

STRATEGIC PLAN 2009-14

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We owe it to our students, staff, and our various stakeholders to pursue our vision of Swansea as a vibrant, successful, 21st Century university with vigour. World-class research, and life- and career-enhancing courses will enable us to address the complementary challenges of global success and helping to deliver a modern knowledge economy and knowledge society at home.

Professor Richard B. Davies, Vice-Chancellor

FOREWORD BY CHAIR OF COUNCIL



Chair of Council **Sir Roger Jones OBE**

This is not the time in the history of Swansea University to be timid. The spectacular RAE2008 results provide the University with the credibility to move into a new league. At the same time, the offer by BP of a large and attractive coastal site for a second campus provides an extraordinary opportunity to transform the quality and scale of the University's facilities and its activities. It will also progress the University's Mission Statement commitment to be "a powerhouse for growth in the regional economy".

This new Strategic Plan provides a radical and comprehensive framework for action to enable

the University to take full advantage of these opportunities. The Plan has been developed over 18 months through a business planning process rolled out across the University, discussions in all the main Committees, and an "away day" with members of the University Council and the Management Board. It was approved by the Council on 6th July 2009.

I am proud of what Swansea University has accomplished but am confident that its next phase of development will be even more remarkable.



VICE-CHANCELLOR'S FOREWORD

Swansea is an ambitious University and, even before the results of the 2008 Research Assessment Exercise (RAE) were published, we have been planning the next stages in our upward trajectory.

The outcomes of these strategic and policy reviews are summarised in this new Strategic Plan for the University.

We recognise that the Plan provides a massive agenda for change and that implementation will be challenging. But, following the spectacular RAE results, there is a vibrancy, enthusiasm, and confidence on campus that rejects a less radical approach.

Our conclusion is that we owe it to our students, staff, and our various stakeholders to pursue our vision of Swansea as a vibrant, successful, 21st Century university with vigour. World-class research, and

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Vice-Chancellor Professor Richard B. Davies

life- and career-enhancing courses will enable us to address the complementary challenges of global success and helping to deliver a modern knowledge economy and knowledge society at home, with a continued focus on equality and social justice.

The Strategic Plan is, by necessity, a dynamic document and we have built into our implementation processes a capacity to adjust and adapt rapidly to external circumstances. There will be serious challenges, not least the likely reductions in public expenditures and further turbulence in the global economy. My confidence for the future derives primarily from the impressive qualities of colleagues across the whole University and the bold leadership provided by the University Council.

THE JOURNEY TO DATE: SWANSEA UNIVERSITY'S STRATEGIC DIRECTION POLICIES

In 2004, Swansea University launched a set of policies designed to accelerate the pace of our development. The Strategic Direction policies were ambitious in scope drawing heavily on comparisons with the 1994 Group of successful, research-led universities in seeking to move Swansea as fast as possible to their level of performance.

This first phase of our development sought to address our competitive position within the UK higher education sector and was predominantly focused on improving our research performance prior to the 2008 Research Assessment Exercise (RAE). It was aimed at building upon our strengths, creating robust and well led academic units, attracting and retaining the best staff, and becoming more efficient and fleet of foot in responding to opportunities.

The vision for the University's future was clear and straightforward:

VISION: TO BE A RESEARCH-LED UNIVERSITY OF INTERNATIONAL QUALITY

Our aim was to position Swansea as a strong research-led University that could support wealth-creating activity and be a major driver for economic regeneration in Wales and we recognised that this would require both high quality and large-scale STEM activity (science, technology, engineering and mathematics including medicine).

In this period, resources were directed towards the most successful academic areas through the business planning process with the intention of developing world-leading, high impact and interdisciplinary research activity. World-class staff were attracted to Swansea, with over 200 appointments made between 2001 and 2008. There were also several quantum leap developments, based on large external investments, with the critical mass necessary to have a significant impact on the University's profile.

Implementation of the Strategic Direction policies was at times difficult with the University's financial position a serious constraint. However, for a sector characterised by inertia and risk aversion, the magnitude of what has been accomplished in such a short period is testament to the remarkable levels of commitment throughout the University from our Council to our Academic Schools. What is now in place is a sound base – real strengths upon which we can build during the second phase of our transformational change programme to achieve fully our vision and mission and realise the benefits both for this University and for Wales.

MISSION STATEMENT:

Swansea University will provide an environment of research excellence, with research being undertaken that is world-leading and internationally recognised and that informs all other activities at the University.

Swansea University will deliver an outstanding student experience, with teaching of the highest quality that produces graduates equipped for distinguished personal and professional achievement.

The University Community will be a powerhouse for growth in the regional economy, and will greatly enrich the community and cultural life of Wales. It will contribute to the health, leisure and well-being of citizens in South West Wales and beyond.

Without a large research base, even highly engaged universities are not able to exert enough impact to make a difference in a regional economy.

> Universities and the Development of Industry Clusters, Carnegie Mellon Centre for Economic Development 2004 Report



06 BUILDING ON STRENGTH – THE 2008 RAE RESULTS

The RAE was a crucial test for how far we have travelled as an institution. The University achieved the highest growth in world-leading and international-quality research activity of any University in the UK in the 2008 RAE: Within Wales, out of 31 subject areas submitted, Swansea University came first in 17 areas and first or second in 24 areas.

The University demonstrated an outstanding performance against other UK universities in the disciplines of Engineering, Medicine and Computer Science, where high percentages of staff were assessed as producing world-leading or internationally excellent research in the 2008 RAE. The results also highlighted high proportions of world-leading and internationally recognised research excellence in Geography, Economics, Welsh, History, Social Work and Social Policy, and English; with other areas such as Business, Law and Health Science also improving their performance significantly.

2008 Research Assessment Exercise Results					
Notional number of staff in world-leading or internationally excellent categories (4* and 3*)	242.9				
2001 RAE – number of staff in departments with high levels of international excellence (5/5*)	79.2				
Increase from 2001 RAE to 2008 RAE	163.7	+207%			

Average increase in England = +6%



Areas of Excellence: ENGINEERING

Seventy three per cent of staff in Swansea's School of Engineering are classed as producing research of world-class or internationally excellent quality (grades 4* and 3*).

- Civil Engineering 2nd in the UK
- General Engineering Joint 5th in the UK
- Materials Engineering Joint 8th in the UK.

Areas of Excellence:

MEDICINE

The year 2008 marked the School of Medicine's first submission to the RAE. Fifty five of the staff in the School of Medicine submitted to Allied Health Professionals and Studies (Biomedicine) were assessed as producing research of world-class or internationally excellent quality. This testament to the quality of the staff and their ability to nurture a research-focused environment resulted in coming Joint 7th in the UK.

Areas of Excellence: COMPUTER SCIENCE AND INFORMATICS

Computer Science was ranked Joint 21st in the UK, with twenty five per cent of academic staff undertaking world-leading research. Seventy per cent of staff submitted from the Computer Science Department are classed as producing research of world-class or internationally excellent quality.

BUILDING ON STRENGTH -

The University's Role as a Driver for Growth in the Regional Economy

The University's research-led mission and achievement in the 2008 RAE support our aim to play a major role in developing a knowledge economy in South West Wales. There is considerable evidence demonstrating the positive effect that a research intensive university has on the economic development of its region. As Lord Sainsbury has pointed out:

C Unsurprisingly, R&D-based and venture-backed companies locate around high-quality research universities to a far greater extent than around lower-quality research universities.

The Race to the Top, A Review of Government's Science and Innovation Policies, Lord Sainsbury, October 2007

Evidence from the UK and North America indicates that a research turnover in excess of about £50m is necessary to attract and retain companies to work alongside a university. Swansea University has doubled its annual research income from £12.5m in 2002/03 to £25m in 2007/08. The University aims

to continue this growth in research turnover and achieve £50m by 2012/13. A high proportion of this growth has been in STEM. Our long-established strengths in Engineering and Physical Science are complemented by the University's rapidly developing Medical School.

The University has successfully delivered a number of large projects supported by European Union Structural Funds. These projects realised significant economic benefits for West Wales and the Valleys through job creation and support for business. They also generated growth in research capacity, through injections of revenue and capital that will further benefit both the University and the region when their full potential is realised. Examples of these projects are distributed through this document. Of particular note is the highly successful Institute of Life Science, a key component within the University's developing world-class healthcare cluster.

These quantum leap projects have allowed the University to build upon its strong track record in multidisciplinary research and collaborative working with external partners within the higher education sector and within industry, government, and third sector organisations. Current major industrial collaborators with Swansea University include BAE Systems, Corus, IBM and Rolls-Royce. Alliance Boots recently established their Centre for Innovation on campus, supported by venture capitalists Longbow Capital.

Areas of Excellence: THE MEDICAL SCHOOL'S INSTITUTE OF LIFE SCIENCE

The Institute of Life Science (ILS) phase one development was opened in September 2007. It provided the Medical School with a state-of-the-art research centre that has delivered tangible benefits to healthcare and the regional economy.

The University Medical School is now awaiting confirmation of funding from the EU Convergence Programme for phase two of this development. This has been developed in close cooperation with a wide range of stakeholders including the Welsh Assembly Government, the NHS Trust and businesses active in the sector including IBM, Alliance Boots, Cyden, Calon Cardio Technology, and Allerna Therapeutics. ILS Phase Two will incorporate a state-of-the-art clinical research facility, a Centre for NanoHealth and a Translational Research Centre that bridges fundamental and clinical science, and enhanced supercomputing, to support the life-science knowledge cluster in the region.



Areas of Excellence: A COLLABORATIVE PARTNERSHIP - THE CENTRE FOR NANOHEALTH (CNH)

Funded under the ERDF Convergence Programme, the Centre for NanoHealth is a unique interdisciplinary research centre based on the application of nanotechnology and leading innovations in healthcare. This joint initiative between the Institute of Life Science, the Multidisciplinary Nanotechnology Centre and the Abertawe Bro Morgannwg University NHS Trust will offer exciting research opportunities to work at the interface between Engineering, Biomedical Science and clinical delivery.

Areas of Excellence: DRAGON INNOVATION PARTNERSHIP

The Dragon Innovation Partnership project is a collaboration between Swansea University, Swansea Metropolitan University and Trinity University College that coordinates opportunities for transferring knowledge and expertise between the institutions and external companies. It helps businesses access relevant academics and experts to discuss their development, support and learning needs. Tailor-made support packages are then provided using the full breadth of knowledge and available expertise.

BUILDING ON STRENGTH –

THE QUALITY OF OUR TEACHING AND STUDENT EXPERIENCE

The National Student Survey has demonstrated that Swansea offers one of the best all-round experiences for students in the UK. The Survey is an illuminating insight into student opinion, commissioned by the UK Funding Councils that allows the University to build upon its strengths and identify opportunities for improvement. The 2008 results show year-on-year progress for the University in each of the categories, including 'teaching', with the ability of staff to communicate effectively rated at 91%, the enthusiasm of staff at 85%, and learning resources, IT access and support rated at 87%. Continuous improvements in the quality of provision are also driven by the opinions of students in the Annual Students' Union's Student Satisfaction Survey, and the LIS and Careers Centre annual surveys.

Swansea University has in place strong and robust teaching quality systems that have been tested repeatedly over the last nine years as the University obtained degree-awarding powers, University Title, and in 2008, an excellent Quality Assurance Agency (QAA) Institutional Review outcome. The QAA Review is a rigorous periodic evaluation of the academic governance, quality assurance, and standards within the institution and is conducted at all UK HEIs as part of a rolling programme. The full report was published in August 2008, in which the QAA affirmed its confidence in the soundness of the University's management of the quality of its academic programmes and the standard of its awards. Following a decision by the University Council in December 2008 that the University should invoke its degree-awarding powers, there is now a progressive change to move the University away from awarding University of Wales Degrees to awarding Swansea Degrees by 2010.

The University has a programme of continuous review and development of its student lifecycle interactions, and has been innovative in introducing online enrolment, online accommodation application and induction procedures. The University is also a leader in the Bologna Process, one of the first three UK HEIs to be awarded a European Commission Diploma Supplement Label for the quality of the Diploma Supplement issued to our graduates.

Swansea continues to respond strongly to the Reaching Wider agenda, leading the South West Wales Reaching Wider Partnership (which includes Swansea Metropolitan University, Trinity University College, Coleg Sir Gâr, Gorseinon College, Neath Port Talbot College, Pembrokeshire College and Swansea College, Careers Wales West, and schools) and recruits 14.4% of the sector's young full-time first degree entrants from low participation neighbourhoods.

The University's Department of Adult Continuing Education (DACE) has an excellent record of achievement in relation to widening access across its Open Programme, Part-time Degree in Humanities, accredited programme, and through Reaching Wider. Through these integrated schemes of study there exist pathways for progression which enable and empower students from under-represented social groups and students from disadvantaged communities across South West Wales to access new learning opportunities at higher education levels. DACE delivers its programmes in 19 out of 21 Communities First areas in South West Wales. The Department supports the 14-19 Agenda through having longstanding links with voluntary education providers, sixth forms, and FEIs.

Swansea University recognises that widening access to higher education must aim to deliver the higher level skills that permanently improve the life chances of the beneficiaries. Training across all academic disciplines is available to ensure students are equipped with a full range of higher level skills with an emphasis in many areas on employer engagement. This is supported by the University's strong performance in retaining students as reflected in the most recent HESA data, with Swansea having the second highest proportion of students with successful learning outcomes of all the universities in Wales. The University's student 'drop out' rate is also less than half that of a number of its Welsh peers.

The University has contributed to the Welsh Teaching Fellows and Scholarship Programme and this has increased the opportunities for Welsh-medium Higher Education on the campus. At the same time, the University also hosts the South West Wales Welsh for Adults Centre, managing Welsh language learning provision in the counties of Neath Port Talbot, Swansea, Carmarthenshire and Pembrokeshire.



Areas of Excellence:

ITWales: AN INDUSTRY-DRIVEN SERVICE

ITWales was launched in 1993 as the industrial liaison unit of the Computer Science Department at Swansea University. ITWales acts as an important bridge between industry and the University, particularly by running industrial placements that enables students to gain valuable experience in solving real-world problems as well as making progress in their own studies.

ITWales provides a range of valuable resources for both students and businesses which are aimed at IT up-skilling. The core mission is to raise the IT skills level in Wales by encouraging graduates to develop careers in Welsh industry and commerce, and to make students aware of the employment possibilities in Wales.

Areas of Excellence: THE WELSH CENTRE FOR PRINTING AND COATING (WCPC)

Acknowledged as one of the world's top five research centres in printing and coating, the WCPC is driving up skills levels and sustainability via its collaborative industrial cluster. The Centre enhances the employability of its graduates through:

- close working with industry to ensure that graduates are kept up-to-date with industry trends
- industry-led learning approaches in the Centre benefiting from practical work, examples and courses designed to encompass current practice and demands
- practical degree programmes to ensure that graduates are equipped with the full range of skills required to make a major contribution to organisations from day one
- a multi-faceted approach to address employer/industry issues.

The Centre sponsors a number of industry studentships awarded by world-leading companies which ensure the transfer of new technology from the University to industry and are a key element of cluster support.



Areas of Excellence: EMPLOYER STUDY PARTNERSHIPS BURSARY: CASE STUDIES

The Employer Study Partnerships (ESP) support employees from public and private sector organisations to undertake part-time study based on research projects in a broad range of subjects. The initiative provides bursaries to support employees engaging in work that strengthens the link between employer and academia.

Sample Partnerships include employees engaged in the following:

- Neath Port Talbot County Borough Council and the School of the Environment and Society are examining how policy is developed in local authorities in relation to the Wales Spatial Plan
- a multinational semiconductor company working with the School of Engineering to explore new approaches in voltage conversion systems for mobile electronic devices
- a local life science SME and the School of Medicine examining the challenges of developing medical devices to address chronic conditions
- a major construction company is working with the School of Law to understand the implications of environmental regulation and legislation upon the industry.



Areas of Excellence: THE SCHOOL OF HEALTH SCIENCE – RESPONDING TO CHANGING REQUIREMENTS

The School of Health Science has developed an innovative and progressive approach to healthcare demands. Its programmes are focused and tailored to meet modern day practitioner skills:

- by offering two graduate intakes each year, the School is able to capture both the school leaver and mature student markets
- healthcare bodies, practitioners and government take a proactive role in the design and development of courses via School Advisory Boards, Steering Groups and Practitioner Forums
- core competencies and learning outcomes are aligned with mandated professional standards
- placement opportunities for students are available in a wide variety of clinical settings in rural and city environments.

The School has developed an innovative, high-technology approach to skills development and learning. E-WARD is an award-winning package that allows students to prepare for employment and practice by facilitating virtual nursing in a 'safe' simulated environment. The system is helping to enhance nurses' skills and the quality of care throughout Wales.

BUILDING ON STRENGTH – INTERNATIONALISATION

Since its foundation in 1920, Swansea University has embraced opportunities to think globally whilst remaining true to its regional roots. The University is internationally active attracting students and staff from over one hundred countries with approximately 30% of all new staff recruited over the last five years from outside the UK. Our Academic Schools enjoy strong and productive links with partner institutions around the world, and much of the University's teaching and research has global relevance.

Many of the University's degree programmes offer options to spend time overseas. For example, the School of Business and Economics enjoys superb international links and offers numerous opportunities for tomorrow's managers to study abroad and, in the School of Arts, students on undergraduate programmes in Modern Languages can spend up to a year abroad improving their language skills. Similar schemes exist across the University's range of academic subject areas and provide an enormously valuable experience for our students.

The University has led Bologna Process developments in the UK and is fully engaged with the Erasmus Mundus Programme, in running innovative joint courses with partner institutions in Europe such as the Erasmus Mundus Master's degrees in Journalism and Computational Mechanics, which provide students with the possibility of study in at least three countries greatly enhancing their international employability and prospects. Swansea is also in the process of developing a joint PhD in Engineering with the University of Avignon. Courses such as these bring together European universities from a number of countries combining the best academic research and teaching from each of the distinct national educational cultures. The University has seen a growth in its student recruitment from overseas and an increase in its market share within the sector. Swansea is cautiously confident about projected future growth in overseas numbers due in large part to an innovative partnership that the University has entered into with Navitas, an Australian organisation highly experienced in developing university preparation courses for international students. Navitas, through the International College Wales Swansea (ICWS) offers new pathways to a Swansea University degree for overseas students via a range of foundation programmes. The very successful inaugural student intake lays a strong foundation for future growth and expansion. ICWS has made an immediate impact on the diversity of the Swansea University student body, enrolling students from less traditional areas of recruitment such as Mongolia, Kazakhstan and Turkey. The portfolio of the College will be further enhanced by the addition of a Pre-Masters Programme in 2009/10.

The University's English Language Training Services offers English Language learning and training experience to students and is seen as mission critical to the implementation of the University's internationalisation strategy. Other sources of support for international students on campus include the International Student Advisory Service which offers impartial support to all non-UK students and provides information and advice on non-academic matters, including immigration and services. The Students' Union also provides active support through its International Officer to help integrate students within Swansea's international community.

Areas of Excellence: THE LARGE HADRON COLLIDER

The Large Hadron Collider (LHC), a collaboration amongst many of the world's leading particle physicists, has been built over ten years at the cost of several billion pounds. It is designed to collide protons and anti-protons at very high energies to produce new particles, and is expected to recreate conditions that existed billionths of a second after the Big Bang.

CERN, the European Organisation for Nuclear Research, switched on the LHC, the world's largest and most powerful man-made particle accelerator on the 10th of September 2008. It was a moment that captured global imagination, and the University's Physics Department was at the heart of the project, with staff present at CERN during the preparations.





Areas of Excellence: THE GLOBALISATION OF SCIENCE – THE TEXAS-UK COLLABORATIVE

The Texas-United Kingdom Collaborative harnesses the collective experience, infrastructure and ambitions of ten universities and medical colleges in Texas and ten of the UK's top universities. The Collaborative was created to stimulate the exchange of ideas and research in the field of biomedicine, nanotechnology and informatics thereby building new areas of interdisciplinary research, and generating new ideas, techniques, products and opportunities. Swansea was invited to become part of the Collaborative in 2007, as the University's researchers have a reputation for working at the interface of engineering and medicine. Membership has already opened up many doors for the University including the possible introduction of joint or collaborative degrees. A recent conference on space-biomedical research at the Baker Institute in Texas enabled Swansea's researchers to speak directly with the directors of NASA, ESA (the European Space Agency), and the Japanese Space Agency, JAXA.

Areas of Excellence: THE SCHOOL OF HUMANITIES – FROM OKLAHOMA TO WALES

American Studies, part of the School of Humanities, hosted Oklahoma's Governor Brad Henry, who was so taken by Swansea University and Wales that when he returned home he proposed the creation of a semester-long study abroad programme here for each of Oklahoma's eleven regional universities.

The governing board for higher education in Oklahoma provided funding for a semester stipend for the students, who are designated as Brad Henry International Scholars. The first of these students arrived in September 2008, further strengthening the links between Wales and the United States.



BUILDING ON STRENGTH – OUR ACADEMIC SCHOOLS

In the academic year 2004/05, the University engaged in a major restructuring of its Schools in preparation for the 2008 RAE. Five areas were identified for phasing out through non-replacement of staff - Chemistry, Development Studies, Philosophy, Sociology and Anthropology, although it was subsequently decided to retain postgraduate activity in Development Studies.

Student numbers were reallocated to areas for strategic investment, allowing growth in History, English, Geography, Psychology, Computing, Business and Economics, and Law. This was embedded within a broader business planning strategy that aimed to maximise the return from such investment with academic areas incentivised to grow their business.

Our ambition was to create academic units that were large enough to manage their own academic development and thrive in an environment of devolved budgets and extensive operational autonomy. Restructuring at this time resulted in ten Schools and a Department of Adult Continuing Education. There is current debate over whether eleven academic units exceeds the optimum for a University the size of Swansea and possible further reduction in the number of Schools is emerging from an ongoing process of strategic engagement between Schools and the Senior Management Team.

Both in terms of our research and teaching, the boundaries between Schools are not rigid, and the University has a strong track record in multidisciplinary research. Collaborations such as that between Engineering and the Medical School on NanoHealth, are enabling Swansea academics to adopt a team approach to address some of the big research challenges of the twenty-first century which do not fit into the traditional disciplinary silos. The University also recognises significant scope for developing the role and visibility of Social Sciences. Multidisciplinary collaborations are developing around core research themes, such as the digital economy, that link social sciences, engineering and computing.

The School of Engineering has strong undergraduate recruitment and exceptional RAE results. Based upon this track record of success, the School has put in place ambitious growth plans.

The Institute of Advanced Telecommunications (IAT) has now been amalgamated into the School of Engineering's existing research centre of Nanotechnology and will facilitate the development of joint research projects. The University is in discussions with Bell Labs on applications of electronic communications in healthcare.

The School of Engineering has long-standing academic links with industry. Through the School, Swansea University is one of three UK universities with a Materials Technology Partnership with Rolls-Royce. The School is also a preferred academic partner with BAE Systems and has enjoyed a close research and training partnership with Corus for many years. The Welsh Centre for Printing and Coating is acknowledged as one of the world's top five research centres in the sector. It is driving up skills levels and sustainability in the Welsh printing and coating sector via its collaborative industrial cluster. This is critical in the context of Welsh high-tech industrial development.

Areas of Excellence: SCHOOL OF ENGINEERING'S OUTREACH – BLOODHOUND SSC ENGINEERING ADVENTURE

In 1997, engineers at Swansea University worked alongside the team, led by Richard Noble, which broke the sound barrier in the THRUST SSC supersonic car. The University's internationally acclaimed experts in Computational Fluid Dynamics are now part of the team designing and building a car capable of even greater speeds. This team is supported by the UK Government, EPSRC, the Royal Air Force, and the Royal Academy of Engineering.

The BLOODHOUND SSC Engineering Adventure launched by Richard Noble in 2008 aims to take the current land speed record of 763mph to 1,000mph by 2011. The iconic engineering project aims to excite young people about science, technology, engineering, and mathematics. The **School of Medicine** is home to Wales' innovative fast-track four-year Graduate Entry MB, and to a vibrant research community evidenced by its exceptional RAE results and the newly built Institute of Life Science. The full cohort for the new Graduate Entry course will be achieved in 2012/13, bringing student numbers up to 280. New developments to improve the student experience include the planned completion of a £25m Education centre for Graduate Entry and postgraduate teaching at the Morriston site by 2011.

School of Physical Sciences staff work collaboratively with a number of external organisations that include the British Computer Society, the NHS, Hewlett-Packard, Invensys, Microsoft, Nokia and Rolls-Royce. The School benefited from significant investment prior to the 2008 RAE recruiting internationally recognised researchers from some of the world's top universities. Notable achievements include: exceptional RAE results for Computer Science, the success of Physics in obtaining Research Council grants and since 2005, Mathematics trebling its undergraduate student intake. Other highlights from the School include:

- An EPSRC Senior Fellowship leading the world famous anti-matter (hydrogen) work at CERN
- A Leverhulme Senior Fellowship to build the new field of human-computer action studies for medical instruments
- The highly acclaimed business support operation ITWales
- Scientific leadership of the Institute for Visual Computing, involving Swansea, Cardiff, Bangor, and Aberystwyth the first designated Welsh Assembly Government Research Institute
- Leading the development of the Wales Institute of Mathematical and Computational Sciences that is beginning to play a key role in new developments in Mathematical Sciences in Wales and is a forerunner of pan-Wales developments in the STEM area.

The **School of the Environment and Society** is a research-led community of almost 200 natural scientists and social scientists, and 800 undergraduate and postgraduate students. The academic area of Geography performed strongly in the 2008 RAE and it is the School's aim to build upon its research strengths through existing and new research centres to meet the multidisciplinary and collaborative research agendas of the Research Councils and other sponsors.

Environment and Society participates in several networks that draw together the four research-intensive Welsh universities. A number of joint applications for EU Convergence funds with a total value to the School of £18m will develop research and support, the refocusing of Biological Science towards Pure and Applied Ecology with particular reference to shallow sea marine science located within the innovative Centre for Sustainable Aquaculture Research. The School also leads the University's contribution to the planned Climate Change Consortium of Wales (C3W). HEFCW has approved a Reconfiguration and Collaboration Fund bid providing £4m to support this Consortium and reinforce the University's contribution to the climate change impact debate.

Social Science staff within the School work with senior politicians, civil servants, academics and other stakeholders to generate first-class research which contributes to the shaping of Assembly Government policy. With European Social Fund support, the School will create the Policy Institute Wales to develop this agenda.

The **School of Business and Economics** has experienced sustained growth in student numbers over the past four years. At undergraduate and, in particular, at postgraduate level, the School's student body is highly internationalised.

Increased student numbers will allow the School to grow revenue streams to support a significant new expansion in academic capacity. In addition, the School is optimistic that a successful Convergence Funding bid will see the School launch itself as a major provider of management and leadership development activity in the region. The School has a strong track record in levering Research Council monies, notably the LSE-led ESRC Spatial Economics Research Centre, and the Cardiff-led ESRC/HEFCW-funded WISERD project.

Areas of Excellence:

THE CENTRE FOR INNOVATIVE AGEING (CIA)

The CIA is a leading centre of excellence for the study of Ageing in the UK. It initiates, coordinates and supports interdisciplinary research within Swansea University and fosters international research collaboration.

The CIA has a philosophy of translating research into practice, achieved through active interaction with policymakers, managers and practitioners. The centre also works in partnership with business and the independent sector. It provides an exceptional training ground for researchers and postgraduate students, attracting the finest students from around the globe.

In the last three years, members of Swansea University have been involved in funded ageing research worth £14.5m. The appointment of new staff in the CIA, combined with the world-class staff already employed in Swansea, place the Centre in a unique position in the UK. The CIA has already secured increased funding from Research Councils and other major funders looking for multidisciplinary collaborations and user involvement and will lead the University's resurgence in the Social Sciences.

Areas of Excellence:

A HOLISTIC APPROACH TO DEVELOPING A WORLD-CLASS HEALTHCARE CLUSTER

In Designed for Life: Creating World Class Health and Social Care for Wales in the 21st Century, the Assembly Government set the strategic direction for the Welsh health service and its partners. In support of these priorities, the University has developed a top-quality medical, health and academic centre for South West Wales in order to drive advances in medical care through the introduction of highly innovative practices that link hospitals and community services, and contribute to the recruitment, retention and development of high quality healthcare staff.

In February 2008, Swansea University, with Assembly Government endorsement, awarded University trust status to the new Abertawe Bro Morgannwg University NHS Trust. It is noted in the Health Vision Swansea Strategic Outline Programme that a 'concordat has been developed with Swansea University on developing a unique and innovative partnership for the provision of services in the future. This will be key to the remodelling of Singleton Hospital.'

The University's Institute of Life Science (ILS) development opened on campus adjoining Singleton Hospital in June 2007. It applies thoroughly interdisciplinary science to health and medicine, and the coupling of medical advance with economic development. The purpose-built facility provides an environment that draws on research expertise from the Schools of Engineering, Human Sciences and Business. Underpinning this innovative environment is a specialist business team, focused on building commercial-academic links. The ILS was chosen by IBM in 2006 to host a vibrant medical research programme powered by supercomputing; in this advances are moving apace in complex modelling and Informatics.

Alliance Boots also selected ILS as the location for its £3m investment in the Boots Centre for Innovation, which opened in April 2008. The Centre is developing new products in areas as diverse as pain relief, skin treatments, diabetes, and healthy ageing, drawing together pioneering researchers, innovators and entrepreneurs. The School of Business and Economics is seeking further development funding for the successful Welsh Economy and Labour Market Evaluation and Research Centre from ESF Convergence, and has recently been awarded £5m from the European Social Fund (ESF) for the LEAD Wales project. This six-year project will work with owner-managers of small enterprises through an intensive leadership programme to deliver increased turnover and job creation. The School has also led on links with the world-leading Willis Research Partnership via its focus on the insurance sector.

The **School of Law** achieved the most dramatic improvement of any law school in the UK jumping from a grade of 3A and 48th place in 2001 to joint 25th place out of 67 in 2008. In doing so, the School overtook 12 institutions that were graded 5 in 2001. The School has also achieved wider recognition within the international academic community with leading universities in Europe, North America, and Japan keen to join the School in a collaborative research network. The attractiveness of the School to overseas students has increased and the new postgraduate taught Law and Globalisation courses are also attracting high quality European students.

The **School of Humanities** will merge with the **School of Arts** on 1 August 2009. This is a strategic merger. The new School will be streamlined and research-led and will aim to be the flagship of Arts and Humanities in Wales within five years. The intention is to invest in areas of strength, principally those with a strong RAE performance and buoyant recruitment, and to excise areas of weakness.

The associated Research Institute in the Arts and Humanities will provide strategic leadership in promoting collaborative, cross- and post-disciplinary high-impact research and develop a fuller engagement with the knowledge transfer and economic impact agenda of the Research Councils. In this regard, it will take a lead in making fuller use of the cultural assets of the University and community, such as Taliesin; our extensive Archive Collections, due to move to a purpose-built, £1m repository in late 2009; the National Waterfront Museum; the Dylan Thomas Centre; the Glynn Vivian; and the Wellcome Collection in the Egypt Centre. It will also progress a creative research-focused dialogue with the Social Sciences, Human Sciences, Engineering and Health.

The School of Human Sciences offers a vibrant environment for teaching and research with highly successful undergraduate degree programmes. Areas of excellence are reflected in its RAE scores and the positive comment of the RAE sub-panel in relation to research in Social Work and Social Policy (Criminology, Ageing and Social Care). The panel noted the 'levels of collaboration with research users including policymakers, practitioners and service users are generally excellent.' Since reconfiguring into research centres (Innovative Ageing; Social Care and Social Work, Criminal Justice and Criminology and Child Research), the School has seen a consistent growth in research income mainly through its efforts to address the emerging collaborative, cross-disciplinary research agenda.

Swansea University's rapidly growing **School of Health Science** is the Welsh Assembly Government's preferred provider for nursing, midwifery, paramedic and clinical physiology professional pre-registration education for the South West Wales region. Its mission is to conduct high quality research, deliver high quality educational programmes (including e-learning and Welsh-medium delivery), and promote evidence-based clinical practice that contribute to the health, social well-being and prosperity of communities of South West Wales and beyond. The School works closely with the Hywel Dda, and Abertawe Bro Morgannwg University NHS Trusts, ensuring there is coherence and continuity from pre-registration through to continuing professional development programmes. Applications are buoyant, and the steady incremental growth in the numbers on undergraduate nursing programmes has resulted in the School now being the largest contracted provider in Wales. The School is typified by its breadth of work that ranges from advanced wound healing through to significant contributions to health economics.



22 THE WAY FORWARD –

KEY STRATEGIC PRIORITIES AND CHALLENGES IN THE POST-2008 RAE PERIOD

The Developing Blueprint for Swansea University

Moving forward, Swansea University will maximise the opportunities presented by our significantly improved performance in research, the quality of our teaching and student experience, and our increasing role in Wales, and internationally.

The University's mission has not changed. However, the manner in which this will be achieved, the distinctive blueprint for the future Swansea University, is now being defined in this second phase of our strategic development.

Our blueprint is one of ambitious growth in key academic areas developed in partnership with industry and government that will stimulate the development of a knowledge economy in South West Wales, supported by our groundbreaking ambition to create a world-leading research, innovation and educational complex at Swansea Bay.

The University welcomes the emphasis on the knowledge economy within Assembly Government policy. The Assembly Government Skills and Employment Strategy and Action Plan, *Skills That Work for Wales*, (July 2008) stresses the need to deliver the high level skills required to ensure the realisation of the *One Wales* vision.

The Minister for Children, Education, Lifelong Learning and Skills in the HEFCW Remit Letter 2009/10, further highlights the need for the HE sector to strengthen links with business and employers to deliver the skills needed for a prosperous Wales including addressing higher level skills needs and to focus on increasing the number of STEM graduates to satisfy future demand. As recently as autumn 2008, the CBI warned that unless the decline in the study of STEM subjects is halted, the UK will struggle to compete in the global market.

Key clusters in the knowledge economy have been identified as priority areas by the Assembly Government, these are: Digital Economy (ICT), Low Carbon (including climate change mitigation/adaptation issues), Health and Biosciences, and Advanced Engineering and Manufacturing. Science and engineering graduates are identified as critical to the growth of these knowledge economy clusters.

The First Annual Report of the Wales Employment and Skills Board, A Wales that Works (April 2009) observes that: 'a more targeted approach to some aspects of Higher Education funding could strengthen our science policy and bring major dividends. A critical mass of research is needed in support of key areas of economic potential, but Wales cannot depend solely on UK-wide research funding to achieve this: significant targeted funding towards applied research undertaken collaboratively with employers is an example of what we have in mind.'

Swansea University is focused upon the priorities identified by the Assembly Government. The University aims to strengthen its internationally competitive research base and further align research with the needs of industry and other key public and private sector organisations. This will be achieved by placing an increased emphasis upon applied research with links to R&D and by supporting higher level skills in order to deliver real economic benefits for Wales. This will be taken forward across a broad range of academic disciplines. Applied research and teaching collaborations with employers are distinctive Swansea University strengths in academic areas ranging from STEM subjects to social sciences.

A Science and Innovation Campus

The University is scoping the opportunity of developing a science and innovation campus at Fabian Way, Swansea. This will also be a business-facing campus and because of its coastal location is currently referred to as 'The Bay Campus'. This ambitious vision has emerged from a partnership between BP, Swansea University, the Assembly Government, Neath Port Talbot County Borough Council, the City and County of Swansea, the education sector in Wales, and multinational companies. The Bay Campus will capitalise on the University's research expertise in science and technology and will transform the long-term academic links with major international knowledge economy companies to provide greater levels of applied research with commercial outcomes. At the same time, the academic expansion facilitated will create significant additional student places principally in Science, Technology, Engineering and Mathematics which cannot be achieved within the constrained existing Singleton Park Campus.

The Bay Campus will provide an intensive, open-innovation environment by co-locating industrial R&D, academic research, and postgraduate and undergraduate students, and facilitating the growth of high-technology clusters in the region. The academic mix for the Bay Campus has not yet been determined but may include Engineering, Computing and Telecommunications, together with the School of Business and Economics.

The revived Singleton Park Campus will house the University's rapidly expanding world-class healthcare knowledge economy cluster, and academic activity focused on the Arts, Humanities and Social Sciences. It is crucial that the Singleton Park and Bay Campuses are linked in order to maintain the strong Swansea University identity and support the ever-increasing multidisciplinary research undertaken across Schools. Provision at the Bay and the Park will be complementary, to create a single community across the two sites.

This Science and Innovation campus is an ambitious twenty-first century development and is expected to be the largest knowledge economy project in the UK.

Professor Richard B. Davies, Vice-Chancellor



IMPLEMENTING OUR AGENDA FOR CHANGE - The University Strategy Map

The policy challenges facing the University are captured in the Swansea University Strategy Map which demonstrates the wide range of interrelated activity that will be taken forward coherently to deliver our ambitious vision for the planning period and sustain the University's upward trajectory. The Strategy Map illustrates the University's agenda for change, it highlights only those areas where significant improvement activity is required and it does not cover areas of the University's continuing business operation where the level and quality of ongoing activity is fit for purpose.

Work on arriving at the key policy challenges identified in the Map was initially based on findings from a series of consultants' reports produced for the University. These were then updated in light of experience to take account of perceived areas of under-performance and 'stubborn challenges' that have proved difficult for the University to manage in the past. This agenda has been through a thorough process of consultation with the University management, and Council in March 2009.

The challenge for the University will be to implement strategic change and realise the benefits within a complex and ever changing environment. As evidenced, Swansea University has made exceptional progress in the first phase of its development but it will be harder for the University to continue on this path and sustain improvement. This is especially difficult within a period of economic downturn with constrained public sector funding. We approach the future optimistically. We have dramatically increased our capacity to implement change. The University has recruited internally and externally to create a strengthened University Senior Management Team (SMT). The members of SMT have clear executive leadership responsibility for the implementation of the University's Strategy Map.

The SMT is supported by a newly established team, the Planning and Strategic Projects Unit. It is firmly embedded within and strongly linked to the other areas of the University's Central Administration and will facilitate a coordinated and structured matrix management approach to the implementation of change, built upon best practice in programme management. The Unit will work specifically with the Departments of Research and Innovation, and Finance to further strengthen and embed the improved project management and risk management processes across the University that are essential to delivering desired outcomes.

Successful implementation will require the engagement of a broad cross section of academic and administrative leaders, staff, students and other stakeholders. To support this approach the University will review its internal communications' methods and enhance its performance management processes.

The Strategy Map is broken down into four strategic themes and four strategic enablers. The strategic themes explain how we will address the challenges we face, and the strategic enablers illustrate the organisational efficiency and effectiveness that will be necessary to achieve our strategic ambitions.

VISION: To be a research-led University of international quality

MISSION STATEMENT:

Swansea University will provide an environment of research excellence, with research being undertaken that is world-leading and internationally recognised and that informs all other activities at the University.

Swansea University will deliver an outstanding student experience, with teaching of the highest quality that produces graduates equipped for distinguished personal and professional achievement.

The University Community will be a powerhouse for growth in the regional economy, and will greatly enrich the community and cultural life of Wales. It will contribute to the health, leisure and well-being of citizens in South West Wales and beyond.

KEY STRATEGIC THEMES AND POLICY CHALLENGES:

Develop our inte reputation for re teaching and col links with indust	search, Iaborative	Be one of the UK research-led univ		Equip our studer personal and pr achievement		Be a powerhouse in the regional ec	
T1. Fostering increased international opportunities for the student body		T4. Deliver increasingly world- leading and international quality in our research work		T11. Deliver teaching of the highest quality		T18. Develop and implement a coherent knowledge economy Strategy	
		T5. Encourage interdisciplinary work between Schools and with external partners		T12. Deliver an outstanding student experience		T19. Create and manage an IP commercialisation pipeline	
T6. Develop research capacity in academic areas that deliver (or have the potential to deliver) world-leading research T2. Enhance international collaboration in research and innovation		academic areas that deliver (or have the potential to deliver) world-leading		T13. Become a selection University		T20. Create and grow industrial clusters	
				T14. Enhance student achievement			
T3. Ensure sustainable growth in overseas student numbers		T8. Ensure high REF i	ratings	T16. Further enhance student participation from all areas of society			
			T9. Increase through	and in particular from disadvantaged communities in SW Wales			
		T10. Increase resear	T10. Increase research grant capture T17. Increas		umbers	T21. Diversify income knowledge transfer ad	

KEY STRATEGIC ENABLERS:

Financial Sustainability		Developing and Communicating our Role as an Agent for Change (Working with Others)		
F1. Achieve a University surplus of 3% of turnover	F3. Grow research income	E1. Promote University externally	E2. Manage the University reputation and brand	
F2. Manage the realignment of resources with strategic priorities	F4. Secure additional HEFCW- funded FTEs to underpin expansion in key strategic areas	E3. Provide leadership in delivering WAG agenda	E5. Deliver on the Welsh European Funding Office objectives for the EU Structural Funds Programme in the Region	
E4. Refine and deliver two		campus estates strategy		
		E6. Build strong strategic partnerships that add significant value		
Building Common Purpose		Improving our Efficiency and Effectiveness		
CP1. Ensure effective communication and the ownership of values and strategy at all levels in the University		11. Ensure all academic areas are large enough to be robust and sustainable		
CP2. Develop culture of empowerment,	CP3. Enhance University middle	12. Ensure an effective and efficient division of labour between Schools and the Centre		
responsibility and accountability	management	13. Enhanced use of ICT to underpin our business processes		
CP4. Further enhance Academic School Business Planning Process	CP5. Develop a cross-cutting planning process for the Central Administration	14. Further develop decision approval	15. Deliver South West Wales Higher	
CP6. Attract and retain high quality staff through competitive salaries, promotion and pay to reward success		and test and challenge processes	Education Partnership outcomes	
			16. Secure effective strategy and management arrangements for sporting facilities	
CP8. Promoting the Welsh Language Schem and enhancing the culture of bilingualism	e CP7. Enhance performan			



STRATEGIC THEME 1 – DEVELOP OUR INTERNATIONAL REPUTATION FOR RESEARCH, TEACHING AND COLLABORATIVE LINKS WITH INDUSTRY

Vision: To become the Wales home campus of a truly international institution with proven world-class quality, expertise, capacity and strength.

ACHIEVING OUR VISION

There is global competition for talent and knowledge and the performance of the Welsh higher education sector in producing high quality graduates and research will be crucial to the long-term productivity and growth outcomes of our economy.

The international reputation and standing of a university determines its competitiveness in attracting research collaborations, international academics and students, which in turn will drive its success in the knowledge economy. The way in which higher education approaches its international engagement will have a significant impact on its ability to produce relevant teaching and research to meet future challenges. Higher Education Institutions, therefore, have a responsibility to advance with an active internationalisation strategy.

Competition has increased in the international academic labour market, where demand for English-speaking

academics is particularly high. The OECD has noted in 2008 that as a disproportionate number of academics retire, 'OECD employers will increasingly need to look abroad for talent as new graduates will become insufficient to replace staff going into retirement.'

To achieve its internationalisation vision, the University will further embed inter-cultural and global perspectives into research, learning and teaching activities, and community engagement. It will enhance and ensure the quality of its strategic partnerships with overseas institutions, and will diversify recruitment, curricula and the student experience. By its very nature, internationalisation cuts across every School and every administrative unit as well as affecting the functions of every Pro-Vice-Chancellor. It will be developed with the use of matrix management and requires a supportive flow of information from all parts of the University.

C The internationalisation strategy provides a framework to intensify our international activities, focusing on the key themes of research, enhancing the student experience, international partnerships, staff, alumni, and community involvement.

We are developing further study abroad programmes, including study in India and China, which are linked with an employability programme. The intention is to provide opportunities for all home and EU students to experience a study abroad period. We know that employers already see study abroad as an important differentiator in recruiting graduates and this is part of a strategy to prepare our students as 'global graduates' and enhance their employability prospects within a Welsh, UK or a global context.

The University has sought to focus its approach through the appointment of Professor Iwan Davies as Pro-Vice-Chancellor (Internationalisation and External Affairs) in 2007, and the development of an Internationalisation Policy. An Internationalisation Steering Group which includes Assembly Government representation now manages policy developments in this area.

The challenge is to expand the international scope of the University's activities so that Swansea stands out from the crowd and develops a reputation as a pioneer in the international higher education sector. International student enrolments have already significantly increased over the last two years. The University attracts students and staff from over one hundred countries, and the foundation programmes offered by its partner, the International College Wales Swansea, also play an important role in attracting students to the increasingly cosmopolitan campus.

IMPLEMENTATION

T1. Fostering increased international opportunities for the student body *The University will:*

- incorporate strengthened internationalisation support within the new School structures
- review resources in some of the administrative units that relate to international students and the effectiveness of the internationalisation policy
- develop opportunities for learning additional languages
- provide mobility opportunities for our students making them globally employable
- develop mechanisms for internationalising our degree programmes
- participate in the UK and Welsh Government's agenda of helping developing countries through targeting student scholarship offers and staff visits
- collaborate with overseas institutions, specifically-targeted for their course content and/or unique facilities to include credit recognition and possible joint degrees where appropriate
- broaden our base of global business and entrepreneurial activities for students.

T2. Enhance international collaboration in research and innovation *The University will:*

- review the membership of the Internationalisation Steering Group to ensure that it is fit for purpose
- develop improved mechanisms for capturing and disseminating information about international activities
- develop benchmarks of internationalisation performance
- broaden our staff's horizons and, in parallel, progressively recruit so as to develop an internationally-experienced staff with world-class capacity
- develop a record of collaboration in publications and joint grants with selected institutions
- aim for regular experience abroad as part of our staff's expectations and thus increase the international relevance and content of our programmes and procedures
- access marketplaces not available either regionally or nationally
- create new companies abroad and attract overseas companies to the UK based on our research and teaching base
- develop an improved Internationalisation web presence.

T3. Ensure sustainable growth in overseas student numbers *The University will:*

- review the operational delivery of the Internationalisation Policy to ensure that it is fit for purpose and consistent with best practice in the sector
- continue to work in partnership to develop the provision offered by International College Wales Swansea
- create an international population on our campus with commensurate social and cultural benefits for all our student population
- while recruiting from existing/developed markets, incubate new future markets
- improve the take up of Master's and PhD courses overseas to maintain the intellectual health of our research and teaching base against the background of falling home demand
- strengthen networks of communications and support and interaction with Swansea alumni
- offer more extensive and convenient access to lifelong learning and professional development opportunities.

ECONOMIC AND SOCIAL IMPACT

Internationalising our educational delivery is a way of further improving the quality of teaching and research, building human capital, and strengthening Wales' educational partnerships with developing, and developed nations. The international reputation and standing of a university will determine its competitiveness in attracting research collaborations, international academics and students, which in turn will drive its success in the knowledge economy, and so create high value-added jobs for Wales.

The expenditure of students from outside the UK makes a significant injection into the UK economy, as well as representing export earnings. Research in the US has also shown that the presence of international students has a positive impact on domestic students in terms of cross-cultural interaction, providing a pedagogical basis for increasing international enrolment. The effect of international students on Swansea and its environs is also profound. Students do not confine their expenditure solely to the University, but support a wide range of local businesses with their purchases of goods and services off-campus. International students also greatly enrich the cultural diversity of the campus experience and the life of the region.

Another area of HEI activity that should be noted is the attraction of visitors to the UK. The expenditure of HEI business and leisure visitors contributes to the UK economy in the same way as that of students. Regional Tourist Boards in some parts of the UK have referenced the impact of major international conferences attracted by HEIs through the standing and reputation of their academic staff.

C The internationalisation of the University's activities is a key driver for our future development. It is perhaps one of the biggest challenges we face, but it will also be the most rewarding.

Professor Richard B. Davies, Vice-Chancellor



STRATEGIC THEME 2 – BE ONE OF THE UK'S TOP 30 RESEARCH-LED UNIVERSITIES

Vision: By the end of the planning period, the University will be considered one of the top 30 institutions in the UK, and will deliver increasingly world-leading and international quality in our research work.

ACHIEVING OUR VISION

The University has pursued an ambitious programme of growth designed to deliver transformational change, with the first phase focused upon the 2008 Research Assessment Exercise (RAE). The success of the Strategic Direction policies has given the University a vantage point from which to review its structures and strategy.

In the autumn of 2008, the University appointed two Pro-Vice-Chancellors with responsibility for research leadership – Professor Ian Cluckie (STEM subjects, Medicine and Health Science) and Professor Noel Thompson (Arts, Humanities and Social Sciences). They have undertaken a period of intensive engagement with Heads of Schools through the business planning process. Following on from this, five-year rolling School Research Strategies have been articulated and these will both drive change in Schools and inform the research strategy of the University.

The forthcoming Strategy will outline a development programme for the planning period that will maximise the opportunities presented by Swansea's performance in the 2008 RAE. The scale of the University's research activity will be an issue of increasing importance, as external research funding will be a critical metric in assessing the strength of the institution's research environment. Thus, a paper published by the Treasury in April 2009 stated that `the HEFCE will consult later this year on a new REF that will take better account of the impact research

The STEM subjects at Swansea comprise Science, Technology, Engineering, Mathematics and Medicine. They critically form the basis of the drive to expand the University's contribution to the knowledge economy and are the foundation for the development of the new Science and Innovation Campus. Their leading contribution to the Welsh STEM activity was clearly evident in the recent RAE as will be their continuing influence on world-leading research in the coming decades.

Professor Ian Cluckie, Pro-Vice-Chancellor (STEM subjects, Medicine and Health Science)

makes on the economy. Decisions on the REF will be announced later next year and will create incentives for changed behaviour from that point.' In this context, it is the University's ambition to double research income to \$50m by 2012/13.

The University will strive to capture and apply all available sources of funding to develop its research portfolio; including the final round of the European Structural Funds which it will use to build capacity in collaboration with other Welsh HEIs. The University is leading on eleven significant ERDF/ESF Convergence Programme proposals that will foster interdisciplinary collaborative research and generate knowledge and talent flow in areas that have significant potential for making a fundamental contribution to the Welsh economy.

The quality and sustainability of the research base created by such quantum leap developments will be a key concern for the University. Areas supported by Convergence funding must produce research capacity of sufficient quality and visibility to generate work of world-leading and international excellence and lever in additional and sustained external funding from sources such as Europe and the Research Councils.

The further development of multidisciplinary research and collaborative working with external partners are critical to the University's mission and REF performance. A multidisciplinary approach is imperative if we are to address many of the big research challenges of the twenty-first century. In this regard, the University will address a number of priority areas identified by Research Councils as having 'significant potential for delivering economic impact' including:

- Living with Environmental Change
- Ageing: Lifelong Health and Well-being
- Digital Economy
- Nanoscience through Engineering to Application
- Medical diagnostics and therapeutics.

Collaborative research will be further developed in the context of the Science and Innovation Campus; an expansion that will facilitate step-change growth in STEM-related areas. This will directly affect the University's ability to attract large company collaboration and inward investment to the area. Such expansion will also help to meet the challenge of the deficiency in science and technology research across Wales.

The Social Sciences, and Arts and Humanities also have ambitious plans to engage more fully with external end-users. Within the Social Sciences, research centres such as those for Ageing, Criminal Justice and Criminology and the Welsh Economy and Labour Market Evaluation (WELMERC) will develop their links with the public and private sectors and help to shape policy both within Wales and beyond. Here, the proposed creation of a Swansea University-led Policy Institute Wales, to provide an interface between politicians, civil servants, third sector managers and academics, will provide a critical forum for such engagement.

Integral to the brief of a new Research Institute in the Arts and Humanities will be an impact agenda. The delivery of this will ensure a high profile for the University within the cultural, third sector and political communities. The Institute will also provide strategic leadership in promoting collaborative, cross- and post-disciplinary research that will ensure a fuller engagement with the knowledge transfer agenda of the Research Councils.



IMPLEMENTATION

- **T4. Deliver increasingly world-leading** and international quality in our research work, and **T8. Ensure high REF ratings** *The University will:*
- develop a publication strategy informed by key REF metrics
- ensure its research community is fully engaged with the challenges REF will entail
- target research leave to ensure delivery of key publications
- target key researchers in terms of support and incentivisation
- enhance arrangements for the mentoring and monitoring of staff
- address poor research performance supportively through effective performance management.

T5. Encourage interdisciplinary work between Schools and with external partners

The University will:

- identify cross-cutting themes that engage the energies of the institution's research community
- put in place the institutional infrastructure and mechanisms to allow a swift and flexible response to cross-disciplinary research opportunities coming from RCUK and other funding bodies

- allocate University funding selectively to support such activity
- support and encourage the formation of cross-disciplinary research centres
- establish a Research Institute in the Arts and Humanities.

T6. Develop Research Capacity *The University will:*

- target investment, through the Business Planning Process at key strategic areas
- pursue major funding opportunities
- support and encourage the strategic restructuring of Schools where this will increase the capacity for world-leading research
- further expand network bandwidth to support eresearch
- develop a University-wide approach to high performance computing
- complete the £1m Archives refurbishment, to maximise the research opportunities offered by the University's unique collections.

T9. Increase Postgraduate Numbers The University will:

• build upon the University's considerable success in the 2008 RAE

- work with external partners to develop scholarship and studentship opportunities
- ensure that its Schools have proactive postgraduate recruitment strategies
- review the possibility of CPD doctorates
- energetically explore the possibilities of joint PhDs with international partners in China, India, the United States and Europe
- include research studentships in funding bids.

T10. Increase Research Grant Capture *The University will:*

- create a more effective system of incentivising researchers
- set clear REF-related targets in relation to the sector
- promote a more precise targeting of funding opportunities
- exploit the leverage effect of studentships to support funding bids
- meet the collaborative and interdisciplinary agenda that has been mapped out by the RCUK
- improve flexibility and speed of response to thematic funding opportunities
- respond to the knowledge exploitation and transfer agenda of the Research Councils, European and other funding agencies.

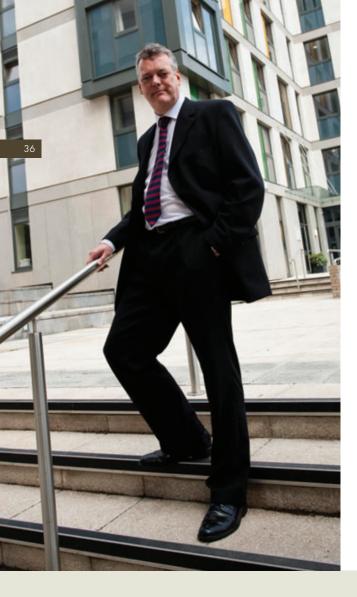


ECONOMIC AND SOCIAL IMPACT

Research informs all other activities at the University and a healthy research culture is pivotal to the future of the institution. By developing the University's research portfolio, attracting and retaining the highest quality researchers and postgraduate students, and working across and between disciplines, Swansea can address the challenges that confront society in the twenty-first century and contribute to the well-being and prosperity of Wales and the world.

Over the past two decades, there has been a growing awareness of the role that universities play in the economy. There is an increasing recognition of the value that may be created through the exploitation of the knowledge these institutions possess. US Research suggests that to act as an effective driver, a minimum 'critical mass' of research activity of c. £50m per annum is necessary to create dynamic clusters of STEM-based 'knowledge economy' companies. This is central to the research strategy of the University and to its ambition to be a powerhouse of the regional economy. This also dictates the vision driving the Science and Innovation Campus concept that structures the 'Bay' development.

The Arts, Humanities and Social Sciences are at the very heart of what it means to be a university: enriching, as they do, our understanding of who and what we are – our culture, society, beliefs, value systems and identity. In Swansea, their research will play a critical role in any constructive engagement with the economic turbulence, cultural tensions, demographic pressures and political instability which represent some of humanity's most significant challenges in the twenty-first century.



STRATEGIC THEME 3 – EQUIP OUR STUDENTS FOR PERSONAL AND PROFESSIONAL ACHIEVEMENT

Vision: Swansea University will provide an outstanding student experience, with teaching of the highest quality, informed by research and professional practice, equipping students for personal and professional achievement.

ACHIEVING OUR VISION

Over the next five years, Swansea University will enhance the quality of its student experience, further develop its strong pedagogic processes, and build on the platform of its longstanding ties with industrial partners, to give our students the experiences necessary to enable them to fulfil their potential. The University will continue to offer students an inclusive environment, engaging students with world-class research and its practical application to nurture the development of high-level skills and employability.

The prospective Open Innovation environment at the proposed Bay Campus will facilitate increased engagement with companies in the mentoring, sponsorship, design and delivery of student learning. It will significantly boost the development of science, technology, engineering and mathematics education, building on the University's strengths as evidenced in employer-led programmes such as the EngD, MRes and MBA. These have demonstrated that postgraduate students play a vital role in developing and sustaining industry-university links that add value to the student experience.

Building on its strengths in learning and teaching, the University will supplement quality assurance with a quality enhancement culture. Quality enhancement will deliver continuous further improvements in the student experience, with the University thinking more widely than just enhancing teaching, by reviewing all areas

Get Our focus on quality enhancement will deliver continuous improvement in the student experience, with the University reviewing teaching and all areas that impact on student learning, including the administrative framework and student support, and seeking the active engagement of students in the review process.

Professor Alan Speight, Pro-Vice-Chancellor (Student Experience and Academic Quality Enhancement)

that impact on student learning, such as the administrative framework and student support.

There are a number of external issues that will impact on the student experience and academic quality that universities will need to understand, forecast and prepare strategies for:

- the launch of 'Y Coleg Ffederal'
- the Assembly Government Transformation Agenda
- the 'Demographic Dip' (the 18–20 year old population to fall by 16% in the UK between 2006 and 2020)
- persistent low participation (in HE) rates in South Wales
- the outcome of the Burgess Review
- the Jones Review (of (i) student finance arrangements in Wales, and (ii) the mission, purpose and role for HE in Wales)
- the English Fees Review.

The University is already well placed to address the challenge presented by the 'Demographic Dip', with strong undergraduate recruitment, an impressive record of widening access, and high levels of student satisfaction. Low participation rates in Wales remain, however, a challenge for the sector as a whole, in seeking to support the One Wales ambition of transforming Wales into a selfconfident and prosperous society that is fair to all.

The University takes seriously its role in contributing towards the regeneration of Wales' unique language and culture. In support of the Welsh Assembly Government's aim of creating a truly bilingual Wales, the University will build further on the considerable progress made in developing Welsh-medium learning opportunities. We will seek to fully engage with 'Y Coleg Ffederal' so as to maximise the emerging opportunities for Welshmedium higher education.

Swansea graduates' employability is already enhanced as, upon graduation, they receive the Diploma Supplement, an internationally recognised description of a student's studies in terms of context, level and learning outcomes. This enables employers and HEIs to gain a full understanding and appreciation of a student's academic achievements.

Other forthcoming student lifecycle development work will underpin the development of proposals to redesign 'administrative' student-facing functions and to inform requirements for an associated student relationship management system. This development will provide improved, integrated and more efficient delivery of student-facing services. The need for redesigning student lifecycle interactions is driven by a number of forces, one of which is the changing student. Learning and support tools across the sector are unfortunately lagging behind lifestyle tools in interacting with these students, and in designing services that recognise that within a diverse student population there will be differential levels of engagement and interaction with digital and related technology. The challenge is to design the optimal services for students in the context of this varied landscape. It will be important to remain 'high touch' retaining the breadth of face to face service provision, whilst becoming more 'high tech' with increased selfaccess information, advice and guidance.

The University has contributed to both parts of the Jones Review of student finance arrangements in Wales, and the mission, purpose and role for Welsh HE, and awaits the resultant developments in Assembly Government policy. The sector will also have to react to the outcome of the review of the cap on English HEIs full-time home undergraduate student fees.

In addition to these external factors, there are also internal issues that will inform the University's development over the next few years. Swansea University is planning to invest heavily in its estate, which will have a significant impact on the quality of our student experience both in terms of the improved academic environment and the involvement of industry, government and other employers in the delivery of learning and teaching. In tandem, the increased internationalisation of the campus experience will result in a more cosmopolitan and culturally enriching environment.

The University will continue to engage fully with our student body through the Students' Union, the Athletic Union and to support the excellent work of Discovery Student Volunteering Swansea.

Executive responsibility within the University Senior Management Team for this strategic theme rests with Professor Alan Speight, Pro-Vice-Chancellor (Student Experience and Academic Quality Enhancement).

IMPLEMENTATION

T11. Deliver teaching of the highest quality

The University will:

- promote and disseminate best practice to enhance the quality of learning and teaching through the establishment of a Swansea Academy of Learning and Teaching
- shift emphasis from quality assurance to quality enhancement
- promote a learning and teaching experience that is research-led and practice-driven
- improve student feedback and enhanced student engagement
- develop a modernised curriculum, with skills and employability support.

T12. Deliver an outstanding student experience The University will:

- review and develop the student lifecycle: first contact, applicant, transition, first year, academic achievement, skills, employability, transition, alumni
- work in partnership with the Higher Education Academy including a benchmarking process looking at current practice in induction, engagement, skills and the use of assessment, at School and subject levels

- increase the level of interaction with students in lifecycle service design projects, with the approaches adopted underpinned by evidence-based research
- target improvement in the first year experience, for example, in the introduction of a pilot Peer-Assisted Study Support programme (PASS)
- become selective in recruitment to trigger a virtuous circle in student performance and recruitment
- review how a high quality student experience in the context of the proposed Science and Innovation Campus and expansion of the existing campus will be assured
- maintain development of our learning, information and ICT facilities
- provide a personalised desktop portal for all students as the starting point for an innovative learning experience
- complete the review of provision for Students with Disabilities
- work with the HEA, as the only Welsh HEI represented on the Disability Awareness project
- continue to increase Welsh-medium learning and placement opportunities for students throughout the University
- work proactively with the Welsh Assembly Government, HEFCW and other HEIs in Wales to ensure the success of the Welsh-medium 'Y Coleg Ffederal'

• promote the benefits of 'Sports Swansea' to students.

T13. Become a selection University The University will:

- increase the application pool, particularly from good quality students, to drive up the quality of intake and improve performance
- overhaul our programme portfolio using market intelligence
- review bursary provision
- develop an increasingly competitive 'student-focused' environment
- channel resources to targeted UG and PG recruitment
- put in place a student relationship management system
- improve the appearance and facilities on the University campus
- increase level of advertising in regional press, student magazines, and online
- develop an electronic marketing/ recruitment strategy.

T14. Enhance student achievement *The University will:*

• seize mobility opportunities from internationalisation

- enhance skills, placement opportunities, and employability
- improve feedback to students
- further enhance e-learning (e-mark).

T7. Enable excellence in research to drive improvement in teaching quality *The University will:*

- further develop Research-Led and Practice-Driven Teaching
- hold a University-wide 'Research and Practice Showcase Week'.

T15. Improve employability of graduates

The University will:

- implement a University Skills Strategy
- increase the delivery of high levels skills in STEM subjects
- continue to develop the international element, particularly student mobility, in curriculum planning
- continue to provide small- and medium-sized enterprises with access to high-calibre students or graduates to work on projects within their business via Go Wales, and Employer Study Partnerships
- develop an Employability Skills Award

 deliver the PebblePad PDP (Personal Development Planning) platform to all students.

T16. Further enhance student participation from all areas of society and in particular from disadvantaged communities in SW Wales The University will:

- continue to lead the South West Wales Reaching Wider Partnership of HEIs, FEIs and school sixth forms
- further improve engagement and support for Widening access.

T17. Increase PGT numbers The University will:

- consider the establishment of a Graduate School to support taught and research postgraduate students (to include MRes)
- review PGT Programme portfolio including CPD content and stepping off points
- investigate the development of Professional Doctorates
- investigate the development of Joint Doctorates and International Masters' Degrees
- further develop the availability of flexible and distributed learning.

ECONOMIC AND SOCIAL IMPACT

The education the University delivers has a significant effect beyond the development of students' skills. It profoundly impacts on their life chances in a number of ways that support the Assembly Government's One Wales agenda.

The University strives to widen access, building on a strong track record. Studies suggest HE participation increases the propensity to vote and has a positive impact on civic participation. Children of university-educated parents are more likely to achieve a HE-level education, have higher levels of cognitive development, and have higher future earnings, creating a virtuous cycle of improved economic and social welfare. Better health and lower teenage pregnancy rates are also related to HE attainment. Swansea University aims to imbue its students with the practical experience, and critical and analytical skills necessary to promote the goals and values of the knowledge society – democratic governance, civic responsibility, economic prosperity and public service.

Students greatly enrich cultural diversity, sport and performance arts in the region. Discovery, a student-led organisation, coordinates hundreds of student volunteers in around 20 studentrun community-based projects. It tackles social isolation and poverty through working with children from disadvantaged backgrounds, working with children and adults with disabilities and learning difficulties, and providing companionship and practical help for older persons. An understanding of issues, such as disability, homelessness, special needs and cultural awareness are an important enhancement to personal development and academic studies.

There is an increasing need for well-rounded, highly skilled and educated workers who can develop the industries of the future. The University will work directly with employers in seeking to meet their skills needs. These skills are essential to the growth in the desired – high value-added – areas of businesses that will bring increased prosperity to Wales.

STRATEGIC THEME 4 – BE A POWERHOUSE FOR GROWTH IN THE REGIONAL ECONOMY

Vision: The University will be the first genuinely twenty-first century University, working in partnership with government and business to create a centre of knowledge economy growth which will make a major contribution to the educational and economic life of Wales.

ACHIEVING OUR VISION

Swansea has struggled to shed the legacies of its industrial past. In a recent research report prepared by the National Endowment for Science, Technology and the Arts (NESTA), Swansea was described as a 'lagging region' in innovation terms and on standard innovation measures within the bottom decile of all the city regions in the UK (History Matters. Path dependence and innovation in British city-regions. July 2008). The Swansea legacy is that of an old, locked-in economy, with branch plant status that has so often in the past limited the development of industry within the region to essentially a one product life span.

As a response, and especially at a time of financial turbulence, the challenge for policymakers is to devise and embrace strategies that are sufficiently large in scale and scope. The Assembly Government Vision for Swansea Bay, as 'an area of planned sustainable growth and environmental improvement, realising its potential [..] and spreading prosperity to support the revitalisation of West Wales', is outlined in the Wales Spatial Plan. This resonates with the local authority's 'Swansea 2020 Economic Regeneration Strategy' which wants the City by 2020 to be 'Wales' leading centre for the knowledge economy, recognised for its adoption of innovation, and anticipation of market and technology change.'

The NESTA research report, *The Connected University* (2009), states that Universities are: 'a locus for coordinating local activity, benefiting local firms both through the informal exchange of knowledge and expertise, and by offering an anchor around which regional clusters can form. The academic literature suggests that collaboration between businesses and universities is associated with improved business performance across a range of indicators, including new market entrance and increased market share; production of an

The intention of this Knowledge Economy Strategy is to progress beyond the usual piecemeal HE engagements in knowledge transfer to a holistic approach with greater strategic focus and ambition, with Swansea University becoming a European exemplar of HE driving the development of a modern knowledge economy.

Professor Richard B. Davies, Vice-Chancellor

increased range of goods or services; producing higher quality goods or services; and generating higher value added.'

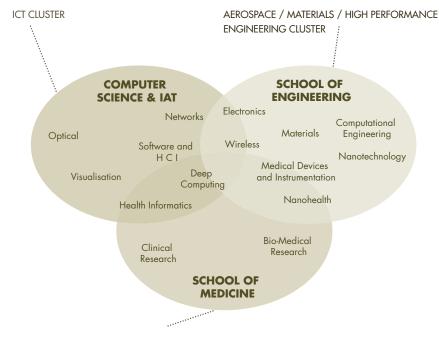
Swansea University has a responsibility as the sole organisation that can lead the development of a knowledge economy in South West Wales. The University's strategy is to work in partnership with business, government, and other educational institutions to achieve this.

Consistent with the ambitions of the Swansea 2020 Strategy and the Spatial Plan Vision for Swansea Bay, the University has developed a Knowledge Economy Strategy designed specifically to support the creation of high-technology clusters in the region, linking them in to the University's research strengths, particularly in STEM, as evidenced in the 2008 RAE.

In discussing the role of a University in the regional economy, The Connected University (2009) notes that: '[The] commercial university model has helped promising clusters emerge more widely. More recently, universities have been casting their attention even more broadly, thinking not just about the formal transfer of intellectual property to industry, but also their role in building clusters, connecting to the national and international economies and bringing together thinking, practice, and finance. This model of the 'connected university' holds the key to further economic growth. Swansea University will become a powerhouse for the knowledge economy in the region, using its research and its strong collaborations with industry to create and grow industrial clusters. The University places particular emphasis upon applied research in three broad academic areas selected because of their relevance to industrial R&D and their potential for supporting cluster development of high-tech companies: Engineering (particularly Aerospace and Materials); Computer Science and Telecommunications: and Medicine. These areas are linked by modern multidisciplinary themes, including nanoscience and advanced computational expertise. It is estimated that 75% of industrial R&D in the UK is in industrial sectors that link directly to these three areas.

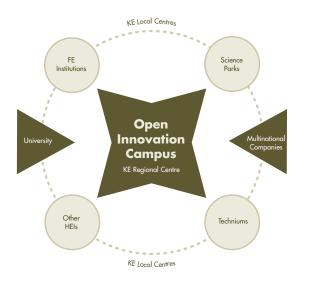
Universities are influential network builders and have a powerful second-order effect in knowledge exchange between firms, by virtue of their role as anchors for clusters of innovative businesses. There is strong evidence from elsewhere that, where leading academic expertise exists, knowledge intensive companies will co-locate their activities regardless of other market location factors. The EADS facility at Innovation Works, Newport is an example of this phenomenon.

Strong, research-led universities support wealth-creating activities and can be major drivers for economic regeneration, but this requires both high-quality and large-scale STEM activity – volume and quality will directly affect the ability to attract large company inward investment to the area.



LIFE SCIENCE / PHARMACEUTICAL / MEDICAL INSTRUMENTATION CLUSTER

Evidence from North America and the UK suggests that the minimum scale for a university to have a significant effect in cluster development is a research turnover of about £50m per annum. Campus expansion, in this sense, is critical both to realising the Knowledge Economy Strategy for the Spatial Plan area and also to building the Welsh knowledge economy base.



A new Science and Innovation Campus is at the heart of the University's strategy to deliver its knowledge economy vision for South West Wales. This will be based upon the Open Innovation concept that assumes enterprises can and should use external ideas as well as internal ideas, and internal and external paths to market, to discover and realise innovative opportunities, through this the University seeks to promote a dynamic interplay between complementary innovators. An Open Innovation environment is already maturing at the Singleton Park Campus, as exemplified by the Institute of Life Science, which houses the Alliance Boots Global Innovation Centre. It is planned that the Singleton Park Campus will develop further as a research and innovation hub for the 'medico' cluster with a discrete emphasis and focus for Life Science high-technology companies. These developments will centre around the expanding School of Medicine and will be undertaken in partnership with the University-linked NHS Trusts.

The proposed Bay Campus will facilitate the growth of the Engineering and ICT high-technology clusters in the region. It will provide an intensive, open-innovation environment by inter-mingling industrial R&D, academic research, and postgraduate and undergraduate students. The academic mix for the Bay has not been decided but may include Engineering, Computing and Telecommunications together with the School of Business and Economics. The development of this Campus will allow the University to build upon its already strong collaborations with industrial partners including BAE Systems, Corus, IBM and Rolls-Royce.

Executive responsibility within the University Senior Management Team for this strategic theme rests with the Vice-Chancellor, Professor Richard B. Davies.

By removing the boundaries between industry and academia, which restrict the traditional science park model, we are proposing radical new approaches to the provision of research and development, education and skills to help drive economic regeneration for the benefit of the whole South West Wales Region.

Professor Richard B. Davies, Vice-Chancellor

IMPLEMENTATION

T18. Develop and implement a coherent Knowledge Economy Strategy The University will:

- further develop its Knowledge Economy Strategy, working with government and business
- contribute to national policy formation in respect of social and economic development, technology transfer, cultural, and industry-HE links
- increase the flow of new high growth, high technology businesses into regional Techniums
- continue to work with partner HEIs to align Third Mission activity within the Swansea and Western Valleys, and Pembrokeshire Spatial Plan areas.

T19. Develop the IP commercialisation pipeline *The University will:*

- vigorously pursue commercial opportunities from its research portfolio
- continue to develop its IP commercialisation, technology/ knowledge transfer and industrially sponsored research activities
- implement the new IP Policy, which makes it easier for all parties to see how the commercialisation activity flows

- restructure its commercialisation support in order to increase efficiency and timeliness
- establish an Investment Panel to assist with commercialisation decisions and attract external venture funding
- produce a register detailing opportunities at various stages of commercialisation
- assist businesses with the 'backoffice' support necessary to facilitate the marketing of their products.

T20. Create and grow industrial clusters *The University will:*

- continue to build the 'medico' and other clusters from the Singleton Park Campus
- develop existing links of social sciences with policy-makers, practitioners and business through themes such as ageing
- build on existing strengths to develop the Engineering cluster from the Bay Campus
- build on existing strengths to develop the ICT cluster from the Bay Campus.

T21. Diversify income through knowledge transfer activities *The University will:*

- match an increasing proportion of knowledge holders within the organisation with external business needs
- maintain a culture of entrepreneurship with continued specialist support to students and staff
- consider, where appropriate, the knowledge transfer abilities of staff when making appointments
- design incentives and rewards to encourage knowledge holders to share their information
- design sharing mechanisms to facilitate the transfer
- continue to measure knowledge transfer activities to ensure they are successful
- work with businesses to ensure that they can apply the knowledge transferred.

ECONOMIC AND SOCIAL IMPACT

The University's strategy is timely. The Connected University notes that: 'The importance of translating our research excellence into economic reality has been brought into sharp focus by the financial crisis and the ensuing global recession. At a national level, the recession makes urgent the need to find new sources of economic activity to [...] drive future growth.'

The University's vision for the region's knowledge economy will deliver a fusion of economic, educational and community growth and regeneration. It will encompass radical new approaches to the provision of education and skills across the age ranges; employer/industry interaction within vocational learning, applied research and commercialisation of intellectual property; generation of international inward investment, and SME creation within the knowledge economy. In turn, it will transform the community it serves by delivering sustainable wealth creation, world-class educational opportunities, and an excellent lifestyle and environment.

This vision is informed by a partnership between BP, Swansea University, the Welsh Assembly Government, Neath Port Talbot County Borough Council, the City and County of Swansea, the academic/education sector in Wales, and multinational enterprises.



STRATEGIC ENABLER 1 – FINANCIAL SUSTAINABILITY

Vision: The University will manage the realignment of resources with strategic priorities to ensure we achieve a balance between investment in our strategy and our financial sustainability.

ACHIEVING OUR VISION

Swansea University's financial strategy over the last five years has been informed by the Strategic Direction Policies. As part of this, the University planned and operated three years of financial deficit to strengthen it prior to the 2008 RAE. This strategy has proved successful as demonstrated by our improved results in the RAE and, following this, by the University's increased allocation from the HEFCW Quality Research funding in academic year 2009/10. Other financial benefits have also been realised - our research income has increased from 12.5m in 2002/03 to 25m in 2007/08 and income from overseas students has also increased from \$5.2m in 2002/03 to \$8.3m in 2007/08. This successful differentiation of our income has reduced our dependency on the HEFCW grant from 40% in 2002/03 to 32% in 2007/08; joint lowest in the Welsh Higher Education Sector.

This strategy of investing in the human capacity of the University at the expense of the physical capacity is recognised as unsustainable in the longer term. This is especially the case as other HEIs in the UK are now investing heavily in their estate with an obvious impact on Swansea's ability to compete in this market. The University's current financial strategy is move to a bottom line surplus position of 3% of total gross income by 2009/10 and to sustain this throughout the planning period. This will improve our level of reserves and so:

- make the University more financially robust and able to take on 'shocks' when they occur
- enable the University to fund capital investment in the estate and infrastructure.

Financial sustainability is central to achieving our strategic vision for the University, we will ensure additional resources are prioritised to build areas of academic strength, and generate the level of financial contribution necessary to maintain support services and reinvest in the estate and infrastructure.

As part of this strategy, the University will continue to improve the alignment of resources with strategic priorities during the planning period through the business planning process. Investment will be focused on building areas of academic strength with the aim of creating academically and financially strong Academic Schools that are able to generate the level of financial contribution necessary to cover central support service costs and to return a surplus for reinvestment in the estate and infrastructure.

The University will continue to differentiate its income and reduce its dependency on HEFCW grant. Research grant income is targeted to double to \$50m by 2013 and with strong overseas recruitment anticipated, supported by our affiliated college ICWS, overseas income is estimated to grow to \$19.8m by 2013.

The University's strategy for the next five years includes plans for major capital investment in the University's estate. An ambitious proposal to create a Science and Innovation Campus at Fabian Way and to redevelop the Singleton Park Campus is currently under appraisal. The proposed Campus at the Bay is conceived as increasing the capacity and quality of STEM research as well as growing student numbers within these disciplines. To this end additional funded student numbers, primarily in these disciplines, are being sought. This represents a strategic investment to 'ensure that higher level skills are available which meet the future needs of the economy' (A Wales that Works, First Annual Report, April 2009, Wales Employment and Skills Board).

This key strategic enabler is the responsibility of the Director of Finance, Phil Gough.

IMPLEMENTATION

F1. Achieve a University surplus of 3% of turnover The University will:

- maintain effective financial administration and stewardship
- provide effective financial support and advise to managers in their operational roles and in particular in the development of operational plans
- ensure reasonable targets are established for the level of Academic School financial contribution within the Business Planning Process
- ensure that financial risks are effectively managed and that adequate contingencies are included in the University's Financial Forecasts to cover risk.

F2. Manage the re-alignment of resources with strategic priorities *The University will:*

- put financial sustainability at the centre of any investment decisions
- clearly establish key strategic priorities
- continually develop and improve the Business Planning Process
- look to maximise opportunities for external funding.

F3. Grow Research Income *The University will:*

- invest increased HEFCW QR funding strategically to ensure increased research grant leverage
- pursue major external funding opportunities
- implement a research incentivisation scheme linked to individual performance in research grant capture
- see T10 for further points.

F4. Secure additional HEFCW funded FTEs to underpin expansion in key strategic areas The University will:

- target existing resources to support strong performance in STEM areas
- develop platform for evidence-based expansion in STEM areas, in particular Engineering
- develop final business case to include impact

 benefits to the South West Wales region
 and Wales that would accrue from increased
 HEFCW funding.

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Vision: We will build strong strategic partnerships that will support the development of Swansea University as a twenty-first century University that is competitive within the UK and global higher education marketplace and is capable of fulfilling our mission as an agent for change within Wales.

ACHIEVING OUR VISION

The University's ambitious strategic vision has not been developed in isolation. It has been informed by an understanding of the environment we inhabit both regionally in Wales through active engagement with emerging Assembly Government policy and globally through teaching and research collaborations with partners across the world. The University has significantly improved its research performance over the last five years as demonstrated by our improved results in the 2008 RAE, whilst maintaining the quality of its teaching and student experience. This has established its credibility in the UK and global higher education marketplace. The University strategy for the next five years is to build upon these strengths to become the prime driver of knowledge economy growth and make a major contribution to the educational, economic and cultural life of Wales. The challenge for the University, in short, is full regional engagement, whilst at the same time, acting globally.

The University's ambitions are fully aligned with the strategic agenda of the Assembly Government and the priorities established by the Minister for Children, Education, Lifelong Learning and Skills for EU Structural Fund investments. The University is already active in the cross-cutting themes identified – Digital Economy, Low Carbon Economy, Health and Biosciences and Advanced Engineering and Manufacturing – and will target ERDF and ESF funds to promote R&D, innovation and skills in these areas and to increase the University's globally competitive research base in order to secure other sustainable sources of external funding.

Strategic implementation will be a major challenge for the University that cannot be delivered in isolation. Central to the University strategy is the groundbreaking vision to create a new world-leading research, innovation and educational hub at Fabian Way and to redevelop the Singleton Park Campus. This vision has emerged from a partnership between BP, Swansea University, the Welsh Assembly Government, Neath Port Talbot County Borough Council and the City and County of Swansea. This dynamic regional public private partnership is central to the delivery of the South West Wales Spatial Plan and the objective of delivering knowledge economy growth in the region.

The vision is supported by the University's strong track record in working with industry and will build upon existing collaborations with major international knowledge economy companies that include Rolls-Royce, BAE Systems, Corus, IBM and Alliance Boots. This strategic collaboration with industry will span research, curriculum development and skills training.

As the pace of change accelerates, so the core values of the University become increasingly important both in supporting its strategic vision and in the managing and marketing of our brand and reputation. The University has a positive and progressive image deriving from its history; its unique location; its sustained relationship with industry and its well-deserved reputation for research and learning excellence. We must build on this to differentiate ourselves in an increasingly competitive international HE environment. A carefully structured reputation management strategy which has these elements at its core is therefore of critical importance.

Executive responsibility within the University Senior Management Team for this strategic theme rests with Professor Iwan Davies, Pro-Vice-Chancellor (Internationalisation and External Affairs). An opportunity has been created to really stimulate the knowledge economy in Wales. All partners are committed to working to deliver the Innovation Campus.

David Toman, BP

The Innovation Campus will bring a massive boost to national and local government aspirations to transform South West Wales into a region with a knowledge economy as its powerhouse for progress in the 21st Century.

> Councillor Alun Thomas, Leader, Neath Port Talbot Council

IMPLEMENTATION

E1. Promote University externally The University will:

- critically review and manage key stakeholders
- ensure membership of key forums, networks and associations
- continually monitor and respond to the external environment.

E2. Manage the University reputation and brand The University will:

- review the University's branding
- develop and implement a core values programme
- deliver cross-organisational strategic marketing management
- manage global marketing of University/campus developments.

E3. Provide leadership in delivering Assembly Government agenda The University will:

- further develop our relationship with the Assembly Government
- input to/influence Assembly Government Policy

- deliver strategy that addresses priorities in:
- One Wales
- Skills agenda FE/HE collaboration with industry via the STEM Academy
- South West Wales Spatial Plan
- Economic development attracting MNEs and SMEs to the region and creating industry clusters
- Graduate employability
- Science Policy recruit increased STEM students and create substantial STEM clusters in the region
- HE Recruitment attract increased graduates to Wales as a result of the unique open innovation experience at Swansea University
- Reconfiguration and collaboration –
 Bay Campus will act as a hub for HEIs in Wales and potentially further
- Swansea 2020 vision of Swansea as 'Wales' leading centre for the knowledge economy'
- Reaching higher FE/HE progression routes, facilitated by industry
- 'Y Coleg Ffederal'.

E4. Refine and deliver two campus estates strategy The University will:

• develop complementary business and master plans for both the Singleton Park and the Science and Innovation Campus deliver academic expansion to create significant additional student places in Science, Technology, Engineering and Mathematics to meet demand

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• deliver an enhanced student experience as part of the developments on both campuses.

E5. Deliver on the Welsh European Funding Office objectives for the EU Structural Funds Programme The University will:

- successfully deliver projects that will provide real economic benefit to Wales and contribute to the Welsh Assembly Government's wider policy objectives
- use funding to focus on key strategic priority areas supported by multidisciplinary working across campus
- support and monitor research groupings to deliver sufficient level of successful applications for UK-wide and European sources of external funding to ensure sustainability.

E6. Build strong strategic partnerships that add significant value The University will:

• build strategic partnerships and multidimensional relationships with key stakeholder groups.



STRATEGIC ENABLER 3 - BUILDING COMMON PURPOSE

Vision: The contribution of our staff is critical to our success. We must work together to manage the way forward and implement our strategic vision for the University.

ACHIEVING OUR VISION

The Strategic Plan describes the vision of the future Swansea University. Successful implementation of this vision demands continuous improvement in leadership and management at all levels in the University. The Senior Management Team will be actively engaged with staff to develop ownership of the strategy and to deliver its effective implementation.

We must take full advantage of the extensive experience and expertise of staff at all levels in developing and delivering continuously improving performance. Our people are our key asset, and the University always seeks to attract and retain high quality staff, and will reward good performance. The University will provide an inclusive institutional culture through effective equality and diversity policies and initiatives. Clear and consistent two-way communication is essential if we are to achieve the necessary level of commitment and buy-in from our stakeholders and our staff. We will build a clear sense of collegiality through the development and implementation of an internal communication strategy.

The University Strategy Map has been developed to support the communication of our vision and strategic objectives and to illustrate the policy challenges that will need to be addressed in order to effect its implementation during the planning period. The Map is being used to inform the development of Business Plans, and the University will continuously review and improve its planning processes based on lessons learned each year.

The Planning and Strategic Projects Unit, using a structured matrix management approach, will bring

We are committed to an ambitious programme of change in an uncertain environment. Delivering success will depend in large measure on our ability to work together in realising our shared vision for the University. together key people from across the University to establish visible leadership for each of the strategic theme areas and to ensure there is clear responsibility and accountability in place for the various associated tasks and projects. Although international in its outlook, the University's roots mean that staff can feel at ease using either the Welsh or the English language.

Executive responsibility within the University Senior Management Team for this strategic theme rests with the Registrar and Head of Administration, Raymond Ciborowski.

IMPLEMENTATION

CP1. Ensure effective communication and the ownership of values and strategy at all levels in the University The University will:

- establish and implement a coherent internal communication strategy and achieve awareness of our strategy and values amongst our staff
- establish clear relationships between senior level management groups.

CP2. Develop a culture of empowerment, responsibility and accountability *The University will:*

- clarify institutional and local decision-making boundaries
- improve reporting to Council and other key committees
- work towards a thinner rulebook with tighter compliance.

CP3. Enhance University middle management *The University will:*

• develop and support Academic School and Central Administrative management performance.

CP4. Further enhance the Academic School Business Planning Process The University will:

- identify and implement lessons from the 2009 business planning cycle
- develop monitoring and reporting of progress against targets estaablished within business plans
- ensure early engagement in the 2010/11 academic year.

CP5. Develop a cross-cutting planning process for the Central Administration The University will:

 establish a model of matrix management aligned to the Strategy Map

- establish a single statement of resourcing priorities for the Administration aligned to delivery of strategic priorities
- fully embed the new Planning and Strategic Projects Unit.

CP6. Attract and retain high quality staff The University will:

- reward good performance
- demand high academic standards
- proactively recruit to key posts
- develop and implement effective equality and diversity policies and initiatives.

CP7. Enhance performance management processes *The University will:*

• work to improve implementation of performance management policy and procedures

- ensure early and consistent engagement with any areas of underperformance
- develop management competence and confidence in managing poor performance.

CP8. Promoting the Welsh Language Scheme and enhancing the culture of bilingualism The University will:

- update its Welsh Language Scheme to reflect its increasing commitment to bilingualism, and improve communication throughout the University to ensure effective implementation
- develop a Bilingual Skills Strategy in order to maximise the opportunities for members of the University to use the Welsh language
- strengthen the University's image in Wales as a bilingual institution.

Vision: The University will have fit for purpose business processes that consistently deliver value for money outcomes.

ACHIEVING THE VISION

Academic provision is currently delivered through ten Schools – Engineering, Physical Science, Environment and Society, Medicine, Health Science, Human Science, Business and Economics, Law, Humanities and Arts – and the Department of Adult Continuing Education. This structure is in transition with merger between Schools likely to take effect in 2009/10.

The University is centrally administered through a number of Directorates reporting directly to the Registrar and Head of Administration. The Directors operate as a team to address both current business operations and how the Administration can best support the major change management programmes captured in the Strategy Map. The next phase of the University's strategic transformation demands a coherent approach to secure improvement in the efficiency and effectiveness of our administrative business processes underpinned by the enhanced use of ICT. We also need to achieve optimal use of resources by securing the most effective division of central and local administrative tasks.

The newly established Planning and Strategic Projects Unit will facilitate a structured programme management approach to delivering change, supporting the members of the Senior Management Team with the specific agendas on which they lead. In taking forward this ambitious agenda for change, the University will review and further strengthen its project management and risk management processes. This strategic theme area, a key enabler for the achievement of strategic objectives is under the executive responsibility of the Registrar and Head of Administration, Raymond Ciborowski.

There is no place for complacency in our approach to tackling the stubborn issues that lie ahead. Our internal systems will have to help us to get the job done and consistently demonstrate value for money in the process.

IMPLEMENTATION

Ensure all academic areas are large enough to be robust and sustainable

The University will:

• support proposals for the merger of Schools where these will enhance academic development.

12. Ensure an effective and efficient division of labour between Schools and the centre *The University will:*

- realise opportunities for efficiency gains arising from the probable mergers of Schools
- develop a 'what works best' approach ensuring both clear central direction and local sensitivity
- position administration as a suite of professional services focused on supporting Schools' implementation of the University's mission.

I3.Enhanced use of ICT to underpin our business processes

The University will:

- develop an Information Strategy, to ensure a coherent approach to information content, processes and delivery
- provide a personalised desktop portal for all staff to improve information delivery and business processes
- strengthen shared platforms and services between Library & Information Services and the Administrative Computing Unit
- prioritise resource investment to support strategic development.
- 14. Further develop decision approval and test and challenge processes The University will:
- develop an enhanced programme management approach to coordinate, direct and oversee implementation of projects and

activities crucial to the achievement of the University's strategic objectives

- strengthen and embed project management and risk management processes
- develop performance management processes to include a suite of University performance targets linked to strategic themes in the Strategy Map.

I5. Deliver South West Wales Higher Education Partnership (SWWHEP) Outcomes *The University will:*

- keep the project focused on agreed outputs
- develop an exit strategy, for some areas, as appropriate, to ensure service improvements delivered by the project are sustained
- develop an outline for possible SWWHEP phase 2 bid
- explore further collaboration with universities in Wales to improve services and to reduce costs.

I6. Secure effective strategy and management arrangements for sporting facilities The University will:

- continue discussions with the City and County of Swansea in relation to a possible single management structure for the Welsh National Pool Swansea and the University's sporting facilities
- continue discussions with Sports Council Wales to consider how mutual benefit can be derived from helping to deliver the Welsh Assembly's objectives for sport
- develop the synergistic relationship between elite sport and the University's sports science expertise
- formulate a coherent and costed University sports strategy.

52 THE WAY FORWARD –

IMPLEMENTING THE UNIVERSITY'S CHANGE AGENDA

Members of the Senior Management Team will seek to implement change in the strategic theme areas for which they are responsible and deliver the University's ambitious vision through the development of rolling Annual Implementation Plans. Implementation Plans will be developed in conjunction with key managers and staff across Academic Schools and Administrative Departments through a matrix-management approach that will help to promote understanding and establish clear ownership and responsibility for the tasks and projects involved and for the realisation of related benefits. These plans will include SMART performance targets, benchmarked, wherever possible, against best practice in the UK Higher Education Sector against which performance can be monitored and reported to University management groups, committees and Council. The operational planning process will also seek to identify and manage high impact risks and issues.





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