visits from local secondary schools to the University Observatory. Students can benefit from world leading observational and computational facilities in St Andrews which are used by research teams and in the University's teaching.

The Open University in Scotland's Young Applicants in Schools Scheme allows pupils in their sixth year to choose from a wide range of Level 1 undergraduate modules and courses. The scheme has been available across Scotland since 2008/09 to give extra breadth and depth to the school curriculum. Pupils can choose subjects that might not be readily available in schools such as engineering and geology or opt to take specialisms within subjects. For example, a module on 'molecules, medicine and drugs' would complement Higher Biology. HM Inspectorate of Education (HMIE) have been supportive in the development of the scheme.

The University of Stirling's Department of Film, Media and Journalism recently organised a media skills taster session for two local schools which included a radio session in which the students recorded a programme and a session in the television studios.

SCHOLAR run by **Heriot-Watt University** is one of the largest online learning resources in the world with over 100,000 students registered with the programme who are able to access it from school or from home. The programme was originally devised by Heriot-Watt University to encourage the take up of science, technology, engineering and mathematics but over the last decade it has grown continually so that it now supports Scottish students working towards Higher and Advanced Higher in almost 30 courses.

SCHOLAR has just launched Higher Gaelic and Intermediate Mandarin for 2010/11. The online format is particularly effective in the support of minority subjects and proves popular with teachers keen to learn about recent innovations with digital learning to keep classroom activities new and exciting.

The University of Abertay Dundee hosts a NASA teacher training initiative as part of the Tayside Space School to help school teachers from Dundee, Perth and Kinross use space as a means of enthusing children's curiosity in science. The intensive training, delivered by NASA experts from Texas and supported by staff at Abertay, gives Scottish teachers all they need to run a series of Saturday sessions throughout the year which culminates in a week-long Summer Space School for pupils.

The Edinburgh College of Art hosted a 'Gods and Heroes' outreach event for schools last year to showcase the College's historic collection of rare casts many of which depict characters and events from Greek and Roman history and mythology. During morning and afternoon sessions groups of young people rotated around a variety of activities which included storytelling, creative writing, drawing, and making masks and headdresses.

The University of Glasgow holds 'Twilight' classes for S6 pupils in Glasgow City Council secondary schools studying Advanced Higher Chemistry, Physics and Biology. Lab space is made available for these classes, which take place from September to April, to allow pupils to conduct and complete the practical aspects of their Advanced Higher courses.

Senior school pupils from local secondary schools can gain free access to **Queen Margaret University's** Learning Resource Centre to support their learning, allowing them to access the extensive range of library services offered by the University and a range of dedicated study spaces. Senior pupils are also able to borrow publications and audio-visual items from the library's extensive catalogue.

2: Widening participation: raising aspirations and awareness of higher education

As well as helping with the core curriculum, universities host many activities to encourage pupils to think differently about some of what they are hearing in the classroom or to stimulate interest in subjects they may not yet know or enjoy. Universities have also been hugely active in recent years as part of the drive to get school pupils more enthusiastic about Science, Technology, Engineering and Maths (STEM) and continue these subjects into further and higher education.

- **Master classes in schools and universities.** Universities deliver specifically-tailored master classes and outreach classes on campus or at schools designed both to get pupils excited about the subjects they are studying and to give them access to some of the leading thinkers in that discipline.
- **Debates.** Universities organise debates for school pupils to encourage them to think further about what they are learning at school and to engage and discuss the big issues.
- **Workshops.** Universities offer smaller group workshops with a practical approach where academic experts can spend time with pupils to explore the latest thinking in a discipline.
- **Bespoke classes.** Universities will put together bespoke classes for schools or other groups if they are interested in finding out more about an aspect of the subjects they are studying – delivered to them by experts.

The University of Edinburgh's SCI-FUN Scottish Science and Technology Roadshow takes science to S1-2 pupils in schools throughout Scotland. The overarching objective of SCI-FUN, aside from a fit with the school curriculum, is for participants to have fun so they might be encouraged to consider STEM-based careers in the future. Current themes delivered in schools include 'climate change', 'stem cells' and 'the senses'. All shows include a brief introduction to the topic using a variety of images and film clips and then a hands-on interactive session.

The University of Abertay Dundee ran a Christmas debate at the end of 2009 for 200 S5-S6 pupils from schools across Dundee in the field of Sociology to fit the Higher modern studies curriculum. Two leading sociologists debated opposing sides of the statement: "Since Scotland is a meritocracy poverty is deserved". The debate helped demonstrate how to build an effective argument and the need to think around an issue to anticipate counterarguments. The pupils were encouraged to challenge the speakers with their own questions to help develop their own critical thinking and oral communication skills.

Glasgow Caledonian University's annual DNA Workshops are aimed at school pupils studying Higher biology and college students studying HN applied sciences. The one-day workshop run by the Department of Biological and Biomedical Sciences is filled with hands-on lab based work overseen by staff in the department. Working in pairs, the young scientists are taken through a sequence of processes to extract and analyse DNA using electrophoresis and experimental equipment of a standard not available in schools. Last year nine schools and colleges and almost 200 pupils took part.

The Scottish Agricultural College has dedicated multimedia web resources to support pupils and staff working towards Higher and Advanced Highers in Biology. The materials, which include downloadable MP3 files, have been based on the current Scottish curriculum but are also useful to anyone with an interest in the biological sciences.

Edinburgh Napier University runs two sixth-year conferences with 10 local schools in June. These are run in partnership with local businesses and other local universities. Pupils are offered a range of activities including inspirational presentations from keynote speakers and interactive workshops.

Queen Margaret University, in conjunction with **The University of Edinburgh**, **Edinburgh Napier University** and the **Scottish Agricultural College**, holds an annual "Kickstart" summer programme for 150 S6 pupils in East, Mid and West Lothian. The aim of the week-long programme is to give pupils as real a university experience as possible and to provide them with a deeper insight into some university subject areas. During the week, workshops are offered from two distinct areas - one focusing on Humanities & Social Science subjects, and the other on Health, Science & Technology subjects. Both programmes also focus on the essential skills required to succeed in school, college, university and the workplace.

The University of St Andrews lends out 'project boxes' in several subject areas, notably biology, to local schools with materials and expertise to support lessons and workshops. It also has a ChemBus and a PhysicsBus that take demonstrations and workshops to schools.

The University of the West of Scotland has a series of master class events known as 'Inspiring People' events. These are offered in addition to activities already delivered for schools and all relevant local S5 and S6 school pupils and their teachers are invited to attend these events. Scottish crime writer Christopher Brookmyre is amongst recent guest speakers.

Inspiring pupils to keep learning

Many pupils will go on from school to university or to a college or a training provider. While some pupils will be certain of what they want to do next, others may still have an open mind or may not fully realise the range of opportunities open to them. Whether minds are made up or not, getting the best start at university means getting ready while still at school. That is why universities run so many school visits and open days.

Opening campuses up to schools and pupils

University campuses are exciting places which can encourage pupils to think about a career at university and beyond or can open their minds to subjects or courses they might not otherwise have thought of. That is why universities make so much effort to open their campuses to schools, pupils and their parents.

- **Open Days and Open Doors.** Every university has scheduled open days in which the whole university campus including the student union and halls of residence are open for visits from pupils, parents and others to look around, meet staff, current students and generally get a feel for the place.
- **Customised Open Days.** Universities can tailor visits for groups to focus on particular Departments or aspects of the university. This gives pupils more opportunity to see exactly what it is they are interested in and get the information they need from those at the chalk face.
- **Institution taster days.** Taster days let school pupils come to university campuses as if they were already enrolled as a student to give them a taste of what it would be like, hopefully inspiring them to make that choice.

Queen Margaret University organises annual events for local secondary school pupils interested in careers in the Allied Health Professions and Nursing. These events feature a range of interactive workshops to increase awareness and knowledge about relevant professional areas, such as Physiotherapy or Radiography. The pupils also receive detailed guidance on how to make a successful university application, with particular attention paid to the pupils' non-academic achievements and career exploration activities, both of which are important aspects in the selection process for these high-demand programmes.

UHI Millennium Institute engages with local schools through its network of 13 academic partners and research institutions. UHI believes that building close relationships with schools on a partner basis allows it to meet the needs of secondary schools in each area more effectively. A good example of this is Perth College UHI which offers short taster courses available during term time for pupils who are not yet sure what they want to do after school.

Heriot-Watt University's Multilingual Debate hosts around 1,000 pupils from schools throughout Scotland. Students at the University debate current issues in a range of languages including French, Spanish and Arabic. The audience, made up of secondary school pupils, follows the debate with the assistance of student translators. The aim is to stimulate an interest amongst pupils in international politics and social issues whilst also setting language acquisition in a realistic context. The pupils get to ask questions in the language spoken and to vote for or against the motion. The Multilingual Debate won a European Languages award in 2006.

The Department of Sports Studies at the **University of Stirling** regularly welcomes secondary school pupils as part of the work experience programme. These students have expressed an interest in attending University and following a career in sport and are mentored by a member of staff.

The University of Glasgow Taster Week has been designed to give school pupils a taste of what it is like to be a student at the University of Glasgow. Taster Week runs over three weeks in June and July. During the week pupils attend sessions about different aspects of university life, alongside lectures, seminars, workshops and lab sessions

led by University staff. The aim is for pupils to experience studying specific subjects and also to experience the different styles of teaching at university.

Robert Gordon University hosted a week-long nursing summer school in association with NHS Grampian for aspiring nurses in S4 and S5. Nursing is a challenging course and a demanding job so pupils should make informed choices about whether it is the right career for them. In the summer school pupils learned core nursing skills, observed nursing work in a clinical setting and interacted with professionals and patients. The week culminated in a simulated practice session with volunteer 'patients' in RGU's Clinical Skills Centre. Pupils from 15 secondary schools in Aberdeenshire and further afield took part.

Getting out into schools: mentors, tutors and ambassadors

It is not enough to hope that school pupils will come to the universities – the universities must go to the schools to engage and enthuse pupils. They do this by sending out academics, but also by getting current students to act as mentors and ambassadors for their university.

- **Ambassadors.** Universities get their students to go into schools and talk to pupils about what it is like to go to university. The pupils hear from someone who is closer to their own age about what it is like and have the chance to ask about any doubts they have.
- **School placements.** Universities run programmes where postgraduate students can undertake long-term placements in schools to work with pupils on a subject-specific basis, helping to strengthen the subject in the school and to get more pupils moving from the subject on to a university career.
- **School mentors.** Mentors help those who have decided to go to university or think they would like to go to university, to get prepared to go. Mentors help pupils feel comfortable with the choice they have made and help pupils to start getting ready.
- **Tutoring visits.** Academic tutors make visits to schools to help pupils studying for specific subjects get themselves academically ready to study at university, helping them to think about what skills and knowledge they should be working on.
- **E-mentoring.** This can be anything from web forums or online chats to blogs and virtual tours. Universities develop these resources so that pupils who are thinking about university can get information and reassurance when and how they need it.
- **Seminars.** Universities will organise seminars in schools where the kinds of issues raised by ambassadors and mentors can be explored in more detail in small groups.

Glasgow Caledonian University's Think Ahead project works in five Glasgow schools with traditionally low progression rates into higher education. Pupils work with student mentors for half a day in school to explore school, employment and studying options. The pupils then visit Glasgow Caledonian University to undertake an academic and support challenge whilst on campus. The project involves whole year groups totalling 700 S2 pupils each year.

The BP Student Tutoring Scheme is run in conjunction with BP, **The University of Aberdeen, Robert Gordon University, Aberdeen College** and Aberdeen City and Shire Councils. It gives university students the opportunity to tutor and mentor in a local school under the supervision of the classroom teacher for ten weeks with the aim that someone closer to their age group will be a positive role model, thereby increasing pupils aspirations and their motivation to stay on in education and training. The scheme is ten years old and last year student tutors were placed in over 50 schools across Scotland.

The University of Dundee takes part in the Researchers in Residence scheme. The project gets researchers out of university and into the classroom to talk about the research they are working on. The scheme breaks down stereotypes about what a university researcher is and school pupils get inspired about a new area of research work. Researchers commit to spending over 20 hours with schools and develop their teaching and communication skills in the process, working with inquisitive minds.

The Glasgow School of Art has a mentoring programme which takes place for a term each year called Artists and Designers in Education. It is an accredited course which involves around 50 GSA student mentor places in target schools characterised by low progression to higher education.

Now in its second year, the Braeview Academy - Supporting Able Pupils Project paired 22 S3 pupils with student mentors at the **University of Abertay Dundee**. The mentors help support pupils with work on a significant research project over the course of a year. Pupils research a subject of their own choosing. Last year topics ranged from Forensic Science to US Black History. Over the year pupils discuss their project with their student mentors, lecturers and research staff and develop research methods, presentation and project skills. All participating pupils are awarded certificates to demonstrate their achievement.

Edinburgh Napier University works with a number of target schools which are offered a 'Meet our Students' workshop, where pupils get the opportunity to hear a brief presentation from a current undergraduate student before taking part in a Q&A session on issues related to higher education and life as a student.

3: Supporting the transition to higher education

The transition between school and university is a crucial period and universities work with schools from Highers onwards to help ease this transition for pupils. Applying to university is a relatively straightforward process, but for those who have difficulties there are multiple options available. Universities are active in helping every school pupil make the right choice, get ready for university and find their feet as quickly as possible.

Flexible routes into university

The process of applying to university is made easier because of the Universities and Colleges Admissions Service (UCAS), the sector's collective mechanism for applications. UCAS is a UK-wide service which enables pupils to apply to up to five universities from a choice of every single higher education institution in the UK. For others, who just miss out or need extra support, there are other ways of making it into university.

- **Summer schools leading to entry.** Universities run summer schools and evening classes for those who just missed their grades or who decided late that they want to pursue an academic career. Many universities offer guaranteed entry for those who complete summer schools successfully.
- **Articulation with colleges.** Universities and colleges work together to develop progression routes so a student studying further education qualifications can progress straight to university, often with advanced entry into the second or third year.
- **Support, guidance and careers services.** Universities offer support and guidance services for pupils well before the point at which they enrol in the university. Pupils can contact a university to discuss any aspect of admissions and university careers services are also happy to advise on which careers are open to them if they succeed in getting onto a course.
- **Consortia approaches.** In many cases it is not just the university which works to help give access to pupils who might otherwise lose out. Consortia projects such as LEAPS and ASPIRENorth all involve primary and secondary schools, colleges and universities and local authorities in a series of initiatives aimed at getting pupils from low participation schools into university. Engagement can start as early as primary school, and in many cases pupils who complete the programme successfully are guaranteed a place at university.

The University of Glasgow's Pre-University Summer School provides another pathway for applicants to the University of Glasgow or other universities. All pupils from local target schools or postcode areas are entitled to join the Summer School. Every year an average of 300 students complete the Summer School and the success rates are impressive with 60 per cent progressing to the University of Glasgow and nearly all participants progressing on to further study at a college or university.

The Bute Medical School at the **University of St Andrews** has developed a special articulation entry route called Pathway to Medicine. Five places to study medicine at St Andrews are offered to students that successfully complete the HNC in Applied Science at Perth College **UHI**. This is the only programme of its kind in Scotland with a guarantee of admission. Following its success the University has just started a similar pilot initiative in Physics called the Gateway Project.

The University of Stirling's Centre for Academic Practice currently runs a 'Bridging into First Year' Programme. This programme is aimed at those who just fall short of the conditions of their offer to study at Stirling, and allows them entry after taking two modules from the regular academic programme and one module focused on learning strategies supported by the Centre for Academic Practice. If the student successfully completes the bridging programme, he or she becomes eligible to proceed onto their degree programme either in February or the following September.

The Educated Pass initiative led by **The University of Edinburgh** actively engages boys aged 13-16 in their education using football as the hook. The project is aimed at boys as this group is generally under-achieving academically relative to girls. It reaches them through their football coaches and clubs and looks to build on their commitment to sport in order to generate a similar interest and commitment to education. As lead partner in the project, Edinburgh University works with four colleges across Edinburgh and the Scottish Football Association and Scottish Youth Football Association.

The University of Dundee's Access Summer School is an alternative route for eligible students to earn an undergraduate place at the university. It involves preparing for study by completing a personal academic skills course, completing three introductory modules and sampling further subjects. Each student is assigned their own Personal Tutor to work with throughout the course. Students who have completed the course the previous year become Student Leaders who are on hand to help students find what they need and ensure they progress well. Participants also gain experience of student life and access to student facilities including IT suites, the library and Students' Union.

The Edinburgh College of Art participates in the University of Edinburgh's Pathway to the Professions project to offer a 'So You Want to be an Architect?' event for pupils at state secondary schools in Edinburgh and the Lothians who want to study architecture at the ECA. Activities include pre-application guidance for prospective students and their families, information on entry requirements and the opportunity to shadow current students.

Student progression and transition to higher education

There are many questions which face a school pupil considering a career at university: Why university? How to choose a course and university? What is it like to be a student? What will be different at university than at school? How do you manage your money? Helping pupils to answer these questions well in advance can help them to concentrate on their academic careers once they get to university.

- **Preparation classes and top-up programmes.** Long before pupils leave school, universities are already helping them to get ready for university. They run classes in schools to help pupils develop their study skills and offer intensive catch-up classes (such as in maths) if students need or want extra preparation to ensure a successful start to university.
- **Information and guidance materials.** Universities produce a wide range of resources to help pupils and students get more information about any of the questions they have about studying at university and which provide tips and advice to help them prepare.

- **Induction and orientation.** Universities have detailed programmes of induction and orientation to help school pupils adapt to university life.
- **Mentoring and buddying.** The mentoring process which begins at school continues into the start of university. New students often have access to existing students who can help them find their feet. This can be one-to-one 'buddying' schemes or it might well involve the same mentors who came to visit them in their school.
- **Care-leavers support.** Young people who leave the care system often have a very particular set of needs when they move out on their own and into university. Many universities have put in place dedicated support for new students who have come from the care system.

The University of the West of Scotland runs a Step Up to University project to help equip imminent school leavers with the practical and study skills needed at University, thus easing the transition from school to higher education. Study skills include the chance to attend a lecture to experience a different way of learning and students receive feedback on how successfully they captured the key points. Pupils are also encouraged to think long-term, beyond graduation, to career opportunities and what transferable skills they may need for their preferred careers so they start off in university with a focused mindset.

QMConnect is a **Queen Margaret University** peer support project that matches new students (mentees) with trained students (mentors) who are there to help the mentees settle in to the University, student life and study routines. Mentors can help with issues including study tips, juggling work and study, finding out about student services and facilities, and practical orientation. Any new student may apply to be matched with a mentor. As well as offering invaluable support to mentees, QMConnect allows mentors to develop many useful skills.

Part of **Glasgow Caledonian University's** Caledonian Club includes shadowing for S6 pupils, giving them the opportunity to speak to subject admissions staff and quiz them on the types of skills, qualifications and experience specific to that subject area. After the S6 shadowing project, the parent and pupil information evening gives advice and tips to pupils on their applications. All Caledonian Club S6 pupils are issued with a matriculation card and are allowed access to the University's Saltire Centre and IT facilities throughout their S6 studies.

The Heriot-Watt University 'Student Ambassador Network' is a scheme which prepares first year students to return to their previous school to talk to senior pupils about their experience of starting at university as a means of supporting pupils to prepare for their own transition to higher education.

The University of Strathclyde runs sessions in partnership with local schools specifically focused at the parents of secondary school pupils. These informal events give parents a chance to find out about the kinds of pressures their children are under ahead of exams and offers practical suggestions and refresher sessions such as time management techniques to give them the confidence to help and support their young person through their studies. Organised for evenings or weekends, they also offer a great opportunity to meet other parents and discuss any fears and concerns they might have with their peers.

Glasgow School of Art provides presentations and portfolio coaching in target schools characterised by low progression to higher education as well as in libraries and community centres. This not only encourages young people to be creative but can also help them get into the GSA.

Seven of Scotland's universities have been awarded the **Frank Buttle Trust** Quality Mark for the extra support they offer to people who come out of the care system. Students going to university from care often face a different set of challenges from other students that can make university life more difficult including the need for year-round campus accommodation, extra financial support and more dependence on university support networks as they may not have family members they can depend on.

The University of Glasgow Top-Up programme targets S5 and S6 pupils who are thinking about university after school. The programme runs from December-April and comprises 11 sessions in school and two sessions on a university campus. It is a rigorous academic programme that introduces pupils to the learning methods and environments they will encounter as university students.

4: Contributing to and implementing curriculum reform

The university role in helping the Scottish Government to develop the Curriculum for Excellence (CfE) has been and continues to be significant. Different universities are involved in different and varied ways but they include:

- The continuing professional development of teachers
- Research and evaluation of CfE developments
- Developing subject specific curriculum content material
- General engagement on national qualifications and assessment
- Responses to national consultation documents
- Representation on CfE management boards and other related committees
- Recognition that natural links and potential continuity exists between CfE values and the graduate attributes being developed as part of universities learning, teaching and enhancement strategies
- Promoting healthy critical debate about education policy in Scotland
- Working with specific local authorities to develop CfE capacity

Deputy Principal at the **University of Stirling**, Professor Grant Jarvie, represents Scotland's universities on the Curriculum for Excellence Management Board. The Board has overall responsibility for ensuring the Scottish Government's programme of curriculum change is delivered. Professor Jarvie facilitates a close link between the Board and all of Scotland's universities through Universities Scotland.

Heriot-Watt University's annual SCHOLAR Conference attracts around 250 teachers. This year's event focused on how online learning can support the Curriculum for Excellence. Guest speakers included the Assistant Chief Inspector of HM Inspectorate of Education and featured videos of lessons from schools across Scotland that have already used SCHOLAR as part of their CfE preparations.

The University of Strathclyde runs a CPD Summer Academy for teachers based on the Challenge Curriculum, the principles of which are closely linked to the Curriculum for Excellence. Young people work together to solve a series of cross-curricula problems which draw on a wide range of academic and practical skills. This approach matches the criteria of the CfE by giving young people the chance to develop their organisational skills, creativity, problem-solving, teamwork and ability to apply learning in new and challenging contexts. The practical, creative aspect of 'Challenges' allows pupils who may not be as strong academically the opportunity to show their abilities. Strathclyde University delivers a full day CPD package that will allow teachers in schools to build and implement their own 'Challenges' in everyday lesson plans and across the curriculum.

The University of Aberdeen delivers CPD and consultancy activities related to Curriculum for Excellence. This includes developing opportunities around the CfE priorities for partnership working between schools, universities and local authorities. Areas discussed include the development of an inclusive pedagogy for teachers, collaborative working, sharing and dissemination to support literacy, numeracy and health and wellbeing, assessment, developing a practitioner research network and associated research development for teachers.

The University of the West of Scotland has a Comenius Regio supported partnership which supports structured cooperations and the cross fertilisation of ideas between two local or regional authorities in different countries across Europe. A number of faculties in the University work with local schools to share best practice in the development of training and student support. The scheme also aims to strengthen the European dimension in school education and provide for more European learning experiences.

A new Postgraduate Certificate in Drama and Theatre for Teaching and Learning, developed by **Queen Margaret University Edinburgh** in collaboration with Borders Council, has been commended for its relevance to the Curriculum for Excellence. Drama provides extensive opportunities for teachers to work with pupils creatively and collaboratively; both approaches being emphasised within Curriculum for Excellence. This course is designed to enable non-drama teachers to build drama teaching skills into their professional practice. The course also supports the evolution of a critically reflective community of drama teachers and teachers of other subjects who use drama. The course validation board, which included external experts, commended the course development team on the clear links between the programme design and the Curriculum.

5: Teacher training and continuing professional development

Universities have an important role in preparing the teachers who educate our young people. Last year Scotland's universities supported around 7,000 trainee teachers through their PGDEs.

- **Initial Teacher Education.** Either as a postgraduate qualification for graduates or as a first degree (BEd), universities train both primary and secondary teachers.
- **Postgraduate opportunities.** Universities also offer a range of postgraduate opportunities and qualifications for teachers who want to enhance their skills.
- **Continuing professional development (CPD).** The teaching profession never stops learning as teaching methods and curricula develop. This CPD is delivered by universities.
- **Conferences and events.** Universities also run conferences, seminars and other events which give teachers the opportunity to get together, hear from people with new approaches to teaching, discuss the issues they face and network with other teachers to expand their skills.
- **Advising on admissions.** Teachers are often the main support for pupils who want to apply to university. Universities link up teachers and their own admissions offices to make sure teachers have up-to-date information and advice which they can offer

The Royal Scottish Academy of Music and Drama offers a series of Twilight events throughout term-time for secondary school teachers which offer the opportunity to acquaint themselves with the Academy and its potential to help with the development and support of the drama or music curricula, or to offer CPD or Postgraduate training opportunities for teachers.

The University of St Andrews runs a 'Teachers Together' conference every summer where teachers come to engage with the university sector and have the option of refresher courses in their subject. The event, which is run at the University's expense, is a partnership between state schools across Scotland, local education authorities, the Sutton Trust and the University. It has been very successful in building strong links between staff in universities and schools. The conference helps schools get all the information they need to advise pupils about university and University staff benefit from learning about subject developments in school which may influence pupils' attainment and achievement levels.

The University of the West of Scotland's School of Education provides teacher training and CPD courses for teachers and is currently working with local education authorities to establish where the University might provide support in delivering the Curriculum for Excellence.

The University of Edinburgh Student Recruitment and Admissions service updates teachers and careers advisers on new developments at the University and in higher education in general. It provides introductory information for staff new to higher education guidance and the UCAS process and regularly visits schools to run workshops with careers staff on the UCAS system, applying to competitive institutions, the UCAS personal statement and reference writing.

The Department of History and Politics at the **University of Stirling** recently ran a series of lectures and workshops in Stirling and Inverness for secondary teachers which covered subjects in the revised Higher and Advanced Higher curricula. The Department is also scoping out plans to develop this into a formal CPD programme incorporating a new Masters programme for teachers.

The **University of Strathclyde** is host to Scotland's National Centre for Languages (SCILT). The Centre has a strong focus on professional exchange and development for primary and secondary modern language teachers. SCILT was a key player in the development of the Maximising Potential project with Learning and Teaching Scotland. Maximising Potential was designed to support individual modern language teachers and modern language departments meet the needs of an ever-widening range of learners. As well as a comprehensive programme of CPD events across Scotland, SCILT developed the Scottish CILT wiki which is an online forum where teachers can share ideas and resources.

Conclusion

This report demonstrates a wide spectrum of engagement that exists between universities and schools and highlights the many innovative ways in which universities and schools work together. This report does not attempt to measure the impact of engagement but it aims to raise awareness of this area of university activity. The breadth and depth of university-school engagement activities in this report and the partnerships which underpin them provide a strong foundation on which to build future collaboration between the two sectors as the education community prepares for the implementation of Curriculum for Excellence.

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