Policy statement on higher education
Welsh higher education is a success story. The higher education sector makes a substantial contribution to the economy of Wales – universities in Wales contribute more than £3 billion a year in gross expenditure to the Welsh economy, they employ 24,600 people and have an annual turnover of £1.3 billion. The sector’s contribution towards sustainable economic growth is broad – through knowledge creation, developing a highly skilled workforce, and through engagement with local communities.

The Welsh Government remains committed to opening up higher education to all those with the potential to benefit from it. We have seen success here too – the number of Welsh-domiciled students enrolled in higher education in the UK has risen from 93,405 in 2000–01 to 102,110 in 2011–12.

Our universities generally score highly in surveys of student satisfaction. They have been more successful in achieving participation by students from non-traditional backgrounds than other areas of Britain. They have considerable strengths in research and teaching and we are proud that Wales is a net importer of students and its higher education system is held in high regard around the world.

Changes to higher education funding and student finance arrangements in Wales introduced in 2012–13 have put the HE sector in a much stronger financial position. The Higher Education Funding Council for Wales (HEFCW) has concluded the average increase in funding for HE institutions (HEIs) in Wales is 13.8 per cent in 2013–14. Based on the assumptions contained in the student finance model, the table below confirms that the HE sector will continue to receive increases in total income until at least 2020–21, if institutions are able to recruit their allocated numbers of students. However, these figures will be dependent on the outcome of the next spending review and its impact on Welsh Government funding.

* There are a number of assumptions contained in the modelling, which assumes that the Welsh Government allocation to HEFCW will be flatlined from 2015–16 but that tuition fees will increase in line with inflation. In addition, the model assumes that current levels of cross-border flows and student recruitment continues at current levels.

The HE sector has experienced much change. New types of providers have entered the market in recent years. Significant numbers of HE courses are now being taught in further education colleges. Devolution has brought new powers to Wales to enable the Welsh Government to work more closely with universities and other HE providers. Implementation of the Browne review’s recommendations by the UK government has brought fundamental change to the way in which higher education is funded. New higher education funding arrangements have brought consequential changes for the way we support learners in higher education.
Structural changes driven by successive Welsh Governments have resulted in a Welsh higher education sector that is stronger and more sustainable. In April this year, the former University of Glamorgan and University of Wales, Newport merged to become the new University of South Wales serving the whole of the south-east Wales region. The University of Wales: Trinity St David and Swansea Metropolitan University began operating as a single institution in 2012 and plans are now well advanced for those institutions formally to merge later in 2013. By the end of 2013, therefore, Wales will have a smaller number of stronger universities – institutions better placed to compete on the global stage and to contribute strongly to the economic, educational, cultural and social well-being of Wales.

The time is now right, therefore, to take stock and to consider the future of higher education in Wales within this new landscape. This policy statement seeks to set a new vision for higher education in Wales as we approach 2020. Building on the successes of recent years and the strengths of Welsh higher education, it establishes a clear set of priorities for the years ahead. The Welsh Government will work in partnership with HE providers and with HEFCW to deliver our shared ambition for a world-class higher education system in Wales that serves the interests of learners and the nation in the twenty-first century. We believe that this close cooperation between Government and the sector itself can work to mutual benefit.
Innovation and economic growth

Key message: Future growth in new jobs is most likely to come from the high-skilled occupations with high proportions of graduates. Interaction between universities and business is important for stimulating innovation and economic growth, and university research and innovation helps to create high-value industrial clusters. A successful long-term approach will require sustained investment in the key areas of greatest opportunity for Wales.

The link between higher education and innovation is a strong one. Countries with high levels of innovation tend to have a stronger track record of investment in higher education and higher proportions of graduates in their populations. Interaction between universities and business is important for stimulating innovation and economic growth, and university research and innovation helps to create high-value industrial clusters. The Wilson Review published in 2012 highlighted how the global reputation of universities can enhance their contribution to both economic and social well-being if the university is placed at the heart of knowledge economy, contributing in terms of:

- commercialisation
- knowledge exchange
- provision of graduates with appropriate skills
- attraction of new inward investment
- public engagement activities.

Wales’ long-term prosperity in a global economy will depend on its ability to foster innovation which is genuinely transformational in nature and can deliver real long-term social and economic benefits. Innovation drives economic growth including new enterprise and job creation. While other investments may be important for short-term growth, economic prosperity in the long run is above all determined by knowledge accumulation and technological progress. There can also be significant qualitative gains for the economy as competition leads to higher-value goods and services.

Future growth in new jobs is most likely to come from the high-skilled occupations with high proportions of graduates. While the growth in new companies across the UK has in general declined, graduate start-ups in Wales have actually increased, attesting to the comparative resilience of innovative high skill-led organisations.

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1 Universities UK. “Higher Education in Focus: Driving Economic Growth - Higher Education a core strategic asset to the UK.” 2011 http://www.universitiesuk.ac.uk/highereducation/Pages/DrivingEconomicGrowth.aspx
3 Higher Education Wales. “Investing in the Upturn.” 2011
4 A Review of Business–University Collaboration by T Wilson (February 2012)
5 The OECD Innovation Strategy: Getting a head start on tomorrow (OECD, 2010)
6 Universities UK. “Higher Education in Focus: Driving Economic Growth - Higher Education a core strategic asset to the UK.” 2011
Universities in Wales recognise that there is a global race towards high-skilled economies and are keen participants. Other countries are investing heavily in innovation, and there are likely to be massive increases in the numbers of graduates worldwide, particularly from countries such as China or South Korea. The European Commission, as part of its Horizon 2020 programme, has advocated that 3 per cent of GDP should be invested in innovation in recognition of the need for Europe to continue to compete successfully.

Universities account for around half of all research and development expenditure in Wales. Wales lags behind other parts of the UK in terms of private sector investment in research and development – despite Wales’ 5 per cent share of the UK’s population, Welsh business investment in research and development is only around 1.5 per cent of the UK total. This means that as a nation we are far more dependent on the investment of our universities in this respect than the rest of the UK.

Universities in Wales punch above their weight in interacting with businesses, performing above their nominal 5 per cent weighting in terms of income from collaborative research, involving both public funding and business income from regeneration and development programmes, the hours of continuing professional development delivered, performance arts events, the numbers of spin-out and start-up businesses, both from staff and graduates, that have survived for more than three years and attendees at chargeable performance events. The sector has a number of notable achievements, and universities in Wales also have the highest levels of engagement with small- and medium-sized enterprises of any region in the UK.

At the same time there are some areas where Wales’ share of income from business interaction is comparatively modest, partly because of the mix of industries and subject base in Wales. Universities in Wales know they must adopt a more collaborative proactive and strategic approach to maximise income from research and consultancy contracts, patents and intellectual property. The Science for Wales strategic agenda will be a key component in providing the science base for future success in this area and we know universities in Wales will be vigorous in their interaction with this programme.

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The Welsh Government’s support for universities and business is critical in this context. One such example is the National Centre for Product Design & Development Research (PDR) at Cardiff Metropolitan University.

**The National Centre for Product Design & Development Research (PDR):**
The work of the Centre is of international standing, whilst having an impact on Wales in terms of supporting industry to be more competitive, pushing the boundaries of specialist healthcare and now starting to address some of society’s big issues. The Service Design Knowledge Transfer Centre project delivered by PDR and funded by Welsh Government is unique in supporting the manufacturing sector to understand how they give real value to customers. The success of the project has put Wales at the centre of developments in this field and as a result, in November 2013, Cardiff will host the Service Design Network Global conference, attracting up to 400 service design professionals to Wales from around the world. Since 1998, PDR has been applying design and rapid prototyping technologies to difficult medical challenges such as head and neck reconstruction following trauma or disease. Now recognised as an international centre of best practice, PDR last year worked closely with clinicians across the UK to design and produce over 450 medical models and devices to reduce operating theatre time and improve patient outcomes. Through leading the **Supporting Public Service Innovation using Design in European Regions** (SPIDER) programme PDR is helping to address two of the key societal issues faced by north-west Europe, NEETs and challenges linked to an increasing elderly population.

Innovation-led growth is most likely to be achieved through an equal partnership between universities, the Welsh Government and business to develop successful innovation ecosystems. This partnership is at the heart of the Welsh Government’s strategy **Innovation Wales**. A successful long-term approach will require sustained investment in the key areas of greatest opportunity for Wales, including the three Grand Challenge areas identified by the Welsh Government. In particular, it is essential that Wales takes advantage of European Funding to support growth in research development and innovation. We know that Welsh universities will play a full and active part in this work.
Employability

**Key message:** Economic success rests on the expansion of a highly skilled and capable workforce. Enhancing the employability of all graduates from Welsh institutions, of any age and background, through various levels and modes of study from full time to part time, undergraduate or postgraduate, is a key priority for Government and universities. Working with businesses to meet their needs will benefit graduates and businesses in Wales and place universities at the heart of economic growth.

HE providers in Wales are working to enhance the employability of all their students. Wales’ universities are already achieving excellent results in producing work-ready graduates. Some 91 per cent of graduates from full-time first degree courses in Wales are employed and/or studying within six months of leaving higher education, which is higher than the UK average.8

Right across the sector, HE institutions are making great strides towards enhancing graduate employability, and enhancing learning in the workplace. Since 2010, the pan-Wales quality-enhancement programme *Future Directions*9 coordinated by the Higher Education Academy (HEA) has collected and shared good practice across the sector. Universities in

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8 HESA – Destination of Leavers from HE (EDUC0067:Percentage of first degree leavers in work or further study, https://statswales.wales.gov.uk/Catalogue/Education-and-Skills/Post-16-Education-and-Training/Higher-Education/Performance-Indicators/PercentageOfFirstDegreeLeaversInWorkOrFurtherStudy-by-Institution-Year

9 *Future Directions for Higher Education in Wales*, briefing note, August 2011
Wales are tackling the learning for employment agenda in a multiplicity of ways – through students solving ‘real world problems’, developing personal development planning initiatives in close collaboration between careers and academic staff, and online careers education modules.

**Enterprising You:** Originally funded to support part-time students, this programme has broadened to potentially support all students’ professional and personal development, with enterprise skills as an essential underpinning element. It uses web access to allow engagement and development of students to increase their employability and aims to provide a tool for academics to use within the curriculum and raise the profile of entrepreneurial learning, enterprise skills and employability within Glyndŵr University and its stakeholders. A suite of seven short e-learning resources focuses on action orientation that is accessible to all students and staff. The resources encourage the development of enterprise skills linked to the learning outcomes and develop employability by setting students a series of interactive tasks. These challenges are designed to explain, develop and test key enterprise skills such as practical creativity, the ability to solve problems with original solutions, team working, goal setting and strategic thinking, planning tasks and managing resources.

Universities in Wales have also made great progress in enhancing the student learning experience for those learning in employment. *Future Directions* has also focused on the accreditation of part, or all, of a student’s learning programme through formal recognition of experience in the workplace. Innovative practice already in evidence in Wales includes efforts to develop a formal academic qualification for learning support assistants in local schools, giving students a taste of real ‘live’ research, and enabling students to access an employer-focused modular curriculum through flexible learning approaches.

The introduction of Higher Education Achievement Reports (HEAR) for all undergraduate students is a significant step. It provides a clear standardised template, focusing on a student’s breadth of achievement, represented through a rich picture of their overall higher education achievement. The reports will allow students’ additional achievements to be recorded, for example, achievements as a student representative, captain of the rugby team, or editor of the student newspaper. We know Welsh Universities will work in partnership with their students’ unions to ensure relevant information is captured and verified for the Achievement Report.
We know universities in Wales will encourage greater and more meaningful employer engagement and shape learning, teaching and assessment to enhance the employability of graduates. By working across the university to increase the number and range of meaningful work experience opportunities available to students in a pedagogically supported environment, universities will develop a deeper institutional culture that promotes employability regardless of subject, mode or level.

**Bangor University Employability Award:** As the main vehicle for the development of employability skills, the Bangor Employability Award provides a framework to enable students to evidence and clearly communicate their employability skills to potential employers. The award is delivered through academic schools and includes a compulsory element of reflection on the employability skills developed through the degree programme, thus promoting the embedding of employability skills within the curriculum. Assessment for the award is reflection-based and supported by a comprehensive taxonomy of skills including reference to the CBI’s list. There is a compulsory element of work experience for the award which can include part-time work to ensure that students who need to earn money are not excluded. The Award includes a bilingual element to encourage recognition of the value of Welsh-medium and other language skills, and enterprise skills and entrepreneurship are embedded within the scheme. Being a framework rather than a fixed programme, the route through the award is tailored to the individual needs of the students.

**My Dr Who Adventure:** I joined the series as Assistant Supervising Art Director after I graduated at the start of Season Two. It was my first role in TV and I soon learned the ropes under the watchful eye of Stephen Nicholas and Royal Welsh College of Music and Drama (RWCMD) Fellow Edward Thomas who ran the Art Department at the time. Ten months later, Russell T Davies announced the beginning of the *Torchwood* series and our brief changed completely. We were now designing and shooting two high-profile shows at the same time and I became the Associate Designer on Season Three. RWCMD gave me the practical experience, work ethic, and technical ability to sit anywhere within a TV art department. I’m now working on the Starz/BBC Worldwide co-production *Da Vinci’s Demons* – another huge creative adventure. It’s no surprise that on this production, which has an art department of 50, we currently have 15 RWCMD graduates working with us on a permanent basis and many more ad-hoc additions.
The international stage

**Key message:** Universities and the Welsh Government will work in partnership to develop international links that will help Wales become a partner of choice for international business and investment and destination of choice for international students and staff. Wales needs to strengthen and maximise the value of the international connections already forged by universities, using those connections to drive inward investment. Wales must project the consistent message overseas that we are open for business and that international students add to the richness and diversity of the student body and are, therefore, welcome and valued. Students and staff in Wales must be supported to be internationally mobile – through physically relocating to another country, or through increased online participation with international peers.

In 2011, there were 3.7 million internationally mobile students\(^\text{10}\). Wales is already a very attractive nation to international students, offering a unique, vibrant experience. In the academic year 2011–12 there were over 25,000 non-UK-domiciled students studying in Wales\(^\text{11}\). To ensure that numbers of international students applying to and studying in Wales continue to rise, barriers, whether real or perceived, must be broken down.

Wales will continue to be seen as an open and welcoming country by international students and staff who bring a rich diversity to our universities and communities. International students in Wales generate a value-added contribution to the economy of over £140 million per annum. The presence of international students on our campuses and in our classrooms (be they physical or virtual) also makes a significant contribution towards the internationalisation of the student experience, enriching learning and teaching, and helping to make Welsh graduates better prepared for an international labour market and a variety of cultural settings. The Welsh Government will seek to support universities in Wales to achieve sustained growth in legitimate international student numbers.

Universities in Wales work hard at supporting international students throughout their entire student lifecycle\(^\text{12}\) – from pre-arrival and pre-sessional support, to employability and next steps beyond graduation. By offering enhanced internship and placement opportunities for students, graduates and staff from Wales with companies across the globe, universities can demonstrate the type of dedication and support that has led to Aberystwyth University becoming selected as one of the top universities in the UK in the *Science without Borders* scheme.

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\(^{10}\) *Higher Education in Focus: Universities UK – Driving Economic Growth* (Universities UK, 2011)

\(^{11}\) HESA

\(^{12}\) International Student Lifecycle Resources bank (HEA)
Wales is a key player on the global higher education stage, but there remains significant potential for further success. We know universities in Wales will strive to become a destination of choice for the best students and staff, worldwide. There is more work to be done by Welsh universities to make better use of alumni networks – in Wales and worldwide. The increasingly international HE curricula in Wales should be communicated and celebrated by all, including Government. Universities in Wales offer a range of attractive opportunities for international placements for home students (including Erasmus\textsuperscript{13} and Study Abroad\textsuperscript{14}). Wales must work to attract and retain leading academic staff from across the world to help enrich our research and scholarship base.

Universities in Wales are working to promote mutually beneficial, sustainable international partnerships, whether commercial or educational. Wales also needs to enhance its profile in the European Higher Education Area, to facilitate the delivery of more joint degree programmes with partners both in Europe and beyond.

By greater collaboration with further education colleges and HE providers operating overseas, universities in Wales are developing their international links, both in terms of strengthening existing links and creating fresh and innovative partnerships.

The Welsh Government will work together with key partners, including the British Council in Wales, to support the FE and HE sectors in all of their international activities.

\textbf{Science without Borders}: This Brazilian Government scholarship programme aims to send 100,000 Brazilian students on undergraduate sandwich courses, PhD sandwich courses and full PhDs, to study in science, technology, engineering, mathematics and creative industries at top universities around the world. Science without Borders UK is the first large-scale student mobility programme operated in the UK and Aberystwyth University has been selected as one of the top UK universities working within the scheme. Students have the opportunity to study in rich and diverse areas including Environmental Biology, Marine and Freshwater Biology or Genetics and Biochemistry at the world-class land-based science teaching and research institute, IBERS, or Environmental Earth Science for example, at the Institute of Geography and Earth Sciences, or even Space Science and Robotics at the Institute of Mathematics and Physics.

\textsuperscript{13} British Council, Erasmus \url{www.britishcouncil.org/erasmus-about-erasmus.htm}
\textsuperscript{14} \url{www.studyabroad.com}
Promoting student mobility

Internationalisation is not simply about recruiting international students to study in Wales. Both students and staff in Wales must also be supported to be internationally mobile – through physically relocating to another country, or through increased online participation with international peers.

An active and mobile staff and student body brings benefits to individuals, communities, universities, the economy and Wales as a nation. Student mobility can enhance employability and personal development, offer greater opportunities for linguistic development and raise a greater cultural awareness and global mindset that is vital for Wales in terms of attracting international business and encouraging export.

International student mobility is beneficial to both institutions and students. The Joint Steering Group on UK Outward Student Mobility has identified a series of incentives and benefits. For universities, student mobility contributes to scores in international league tables which in turn raises international profile and reputation and attracts international staff. Student mobility supports the development of joint research portfolios or courses and offers the ability to link up with top international providers. It also aids international recruitment and supports the employability of students. For students, international mobility can enhance employability and personal development and offer greater opportunities for linguistic development. Students also benefit from greater cultural awareness and a more global mindset.

The Joint Steering Group has offered a best practice framework for consideration, for institutions seeking to improve, promote and support student mobility.

Universities in Wales are demonstrating their commitment to mobility by including visible leadership in institutions, communicating key messages driven from the top, and by providing a suitable level of resource and funding. Promoting mobility and the infrastructure to facilitate uptake will ensure the best possible engagement with students. Universities are working to ensure that curricula are flexible to allow students to undertake a mobility period – this includes appropriate accreditation to ensure mobility periods can be credited and/or recognised. The HEAR should be utilised to best effect to ensure that mobility activity is recorded and, therefore, of employability value to the student.

15 Recommendations to support UK Outward Student Mobility (Joint Steering Group on UK Outward Student Mobility, March 2012)
For international student mobility to be a success, universities in Wales understand that it must be integrated with other activities, for example, learning and teaching, widening access, and student support. There must be no barriers – real or perceived – to mobility. Universities in Wales can make it easier for students to participate in industrial placements, work experience abroad, intensive language courses, or recognised volunteering projects, and bring back their experiences to their neighbourhoods where they study, work and live.

Universities in Wales are working to ensure that international student mobility is open to all. Currently the uptake of some outward mobility schemes, including Erasmus, is not consistent across our universities. Widening access students, for instance, tend to be under-represented among outgoing UK Erasmus students. HEIs need to recognise and do more to support students from widening access backgrounds to overcome barriers to participation in international learning experiences.
Widening access to higher education

Key message: Higher education should be available to all those with the potential to benefit regardless of age, gender, mode and level of study, country of origin and background. Universities in Wales should aspire to become the destination of first choice for students from Wales, the UK and across the world.

Widening access is about offering every person, regardless of circumstances, the opportunity to a higher-level learning experience that is appropriate, relevant and valuable – widening access to all with the potential to benefit.

Wales has a record of success. Established in 2002, the all-Wales Reaching Wider initiative has helped to widen access to learning and to support social inclusion and economic up-skilling. All universities and further education colleges in Wales are members of the Reaching Wider partnerships which, with regional partners including local authorities, schools, the voluntary sector, the Open University in Wales and Careers Wales, have proved hugely successful. There are many other initiatives across Wales that complement the Reaching Wider partnerships, including the University of the Heads of the Valley Initiative (UHOVI).

UHOVI wins national Guardian University award: A partnership between the University of Glamorgan and the University of Wales, Newport, and backed by the Welsh Government, UHOVI won the ‘Commitment to Widening Participation’ category in the 2013 Guardian awards. Over 3000 people in the Heads of the Valleys region have already benefitted from the initiative which is focused on improving access to higher education by offering university-level courses locally. UHOVI provides opportunities to study a range of courses in different subject areas, at local venues including further education colleges. There are also options for businesses in the region to engage with UHOVI to help up-skill their workforce. The Guardian University Awards are designed to recognise best practice, achievement and innovation, celebrating all things that make UK universities uniquely great. UHOVI is delighted to be recognised for its work and positive impact on the lives of individuals living or working in the region.

Statutory tuition fee plans have been introduced in Wales as vehicles for promoting equality of opportunity of access to higher education. HEFCW has been designated the relevant authority for the assessment and enforcement of fee plans and also has a key role to play in providing guidance to the sector on good practice.

Looking forward, widening access initiatives need to:
- build on previous achievements and provide sustainable provision in the longer term, recognising that widening access remains a long-term agenda
- focus on groups currently under-represented in HE
- become more evidence-based and strategic in order to support learners’ engagement and success in HE
underpin provision with HE-related information, advice and guidance to promote higher education, higher-level learning and higher skills, and informed decision making

act as a conduit between communities, campuses or other places and modes of learning to support progression and success

support progression to regional, Wales and UK-wide learning opportunities

promote and increase progression opportunities to Welsh-medium HE opportunities

recognise changing demographics in Wales and the role that HEIs should play in responding to the needs of mature and younger-age learners

increase social mobility and contribute to tackling poverty

ensure that modes of provision include: the Welsh medium; flexibility; community- and workplace-based outreach; bite-sized learning; appropriate to learners of all ages

contribute to an increasingly diverse HE population and support equality agendas

support HE in FE, in the workplace, and digitally

improve fair access to the professions, higher-level skills and the priority sectors

respond more clearly to learner and employer demands.

Retention is as important as recruitment. Widening access to those with no tradition of university life can bring additional challenges for retention. For many students, moving away from home for the first time can be a daunting prospect and universities have adopted a student-centred approach to support, particularly for those from non-traditional backgrounds. Universities tailor support to individual needs and offer pastoral support and help regardless of background and circumstance.

Higher education has the potential to inspire and develop individuals of any age and encourages them to continually develop throughout their lives so that they are not only equipped with the skills required for work but also can contribute to their communities. HE institutions in Wales run a variety of successful volunteering programmes to help nurture personal development.

Open University in Wales Student Volunteer Programme: By the very nature of the Open University’s (OU’s) distance learning model, its students are distributed throughout Wales. To support students at the beginning of their learning journey, which begins with the initial commitment to entering higher education, the Open University in Wales has introduced a Student Volunteer Programme. Initially trialled in north and mid Wales, the programme has recruited existing students and some alumni as mentors to provide support to those interested in study with the OU. The volunteers are able to describe the challenges and benefits of part-time distance learning higher education in ways which help the enquirers make an informed decision and give them confidence as they make a commitment to study. Volunteers receive a certificate as a formal record of their contribution and come together as a peer support network, supported by a Facebook group. The University is now looking to develop the programme and extend its geographical reach.
Wales’ HE institutions are in a prime position not only to transform the futures of the next generation but also to transform the communities within which they are situated. To ensure that Wales can continue to lead the way in having a truly accessible education system, institutions need to be fully embedded in the communities they serve. For HEIs truly to enrich and engage their local communities they need to take their classrooms to potential students. There is clear evidence of the impact of residential study experiences – summer schools, winter colleges, Easter revision provision and the like – for the local residents of universities, but there is greater potential in Wales for community outreach. HEIs must continue to extend their offering outside their campuses to embed learning opportunities in communities and workplaces.

There are areas where new opportunities have been opened up by new technology. Higher education providers should promote HE opportunities, including new and different progression pathways, study modes and locations available. There should also be stronger strategic collaboration between HE providers and careers services in Wales, building on established communication channels to explore new and innovative ways of attracting students of all ages and backgrounds into higher education (including information on routes to higher education).

Higher education providers should look to provide an appropriate offer to people at all stages of life through a variety of programmes, and through a flexible and dynamic delivery system that meets students’ expectations and needs. The aim should be to widen access to all, including those living in rural areas of Wales, rather than opening up access only to a few. Wales needs a blend of full- and part-time provision at varying levels, including continuing professional development, and focused on employer requirements.

It would be beneficial if all higher education providers in Wales shared good practice to ensure that good and excellent practices are demonstrated by all. An evidence base of effective practice needs to be developed to inform widening access provision.

Fair admissions procedures, underpinned by high-level professional practice and informed by effective practice are also key to ensuring equality of opportunity in HE. HEIs in Wales support the delivery of fair admissions and are encouraged to use contextual data to gain a more rounded view of applicants. They know they must continually seek to identify the applicants with the greatest potential and likelihood of a successful outcome. They are making sure that course requirements are clear and transparent so that students can make informed choices.
Regional coherence – joining up post-16 education in Wales

*Key message:* There needs to be a more holistic and regional view of post-16 education in Wales, supported by stronger regional planning. The needs of the learner should be paramount. There needs to be much greater collaboration between higher and further education providers to ensure that progression and even simultaneous study in both sectors can become a reality.

We need to ensure that we are giving young people the best opportunity to progress from schools and FEIs to higher education across Wales, including those from the most disadvantaged backgrounds. There are weaknesses in coordination between the different phases of education. Problems include: deficiencies in curricula and instruction offered by some sixth forms and FEIs; poor advice and guidance; travel distances to HEIs; and students’ perceptions over HE costs and future job opportunities. The lack of a coherent regional approach to the planning and delivery of HE opportunities is a contributing factor to some of these difficulties. Action is needed to improve data collection, analysis and data sharing to inform future strategic developments.
Dual-sector universities, such as that developing in south-west Wales, or the planned University of South Wales ‘Community College’ approach which will have HE formally embedded in University Centres in FE colleges, are taking the lead in real collaborations. This approach needs to be expanded and deepened across Wales, not always through formal structures but in regional forms of meaningful collaboration. Mature and sustained collaboration is needed.

To facilitate access to technical expertise, universities will need to deliver to business across regional boundaries and use that expertise to leverage business investment into Wales. Higher education institutions need to work proactively with anchor companies to ensure that the wider research and skills needs of Wales are met.

In addition to improving access and progression routes, specific activities which would benefit from a more coherent regional planning framework include the transfer of knowledge, Welsh-medium provision, sharing of good practice and actions to address higher-level skills gaps and promote business development.

There are also significant financial imperatives for collaborative planning and development of greater regional coherence. As a major consumer of public funds, the HE sector in Wales must maximise value for money and demonstrate substantial returns on investment.

**HEIs in Wales must** work with other education providers to improve the effectiveness of learner progression at all stages. **HEIs should** also work better together to plan delivery on a regional or collaborative basis where appropriate, but recognising the distinctive missions of different institutions. There should be a coordinated and sustainable approach to the delivery of HE in FE which is firmly embedded in the regional strategic planning of higher education.

**HEFCW will continue to focus on developing greater regional coherence in the provision of higher education in Wales**, and in particular will be under a requirement to promote regional coherence when exercising its functions to allocate funding to institutions.
Diverse and distinctive student experience

**Key messages:** Learners are at the heart of higher education in Wales. Wales has led the way in developing new approaches to the funding of effective, democratic students’ unions and student representation. Higher education providers must ensure that current good practice is shared between institutions and gives rise to sustainable, enduring and longstanding partnerships between students, staff and institutions.

Technology is moving and providers must move with it. HEIs in Wales are committed to exploiting fully the opportunities that Open Educational Resources and Practice bring and are working hard at embedding practice that encourages the use and reuse of the world-class teaching and learning materials and research which are available. The Welsh Government will work with all HE providers to ensure that HE in Wales is positioned to prosper from technological innovations now coming on stream.

HEIs in Wales already share a strong commitment to the principle of student partnership and interaction. By empowering students to participate in the enhancement of their own learning experiences, HEIs in Wales can provide not only an excellent and distinctive student experience but also the channels to create authentic and constructive dialogue with staff. This combination of staff–student interaction will allow Welsh universities to be responsive to changes of need and expectation of students in a rapidly diversifying education sector. By seeking to continually enhance the ways in which students are consulted on, and involved in, decisions about their learning, HEIs in Wales can place themselves at the forefront of student partnership.

Using the Wales Initiative for Student Engagement (WISE), an approach which engages students as active participants in the leadership, management, development and delivery of their own educational experience, as a foundation, HEIs can drive innovation and enable widespread adoption of good practice in student engagement. In Wales also, Student Charters and relationship agreements have been introduced in universities which formalise the relationship between students and institutions.

The development of Key Information Sets (KIS) forms part of the work of HEFCW and the sector to enhance the information that is available about higher education. First published in autumn 2012, KIS give prospective students access to information in order to help them make informed decisions about what and where to study. They contain information which prospective students have identified as useful, such as student satisfaction, graduate outcomes, learning and teaching activities, assessment methods, tuition fees and student finance, accommodation and professional accreditation. This is the first time this kind of data has been brought together in this way, providing information to students in a format that is useful to them.

**HEIs in Wales must** continue actively to explore new ways of interacting with learners, regardless of mode of study or personal circumstances. To become the destination of choice and attract the best students and the best staff from at home and abroad, **HEIs must** communicate the positive student experience and excellent learning and teaching that students can expect from studying at a Welsh university.
From engagement to full partnership

Partnership is about more than just listening to the student voice and enabling students to have input in decisions that affect them. True partnership relies upon an environment where the priorities, content and direction of the learning experience are all set by students and staff in partnership.

Strong students’ unions have a key role to play in helping to deliver effective partnerships. For partnership to succeed the relationship between students, the student movement and the institution needs to develop in new ways.

HEIs in Wales should work in partnership with students’ unions to support and facilitate the engagement of all students.

Technology-enhanced learning

New technologies are changing how students access and interact with higher education. The past year has witnessed a rapid change in attitudes towards delivering higher education online. There is a growing recognition that online courses can be of the highest calibre. Scepticism about whether courses can be delivered online and concerns about a lack of interaction are being overtaken by changing social habits. Discussing and sharing of ideas and resources online is no longer a leap of the imagination and many social media commentators suggest that for younger people the gap between online and real life is becoming increasingly blurred.

Open educational resources (OER) are predominantly focused on content and the availability of resources and materials. Open educational practice (OEP) represents both the practice of creating the environment in which OER are created or used and extends OER practices to other aspects of the learning experience such as open access to research. The nature of OEP offers higher education providers, and those delivering education to all ages and at all levels, the opportunity to explore how students and lecturers can be actively involved in the development of resources. OER can enhance the student experience by providing a bridge between informal and formal learning as part of the lifelong learning agenda, offering students an opportunity to move in and out of formal learning throughout their lives and careers.
One area that has gained significant momentum and attention is MOOCs (Massive Open Online Courses). MOOCs are courses aimed at large-scale participation and open access via the web. MOOCs typically do not offer credits but there is a move towards certification and assessment and this is an area that should be explored further by higher education providers in Wales.

Online course ventures have been launched by some of the most prestigious global academic brands such as Stanford, MjT and Harvard. Udacity and Coursera (which includes the University of Edinburgh) are potentially the start of a new breed of for-profit online higher education providers. The Bill & Melinda Gates Foundation is now funding a potential accreditation model for MOOCs. These new ventures have begun to attract serious venture capital investment. The trend is thus likely to grow.

‘As a Vice-Chancellor I believe that open access to learning and teaching materials has the potential to benefit the learner and the community within which the learner operates. My fellow Vice-Chancellors and I believe that sharing knowledge and resources is key to providing students with the skills and understanding required to become active participants in their communities, their countries and society globally. We believe that we have a responsibility to the next generation of scholars, whether they are based within our own universities or further afield, because they are the innovators of tomorrow. We also believe that increasing access to higher education, whatever the economic, geographic or environmental situation experienced by students, is a responsibility that we should embrace. Embedding open educational practice (OEP) across the Welsh higher education community will facilitate an improved, quality educational experience for students through Open Education Resources (OER).’

Professor John Hughes, Chair of Higher Education Wales and Vice-Chancellor, Bangor University

The reach and quality of such disruptive innovations may have profound implications for the delivery of higher education in Wales. Change is already under way – the Open University has announced the launch of Futurelearn, with partners including Cardiff University, to produce a UK-based platform for MOOCs.

The Welsh Government has established an expert working group, chaired by the former National Librarian of Wales and with membership drawn from across the HE sector, to examine the potential for online digital learning and how the Welsh Government can support the higher education sector in this growing field. Our shared aim is to ensure that Wales is well placed to continue to prosper in the face of such developments.
The working group will report on:

- the potential competitive threat posed by global technology-based developments to the higher education sector in Wales
- the potential opportunities afforded by technological development for the Welsh higher education sector at a time of constrained public expenditure
- to what extent the Welsh higher education sector is working collectively to bring economies of scale to maximise the opportunities afforded
- to what extent technological development may provide a platform to increase participation in part-time and full-time higher education, again in a period of constrained public spending.

HEIs in Wales need to grasp the challenge and potential of online learning and explore the opportunities of OER. The opportunity exists to create new social and learning environments that will help to promote social justice, with material produced by Welsh universities at the heart of these endeavours.

Working with and supported by the Welsh Government, HEIs need to push forward with the aspiration to produce a ‘one nation’ response to technology-enhanced learning that will see Wales take a prominent position on the global stage and offer a highly distinctive experience for higher education students. The focus should be on ensuring that high-quality content is available – course content and the enhancement of the student experience must be the key drivers, not the technology.
**Enhancing quality**

**Key message:** Demonstrable, robust, publicly credible, independent and rigorous scrutiny of higher education that offers assurance and confidence about quality is essential. HE institutions need to strive beyond maintaining academic standards and focus on improvement to ensure that students are provided with the highest-quality learning experience. A ‘whole-system’ view is needed and measures need to be developed which will provide a comprehensive assessment of the quality of Welsh higher education in all of its different dimensions.

Quality assurance and enhancement are essential to the future success of higher education in Wales. The response to the *Further and Higher Education (Wales) Bill* White Paper\(^{16}\) published in 2012 clearly demonstrated that a strong commitment to enhancing higher education quality in Wales already exists, with many established enhancement activities and arrangements in place.

The Welsh Government will bring forward legislation to ensure that HEFCW has appropriate powers and duties in relation to quality assurance and regulation of the HE sector which take account of the new funding arrangements for higher education provision.

HEFCW will continue to be responsible for ensuring that quality assurance and enhancement systems in Wales are robust, challenging and are focused on continuous improvement. Students and staff must be at the heart of the process.

Universities in Wales should continue to build on established enhancement activities and use the momentum that has built up to further improve the learning experience and outcomes for students.

\(^{16}\) [www.wales.gov.uk/consultations/education/feandhebill](http://www.wales.gov.uk/consultations/education/feandhebill)
Higher Education Academy (HEA): The HEA has been developing quality enhancement in Wales through the Future Directions for Higher Education in Wales, working closely with HEIs, students and sector agencies. The enhancement theme ‘Graduates For Our Future’ was developed to support the sector in addressing the Welsh Government’s twin priorities of delivering social justice and supporting a buoyant economy. There are three strands: Students as Partners; Learning in Employment; and Learning for Employment, celebrated and showcased at the Inaugural Future Directions conference in spring 2012.

The Future Directions programme has also been delivered through a range of sector events including ‘Future Directions: Feeding Forward, Enhancing Learning and Teaching through Technology’ in April 2011, and ‘Future Directions: Foundation Degrees – where policy meets practice’ in February 2012. All Welsh HEIs, students’ unions and key sector agencies are involved in the work, in a variety of ways, for example through membership of the Future Directions Steering Group, membership of the three work strand groups, submitting case studies, disseminating the work through networks, and participating in the Future Directions events.

Being part of a UK-wide quality assurance system is beneficial to universities in Wales and having a system that is comparable across the UK reinforces Wales’ position internationally. Universities in Wales should explore new ways of building on this UK-wide profile to the benefit of both staff and students.
In addition to excellence at the level of each institution, Wales should aspire to a higher education system which demonstrates excellence at every level. We need to adopt a whole-systems approach and to measure not only quality of research or teaching within our institutions but also:

- how well HE providers in Wales work with business and employers to enhance skills and employability
- how effectively the constituent parts of the HE system in Wales work together to provide smooth pathways and progression for learners and to ensure maximum value for public funds invested in HE
- how collectively the HE system in Wales contributes to regional and national goals
- what impact the Welsh HE sector has on the international stage.

Working with HEFCW, HE providers in Wales, and with other key partners, the Welsh Government will seek to develop a robust and comprehensive set of benchmarks and measures through which to assess the quality and impact of Welsh higher education at the national and regional level.
Research: building a world-class system

Key message: In research, Wales has some truly world-class research teams. We must celebrate their reputation and publicise successes to show Wales as a small country with a growing research impact, raising the international profile of universities in Wales. We need committed effort, though, by more of our academics, to confirm and sustain the sector’s reputation for research excellence by winning a yet greater share of the competitively awarded funding.

Universities in Wales are part of a world-leading UK science base, second only to the US for its share of global citations. Over the past 10 years, the overall research quality, research funding captured and international standing of Welsh research have all improved significantly. More Welsh academics have been elected to prestigious UK Learned Societies, such as the Royal Society, Royal Academy of Engineering, Academy of Medical Sciences, British Academy and Academy of Social Sciences. Research impact from Welsh universities, as measured by the number of citations per paper, has grown over the last decade at a rate that overtook the UK average in the period 2006–2010. In the 2008 UK Research Assessment Exercise (RAE) 49 per cent of Welsh research was placed in the two highest quality categories, 4* and 3*. Internationally, Wales’ current research impact, judged by citations per paper, now exceeds the world, the Organisation for Economic Co-operation and Development (OECD) and EU average.

So our university research base is a great national asset, vital to the future of Wales. Compared with the UK overall, however, Wales achieves less than its population share of competitively awarded research funding. Our universities must therefore be ambitious to gain competitive funding for inventive and challenging science research, building on good examples of success.

This increasingly requires proactive collaboration with the best in a given field, wherever they are in the world. Academic teams must engage fully with increasingly competitive research funding processes. They should capitalise on our strengths and work across institutions to gain a greater share of fewer, larger, research calls from the higher-spending Research Councils and funding from the European Horizon 2020 international collaborative research programme. Effective research collaborations established over recent years such as the Low Carbon Research Institute (LCRI) and the Wales Institute of Social and Economic Research, Data and Methods (WISERD) are encouraging. Universities in Wales must also be more proactive in encouraging their academics to participate in Research Council boards and committees.
Science for Wales, the Welsh Government’s strategy for science, made these points and announced our investment of £50 million in Sêr Cymru, a collaborative programme with our research universities to attract internationally excellent scientific chairs to Wales, to set up new National Research Networks and to recruit high-profile directors to lead them. Science for Wales also announced a new commitment to work collaboratively with the HE sector to improve research performance overall, with structures to support this. Actions include better and more strategic management of influencing, bidding and engagement with Research Councils, the Technology Strategy Board, EU and other research funders at all levels.

These initiatives will help Wales to compete and collaborate with the biggest and best in UK science and build a more sustainable and successful research base around our strongest areas, thus attracting further competitive funding from outside Wales. Strengths include life sciences research at Cardiff, the award-winning Institute of Biological, Environmental and Rural Sciences (IBERS) in Aberystwyth University, Bangor University’s impressive work in the fields of environmental protection, opto-electronics at Glyndŵr University and Swansea University’s innovative advances in materials research and testing, among others. Facilities and equipment, such as the National Plant Phenomics Centre at Aberystwyth University, and the Cardiff University Brain Research Imaging Centre, rank among the finest anywhere.

**Neuroscience and Mental Health Research Institute:** The Neuroscience and Mental Health Research Institute will establish Cardiff University as an international leader in the field of neuroscience and mental health research, searching for answers to the major mental disorders, which represent some of society’s biggest challenges. The Research Institute will focus help across the lifespan from childhood to old age. Closely aligned is the MRC Centre for Neuropsychiatric Genetics and Genomics, a well-resourced centre of excellence which seeks to understand the underlying causes of mental illness. The Centre’s research focus includes major psychiatric disorders such as schizophrenia, bipolar disorder, depression and ADHD, as well as neurodegenerative diseases such as Alzheimer’s and Parkinson’s. Most recently, the Centre has secured a prestigious Wellcome Trust Strategic Award for a five-year project investigating the genetic risk factors in mental disorders.

Wales had 20 units of assessment in the last RAE judged ‘world-leading’ and ‘internationally excellent’, where we outperformed the UK average. Most were located in the social sciences, arts and humanities. Exploiting social and life science can help to improve quality of life and social justice in Wales.

In addition, the commercialisation of research not just from natural science research but from the creative disciplines for differing media brings cultural, social, and economic benefits, including quality jobs in Wales, as well as a highly visible international profile for Wales. Research and innovation lie at the heart of economic growth and recovery and Wales must seize the opportunity for greater economic and social benefits from a more
joined-up approach using Structural Funds and *Horizon 2020* to link investment in jobs and infrastructure with investment in research and innovation.

In an increasingly competitive world, *Sêr Cymru* is looking to recruit star teams and embed effective networks. Sustainable systems for attracting and funding postgraduates to work in these networks and in other departments, making research careers in Wales, needs to be part of any holistic research strategy.

**Science for Wales’ vision for research in Wales is shared by** the Welsh Government and the HE sector: expanding excellent research in HE through strengthening the quality and quantity of the research base, to achieve economic, social and cultural goals to benefit Wales.
**Welsh-medium education**

*Key message:* The Welsh Government’s vision is to see the Welsh language thriving in Wales. Higher education providers have a key part to play in making that vision a reality. Through the Coleg Cymraeg Cenedlaethol, the Welsh Government will continue to support the development of Welsh-medium higher education and a confident bilingual Wales.

A living language: a language for living – Welsh Language Strategy 2012–17 aims to see an increase in the number of people who both speak and use the language. Our aim is to see:

- an increase in the number of people who both speak and use the language
- more opportunities for people to use Welsh
- an increase in people’s confidence and fluency in the language
- an increase in people’s awareness of the value of Welsh, both as part of our national heritage and as a useful skill in modern life
- the strengthening of the position of the Welsh language in our communities
- strong representation of the Welsh language throughout the digital media.

The Welsh Language Strategy is geared towards providing opportunities for people to use their Welsh language skills, whether acquired in the home or through the education system, in all aspects of everyday life.

The Welsh Government’s [Welsh-medium Education Strategy](#), launched in April 2010, sets out the critical role played by the education system and how we intend to strengthen Welsh-medium provision. One of the aims is to ensure that all learners develop their Welsh language skills to their full potential and encourage sound linguistic progression from one phase of education and training to the next. In addition, the strategy also aims to ensure a planned Welsh-medium education workforce that provides sufficient numbers of practitioners for all phases of education and training, with high-quality Welsh language skills and competence in teaching methodologies. Strategic Objective 2.6 states that the aim is:

To encourage partnership working between the higher education sector (including the planned Coleg Ffederal) and the post-16 sector on effective progression pathways for learners from post-16 provision into Welsh-medium higher education.

The [Welsh-medium Education Strategy’s Implementation Programme](#) includes commitments for the Higher Education sector to work with the Coleg Cymraeg Cenedlaethol to:

- work with post-16 providers to plan future Welsh-medium provision with effective progression from post-16 learning
- work with the Welsh Government and providers to prioritise progression pathways
- encourage HE research through the medium of Welsh in order to raise the status of Welsh as an academic language
- consider appropriate action to increase the numbers studying Welsh at degree level
- work with HEFCW to respond to the Initial Teacher Training Change Plan based on workforce remodelling
• continue to support the HE Postgraduate Scholarships Scheme and the Welsh-medium Teaching Fellowships Scheme or successor schemes
• consider options for research and scholarship on Welsh-medium and Welsh-language teaching methodologies in education, and identify methods of funding.

The establishment of the Coleg Cymraeg Cenedlaethol in 2011 has been an important step in the continued development of Welsh-medium higher education. The Coleg has made significant progress since it was established. In September 2012, the Coleg launched its first Academic Plan which provides a focus over the next three years for the Coleg and higher education institutions in Wales to make a very substantial contribution to the goal set out by the Welsh Government of creating a confident bilingual Wales.

The Academic Plan is underpinned by subject-specific plans drafted by the academic community and approved by the Academic Board. The plans reflect current provision and student numbers, strategies for developing resources and provision, collaborative opportunities and links with employers.

Enhancing learning through technology: The Coleg has invested in a range of platforms for enhancing learning through technology, and facilitating the delivery of Welsh-medium resources and university module provision to students located in universities across Wales. The main platform for delivering Welsh-medium provision is ‘Y Porth’ (www.porth.ac.uk), the Coleg’s national e-learning system based on Blackboard Learn. The platform, which has over 2000 registered users, hosts hundreds of university modules developed by lecturers funded through the Coleg’s Academic Staffing Scheme as well as several key open-access electronic resources (OERs). Welsh-medium provision is also delivered on campuses nationally using the Coleg’s network of ‘Learning Spaces’, located in six Coleg branches. The learning spaces include industry-standard HD video-conferencing equipment and PCs for displaying content from y Porth, and allows for participation across geographically dispersed locations for a truly collaborative student experience.

The Coleg also hosts several key open resources, including study materials for its new Welsh Language Skills Certificate, on its Apple iTunes U site (launched in September 2012) and freely available e-book publications on the Apple iBookstore. In 2013, ‘Y Porth’ will be further expanded to include an online multimedia library, which will allow digitised publications and video and audio content to be easily embedded within resources and modules, and enrich the learning experience further by allowing students and staff to upload content directly from mobile and tablet devices.

The Coleg’s prospectus was launched in May 2013 and provides details of the range of Welsh-medium provision available across the HE sector. Closer links now need to be forged with schools and the FE sector in order to enhance progression into higher education and to underpin the Welsh-medium Education Strategy.
New models of delivery

**Key message:** The context within which Welsh higher education providers operate is changing rapidly. Fundamental changes to the way in which UK higher education is funded, together with technological innovation and increased student expectations, represent a challenge to traditional models of delivery. The distinction between different modes of delivery is becoming increasingly blurred from the learners’ point of view, with many students also working full or part time and with full- or part-time caring commitments. The HE sector in Wales can respond by developing more flexible models of provision, both full time and part time, to build a more successful and sustainable future.

A number of fundamental challenges face the higher education system in the early part of the twenty-first century:

- the first is the financial challenge of the old model of HE, where every qualified 18-year-old was traditionally able to access three years of full-time study away from home, with the quality of the student experience now ever more central
- the second is the transformative challenge of the best content from the best teachers being available on a global basis digitally
- the third is the democratisation of HE and the thirst for learning internationally, which is both a challenge and an opportunity
- and the fourth is the challenge of public accountability for the public money that is injected into the system, which in a climate of economic scarcity will sharpen, no matter how large a proportion of HE income comes from fees, and will result in stronger national governance and a requirement for better and more strategic institutional governance.

Sir Michael Barber’s recent report, published by the Institute for Public Policy Research, on the future of higher education across the world spoke about an ‘avalanche’ of change in prospect for UK universities. Traditional universities are, Barber said, ‘being unbundled’ and some may need to become more specialised in teaching alone.

Welsh universities will not be insulated from these challenges and need to plan now for a more unpredictable future. The Welsh Government will work with HEFCW and with universities in Wales to explore potential new models for the delivery of higher education in Wales. Radical innovation may be required and we need to be bold in our thinking. Possible options may include:

- the move to more specialised universities that Barber describes, having a smaller number of research-intensive institutions in Wales with others focusing on provision of world-class teaching and learning experiences
- developing new ways of delivering part-time higher education
- finding new ways to support postgraduate study – for instance through trialling a small number of two-year condensed undergraduate degree programmes with a third year paid Masters degree funded through the statutory student support system
- creating a more ‘self-sufficient’ higher education sector in Wales, capable of providing the broadest range of subject content available elsewhere in the UK (for example, offering the opportunity to study veterinary medicine in Wales).
Access to higher education through part-time modes of study is vital to our national interests. Early indications of the impact of reforms in England point to a very steep decline in part-time provision including a reduction of 40 per cent for undergraduate part-time numbers. The impact of the reforms for uptake of postgraduate study will not be clear until around 2015. The picture is complex and universities in Wales will need to review developments with care to identify what interventions would be most helpful and appropriate, and look at all the options for increasing access to higher education through a variety of modes of delivery.

What is needed is an active dialogue between Government and universities in Wales to explore these and other options for the future. This document represents the opening up of that dialogue.
Future funding and student support

Key message: Universities and Government will need to monitor carefully the impact of policies across the UK to ensure that any risks or potential instability that may result are identified, considered and acted upon.

To ensure that Wales has the skills it needs to meet the challenges of the future, universities and students have to have access to the resources and support they need. The Welsh Government has set a clear strategy in terms of tuition fees and support – the higher education funding and tuition fee support policies introduced in 2012–13 will remain in place at least until the end of the current Assembly term. The UK Government continues to make a number of piecemeal changes, some of which may have an unintended impact on universities in Wales.

University funding and student finance models will require careful monitoring and review in the light of any further changes in policy or student numbers and flows in order to minimise potential negative impacts and ensure that universities in Wales are not destabilised as a result. With risk comes opportunity and universities must seek to maximise any opportunities in this shifting landscape.

Welsh universities have been innovative in attracting investment from a variety of sources. Swansea University, for example, has attracted funding of £60 million for its new Science and Innovation campus from the European Investment Bank. Given the low interest loans that are currently available, the Welsh Government will work with the sector to identify new sources of long-term funding to invest in strengthening the sector and its offer to students and researchers.
Acknowledgements

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