

Review of Higher Education Provision in North East Wales

Advice to the Minister for
Education and Skills

June 2013

Contents

Foreword	1
1. Executive Summary	2
2. Context	13
3. Our Approach	16
4. Profile of North East Wales	18
5. What North East Wales Needs	59
6. How Does Current Provision in North East Wales Measure Up?	83
7. Important Considerations	105
8. Options and Recommendations	109
Annex A: Details of Review Panel Members	126
Annex B: Stakeholder Engagement List	127
Annex C: Additional Evidence List	130
Annex D: Universities and Further Education Colleges Location Map	137
Annex E: Additional Profile Data – North East Wales	138

Foreword

In February 2012 we were asked by former Minister, Leighton Andrews, to review the provision of higher education in North East Wales. This is the final report arising from the review. In the course of our work we have spoken with more than 160 stakeholders and examined over one hundred items of other evidence.

The Review Panel members¹ have, without exception, brought dedication and an analytical and independent approach to the task in hand. We in turn have much appreciated the respect shown to our independence; we have not been under pressure to recommend any particular solution.

Our conclusions are unanimous. Our vision is one of substantial ambition for higher education in North East Wales and for what it can do for the region into the future. In searching for ways of achieving that vision we assessed a wide range of possible options. We recommend a preferred and a "reserve" way forward. Both would involve structural models not found (to our knowledge) elsewhere in the UK. To this extent we could be seen to have been somewhat radical in our thinking, but stakeholders overwhelmingly rejected the status quo as an option and many argued that change had to be "hard-wired" if it was to have a chance of success. Such possibilities are not abundant. We recognise that there is significant work to be done on how best to bring our suggestions to fruition, but there are appropriate models around the world of how things can be done – in the case of our wider, slightly longer term proposal there are models available in the UK.

There can be no doubt that any satisfactory way forward will require an expansive mental framework and an avoidance of merely sectional interests. We hope all parties will recognise this and make our vision possible. If not, we are clear that the learners and employers in the region will not be as well served as they could be and this could be detrimental to the region's future.

Professor Sir Adrian Webb
Review Panel Chair

¹ Details of Review Panel members can be found at Annex A.

1. Executive Summary

1.1 Background

*For our Future*², the Welsh Government's higher education (HE) strategy and plan for Wales, published in 2009 identified the need for radical change in the shape, structure and provision of HE in Wales.

In 2010, the Welsh Assembly endorsed the Higher Education Funding Council Wales' (HEFCW) Corporate Strategy for 2010-11 to 2012-13³. This outlined plans for 75 per cent of HE Institutions in Wales to have an annual income above the UK median and none within the lower quartile, by 2013.

In 2011, in its advice to the then Minister for Education and Skills on the *Future Structure of Universities in Wales*⁴, HEFCW recommended changes to the current structure of HE provision in North East (NE) Wales, advising that Glyndŵr University should develop strong structural relationships with a range of further education (FE) colleges within a group structure led by Aberystwyth and Bangor Universities.

The Minister rejected HEFCW's advice with regard to Glyndŵr, on the basis that there appeared to be a case for considering more closely the existing pattern of provision in NE Wales and for examining further the options for securing greater regional coherence in the delivery of further and higher education.

We were appointed as an expert Review Panel in February 2012 to undertake the *Review of Higher Education Provision in North East Wales* and to advise the Minister on what form of HE will best serve the economic, social and learner needs of the region.

1.2 Our Approach

The Review Panel approached its work with an open mind and did not begin with any notions of structural change, but with the questions "What does NE Wales need of HE?" and "What should the goals and desired outcome be?"

This immediately raised the question of whether a HE presence was needed at all in NE Wales as the region is served by a number of strong and well regarded HE Institutions in North West (NW) England and it has a relatively small population base. The Review Panel quickly concluded that the region needs a strong HE presence.

² A copy of *For Our Future – The 21st Century Higher Education Strategy and Plan for Wales* can be found at: <http://wales.gov.uk/topics/educationandskills/publications/guidance/forourfuture/?lang=en> .

³ A copy of HEFCW's Corporate Strategy for 2010-11 to 2012-13 can be found at: http://www.hefcw.ac.uk/publications/corporate_documents/corporate_strategy.aspx .

⁴ A copy of HEFCW's report on *The Future Structure of Universities in Wales* can be found at: <http://wales.gov.uk/consultations/education/heinwales/?lang=en> .

During the period of the review, responses to the earlier stakeholder engagement exercise on the *Future Structure of Higher Education in Wales* were revisited. The Review Panel also undertook an extensive stakeholder engagement exercise. By the end of the review over 160 stakeholder interviews had been carried out including those with education, local authority, political, employer and industry representatives. Alongside this, the Review Panel considered over one hundred individual items of data and research information.

In reaching our conclusions, we have drawn on the stakeholder contributions and the wider evidence base.

1.3 Profile of the Region

The population of the region, at just over 381,000, is not large, is quite substantially rural or semi-rural, but with a concentration of comparatively small urban centres in the eastern corridor. Whilst the overall population is projected to increase, the 16-24 and working age population is projected to decline over the next 5, 10 and 20 years.

Overall deprivation in the region is below the Welsh average. Nevertheless the region plays host to some of the most deprived areas in Wales. This includes the most deprived area (Rhyl West 2).

Employment rates in NE Wales are above, and unemployment rates are below the Welsh and UK averages. Gross Value Added and Gross Disposable Household Income for the region as a whole are above the Welsh average and below the UK average.

The NE Wales economy is an important driver of the Welsh economy as a whole and is diverse, but with a major concentration by UK standards of advanced manufacturing in Flintshire and to a lesser extent in Wrexham.

Few of the major manufacturing companies have their headquarters based in the region. There is a widespread view amongst stakeholders that this leaves the region vulnerable as decisions about the future of these businesses are likely to be taken outside the region.

The proportion of people with their highest skill at Level 3 has consistently been at or above the Welsh average; the proportion with their highest skill level at 4 and above is below the Welsh average, despite improvement in recent years.

Projected occupational trends suggest a growing demand for higher level skills, including in the professions and management.

Taken together, these skills data suggest a possible skills gap, and growing demand, at graduate and possibly postgraduate levels. This is not borne out by recent employer survey data, but these data may mask skills shortages at the highest levels in advanced manufacturing (see Chapter 5) as well as reflect the wider economic downturn. There will be replacement demand at all skills levels in the foreseeable future.

NE Wales is very well served by established HE and FE institutions based in the region and across the border in NW England and in NW Wales.

Of the 9,551 HE enrolments⁵ in the region in 2011/12, 3,896 were full-time HE enrolments and 5,655 part-time; full-time enrolments were largely at first degree level, part-time largely at sub-degree level.

Glyndŵr University is by far the largest provider of HE in the region. In 2011/12, there were 7,578 enrolments at Glyndŵr's campuses in NE Wales – excluding franchised provision – (79 per cent of all HE delivered in the region). This included 3,460 undergraduate first degree enrolments, 3,121 sub-degree enrolments and 997 postgraduate enrolments. Glyndŵr's total student population, including franchised provision and those studying at campuses outside of NE Wales was 9,535 of which 4,055 were from overseas.⁶

The Open University (OU) was the second largest provider of HE in the region in 2011/12 with 1,132 learners (12 per cent) enrolled on distance learning courses.

475 learners were enrolled on franchised HE in FE courses with Yale College, Deeside College and Grŵp Llandrillo Menai.

There is a general shortage of undergraduate provision delivered in NE Wales and a number of quite prominent subject gaps, although many of these are catered for by other HE institutions in North and Mid Wales and by the nearby University of Chester.

Glyndŵr University is primarily involved in applied research activity. It possesses high quality research capacity in a small number of areas. Its research activity is relatively small in scale.

In terms of turnover and student population levels, Glyndŵr University is small in scale compared with comparator and neighbouring HE institutions. With a turnover of £48.3m in 2011/12 the university was in the lower quartile of income⁷ for UK HEIs.

Glyndŵr told us that HEFCW had discriminated against them in grant funding allocations this year, but we could not identify any evidence of this.

In terms of HE sector quality and performance indicators, the latest available Quality Assurance Agency (QAA) report for Glyndŵr University stated that 'confidence can be placed in the soundness of Glyndŵr's current and future management of the quality of its academic programmes and the academic standards of its awards'. Similar statements of confidence have been made by QAA with respect to competitor universities in NW England and NW Wales.

The overall quality of the student experience at Glyndŵr University, as defined by the National Student Survey for 2012 is just below the UK performance indicator benchmark.

⁵ HESA standard registration population has been used for enrolments and includes all modes and levels.

⁶ Overseas students include non UK European Union students and non European Union students.

⁷ Based on 2010/11 quartile analysis. Equivalent analysis for 2011/12 was not available at the time of writing.

In terms of overall university league table rankings, Glyndŵr University appears at a relatively low position in all UK university league tables and there has been some deterioration in the university's ranking across several of the tables in the last year. Glyndŵr has consistently performed very well in terms of graduate employability.

UCAS applications and acceptances data suggest that Glyndŵr University has benefited from acquiring university status in terms of overall number of applications, but that it is less popular than comparator universities in Wales and neighbouring HE institutions in NW England. The large drop in UCAS acceptances this past year reveals that it receives relatively few first choice applications.

For the region as a whole, participation in full-time HE has improved over recent years and is above, though part-time participation is below, the national average.

There is no evidence of full-time learners lacking choice of university despite a relatively limited scale of provision delivered in the region. However, locally available HE is important to non mobile students (including part-time study) and employers strongly argue that studying locally is likely to increase the flow into the local economy – especially of high achievers.

There is a large net outflow of full-time HE students from the region; much of this outflow is to universities in NW England. The outflow is of high achievers and students from low participation neighbourhoods as well as students as a whole.

Overseas students offset the net outflow of UK HE students, but it is not known whether this also offsets any impact on the labour market from the outflow of UK students.

From 1 August 2013, the FE landscape in NE Wales will change significantly with the formation of Coleg Cambria from the merger of Yale and Deeside Colleges. This will create a single FE institution in NE Wales with a turnover of around £60m, which will be among the ten largest colleges in the UK.

1.4 What North East Wales Needs

Every stakeholder that was interviewed commented on the tremendous achievement of Glyndŵr University, its staff and leadership in obtaining university status.

An overwhelming majority of stakeholders were also in agreement about many underlying issues and needs. Throughout the stakeholder engagement exercise, two themes stood out:

- the status quo is not an option; and
- NE Wales needs a HE presence which it can feel it owns and which is focussed on the needs of the region. In this regard one stakeholder commented:

"The region needs an institution based in NE Wales of strength, scale and prestige that has the capacity and capability (educationally and in R&D terms)

to respond to the economic and educational needs of the whole region and to deliver high quality HE support to local businesses and residents".

From both stakeholder views and our own analysis the following are the foremost needs identified for NE Wales:

Outcome 1 – Aspiration and attainment – In the interest of learners and the skills base, NE Wales needs to extend opportunity, raise aspirations and ambition, and increase participation in HE. To do this there needs to be an "end to end" approach from school to FE to HE. There also needs to be seamless progression from FE to HE and an increased flow of graduates and postgraduates into the NE Wales workforce.

Outcome 2 – A coherent strategy for skills – We were repeatedly told that the region needs a clear strategy for skills, underpinned by strong, productive relationships between institutions. Such a strategy would need to be fully informed by information on the current and future demand for skills as a basis for a strategic approach to the supply of those skills. This would necessitate strong interaction between employers and providers.

Outcome 3 – Subject breadth – To raise aspirations, participation and skills among learners there needs to be a sufficiently wide breadth of subjects, but this is also needed to meet the needs of the NE Wales economy now and especially into the future.

Outcome 4 – A strategic approach to well balanced provision – The region needs an overall expansion of HE provision, with an appropriate balance between sub-degree, undergraduate first degree and postgraduate programmes to meet the needs of learners and the region's economy. This in turn needs to be embedded in a respected brand that will attract more students to study (and subsequently work) within the region.

Outcome 5 – High quality higher education – NE Wales needs high quality provision both in terms of academic and vocational experiences – and of a standing that will meet the expectations of learners (including high achievers) and of employers.

Outcome 6 – Responsiveness to the needs of the North East Wales economy – A strategic approach to meeting employer needs must be responsive not only to the areas of expertise needed by employers but also to the patterns and styles of learning that best suit employers and their employees. Provision would need to be part-time as well as full-time; it must be innovative and must include "bite size" tailored learning as well as more traditional programmes. It needs to meet the needs of *all* current and future sectors such that the region's economy will be sustainable and grow. Advanced manufacturing is a particular strength, but by no means the only source of current and future jobs.

Outcome 7 – The promotion of manufacturing and STEM – However, advanced manufacturing is an important, and in Welsh terms a unique, strength of the NE Wales economy. We were told that employers need to go well beyond the region,

and indeed the UK, to source many of the skills that they need, especially at the highest level. There is a perceived shortage of skills in the STEM (Science, Technology, Engineering and Mathematics) subjects and a reluctance to see manufacturing as an attractive career prospect. What is required is a systematic promotion of manufacturing and vocational routes as career options and STEM as an academic option.

Outcome 8 – Research and development and knowledge transfer - Research and development and knowledge transfer must be of a range and standard to fully support the current and future economic needs of the region, but also to act as a magnet for further investment.

Stakeholders and our own analysis also identified five key characteristics of the HE provider system needed by NE Wales:

Characteristic 1 – An aspirational HE system based in NE Wales in which the region can take pride.

Characteristic 2 – A HE system which is sustainable.

Characteristic 3 – A HE system which is well balanced.

Characteristic 4 – A HE system which is systematically strategic, addresses the needs of NE Wales, and does so in a highly collaborative way.

Characteristic 5 – Leadership and governance across the provider system that ensures a strategic approach to skills in NE Wales.

1.5 How Does Current HE Provision Measure Up?

Although there are many positive features on which to build, not one of the desired outcomes or system characteristics is fully present as yet. Stakeholder views and/or the wider evidence base suggest:

- There is a strong commitment to access, but an end-to-end approach to raising aspiration and participation is required.
- Some important skills needs are being addressed, but a systematic and strategic approach to meeting the needs of the whole region, now and into the future, is lacking.
- There is a lack of scale and breadth in HE delivered in NE Wales.
- Glyndŵr University is perceived as acting opportunistically within a commitment to survival rather than having a strategic approach to the balance of provision needed or to improvement of its standing and "brand". While current HE provision in the region is highly focussed on the economic needs of the region, and is an undoubted strength, many stakeholders strongly argued

for expanded provision – particularly at undergraduate first degree and postgraduate level – and for a rebalancing of provision across FE and HE.

- Glyndŵr University is highly responsive to some of the core needs of employers and the economy, but much remains to be done if the current and future needs of the whole of the regional economy are to be met.
- Despite some enterprising developments and the fact that HE and FE are largely student demand driven rather than an expression of a planned economy, more could be done to help promote manufacturing and STEM as career and educational choices.
- The precise research and development (R&D) needs of the economy and therefore the adequacy of current provision are open to debate, but stakeholders identified several ways of moving forward: the building of more collaborative research, the development of networking/brokerage, and both of these based around a hub comprising Glyndŵr and/or other universities.
- The existence of a university in NE Wales brings a sense of enormous pride to the region. Many stakeholders see a NE Wales owned solution as being crucial in creating the high quality and truly aspirational HE system that the region seeks. However, they believed this must be built on self confidence and be far more strategic and collaborative than at present.
- The HE system in the region must be financially secure and sustainable. While Glyndŵr informed us that the institution is currently financially sound, there are a number of real threats which could significantly impact on future viability, investment and development.
- A more strategic approach is needed to meet the current and future needs of the region – to include stronger and more effective collaboration between providers in the region and beyond.
- Effective leadership and governance must sit at the core of any solution if it is to deliver the truly strategic and collaborative approach needed in the region. A significant body of stakeholder opinion believes that the provider system has fallen short in this regard.

1.6 Important Considerations

Many stakeholders saw the way forward as one of significant growth for Glyndŵr such that it becomes a far more powerful university serving the region. Is this a realistic proposition?

A number of factors militate against rapid expansion at Glyndŵr University: the timing of its development as a university after the period of rapid growth in HE; the small regional population and future demographic trends; the concentration of substantial

and established universities close at hand; and the university's brand in a highly competitive market.

The nature and scale of the challenges that lie ahead will be defined by the immediate Welsh and UK context, but also by the predicted transformation of HE internationally.

Does the small size of the university matter? The research evidence clearly links size with efficiency, rather than with mere survival.

But the capacity to invest in change and to seize opportunities is and will become increasingly vital, and is underpinned by institutional efficiency.

If HE in NE Wales is to measure up, the core requirements are:

- strategic capability;
- gradual and focussed expansion of first degree and postgraduate students within collaborative systems of provision;
- the ability to invest in change;
- and, therefore, institutional efficiency.

1.7 Our Vision

There is much that is good about current HE provision in NE Wales, but it none the less falls well short of the criteria for future success. What is required is imaginative, dynamic, joined-up educational provision – across all age and ability groups – capable of firing aspirations, meeting learners' needs and producing the skills to underpin economic performance as a whole, not merely in one sector or sub-region. A successful meeting of the region's needs has to rest on the nature of the region itself – not on sentiment or vested interests. To this end, our concern is not with the mere survival of what exists but with achieving a system with the capacity to drive and invest heavily in change and growth in a challenging environment, not struggle to keep pace with it.

1.8 Options & Recommendations

We believe a unique opportunity exists for HE and FE institutions in NE Wales to lead the way in Wales.

Options

In considering how to achieve our vision, and to meet the present and future HE needs of the region we considered a range of options before arriving at our recommendations, including:

- Maintain the Status Quo.
- No University in NE Wales.
- Merge Glyndŵr University with another HE institution (e.g. Chester, Bangor or Aberystwyth).
- A HE/FE Merger (merge Glyndŵr University with Coleg Cambria).
- The Glyndŵr Federal Model (model proposed in *"Glyndŵr University's Written Submission to the Review of Higher Education Provision in NE Wales"*).
- Strategic Alliances.
- North Wales Universities HEI/HEI Federal Model (Glyndŵr and Bangor Universities - plus strategic alliances for specific purposes).
- NE Wales HEI/FEI Federal Model (Glyndŵr University and Coleg Cambria – plus strategic alliances for specific purposes).
- North Wales wide HEI/FEI Federal/Confederal Structure.

Recommendations

From stakeholder views and our own analysis we determined that the status quo was not an option and that significant improvement, facilitated by the Welsh Government and HEFCW, is a matter of urgency for the sake of learners and the regional economy.

Accordingly we **recommend**:

1. A reserved powers federal model, as outlined in Chapter 8, to be formally inaugurated between Glyndŵr University and Coleg Cambria (our preferred model). We envisage a "hard-wired" federation based on the "reserved powers" version of devolution proposed by the Welsh Government in its response to the second phase of the Silk Commission's work. The two institutions would remain independent, but the relationship would be hard-wired by virtue of the powers reserved to a Strategy Board drawn from those institutions (as outlined on page 119). This board would be tasked with the development and constant renewal of a strategic, outward looking response to the outcomes and system characteristics required to meet the needs of the region – beginning with those we have identified. This federal model to be achieved within eighteen months from acceptance of our report.
2. In the interim but with immediate effect the two institutions, with the active involvement of the OU and the support of HEFCW, should begin to work informally but systematically and collaboratively to deliver the strategic objectives outlined in the remit we have suggested for the Strategy Board.

3. Both Glyndŵr University and Coleg Cambria, separately and jointly, should develop relationships with institutions further afield that will strengthen the overall provision across HE and FE in the region.
4. Glyndŵr University and the University of Chester, assisted in so far as it is possible by HEFCW and HEFCE (Higher Education Funding Council England), should develop a stronger, more strategic relationship leading to joint provision across the two institutions based on their respective strengths – including shared teaching facilities and staff appointments – so as to broaden the offering to learners, strengthen the competitiveness of a vibrant economy that spans borders and maximise opportunities for joint bids for R&D and other resources.
5. Welsh Government/HEFCW should seek to avoid competitive re-alignment by fostering a gradual and planned re-balancing of sub-degree provision, combined with a long term strategy for the growth and improvement in provision that is required in NE Wales if future learner and employer needs are to be met (to include a gradual expansion of first degree and postgraduate output in the region).
6. Welsh Government/HEFCW should pursue, on the same timescale, our alternative proposal of a reserved powers federal model between Glyndŵr and Bangor universities if for any reason our preferred option should prove unworkable. Within this model consideration could be given to awarding Foundation Degree Awarding Powers (FDAPS) to Coleg Cambria, supported by direct funding.
7. Welsh Government/HEFCW should, within a manageable timescale, consider and explore with all parties the need for and delivery of an informal, but structured, confederal network of all the universities and colleges in North Wales (for example, along the lines of the Combined Universities in Cornwall [CUC]).
8. Welsh Government/HEFCW should also facilitate strategic thinking and action regarding relationships between HE and FE provision across NE Wales, and NW England.
9. Relevant Welsh Government departments should:
 - Examine the merits of developing an Advanced Manufacturing Centre or similar entity in the Deeside Enterprise Zone as a base for an R&D (and advanced skills) partnership comprising Bangor, Glyndŵr (and possibly other universities), that would directly provide R&D support to the advanced manufacturing sector.
 - Explore the potential of this partnership to act as a base for a specialist brokerage activity designed to link current – and potential future – manufacturing companies in the regional economy with R&D expertise from research led universities across and beyond the UK.
 - Evaluate such an initiative as a model for expanding the provision of R&D support (beyond advanced manufacturing) to the wider regional economy with

a view to at least equalling the kind of R&D collaboration to be found in similar networks in the UK.

2. Context

2.1 Background

The Welsh Government is committed to developing a strategic and forward thinking HE sector in Wales which will make a stronger contribution to both society and the economy.

For our Future, the Welsh Government's HE strategy and plan for Wales, published in 2009, identified the need for radical change in the shape, structure and provision of HE in Wales. It argued that too many HE institutions in Wales are too small to operate effectively and efficiently, and to compete on a global stage. While recognising the significant achievements and strengths of the sector, Ministers have made clear the need to create a system of HE in Wales that consists of fewer, stronger institutions with greater critical mass that allows them both to compete internationally in terms of research and student experience and to develop an internationally competitive economy around them.

In 2010, the Welsh Assembly endorsed the Higher Education Funding Council Wales' Corporate Strategy (HEFCW) for 2010-11 to 2012-13. This outlined plans for 75 per cent of HE Institutions in Wales to have an annual income above the UK median (which was estimated to be £119.6m for 2009/10), with none in the lower quartile, by 2013. HEFCW subsequently determined that a HE sector of six institutions was the optimum size for Wales.

2010 also saw the publication of the Browne report – *Securing a Sustainable Future for Higher Education – An Independent Review of Higher Education Funding and Student Finance*,⁸ which recommended wide ranging changes to the way in which universities are funded in England. Implementation of the review's recommendations by the UK Government, and the lifting of the cap on the level of fees that universities charge, has resulted in fundamental changes to the way in which universities are funded in Wales and the way in which HE learners are supported. 2012/13 saw the start of the new funding regime in Wales, the implications of which have yet to be fully realised.⁹

In March 2011, the Minister for Education and Skills requested advice from HEFCW on the future shape of the HE sector in Wales. HEFCW's resulting report, *Future Structure of Universities in Wales*, was published in July 2011 and presented several recommendations, including proposals for mergers between HE institutions and the development of their particular missions.

With respect to HE provision in NE Wales, HEFCW recommended changes to the current structure, advising that Glyndŵr University should develop strong structural

⁸ A copy of "*Securing a Sustainable Future for Higher Education – An Independent Review of Higher Education Funding and Student Finance*" can be found at: <http://www.delni.gov.uk/index/publications/pubs-higher-education/browne-report-student-fees.htm>.

⁹ Higher Education Funding Council Wales Circulars W11/07HE Changes to the Funding System for Higher Education in Wales – February 2011; and W12/10HE HEFCW's Funding Allocation 2012/13 – 30 March 2012 Refer. Available at <http://www.hefcw.ac.uk/publications/circulars/circulars.aspx>.

relationships with a range of further education colleges within a group structure led by Aberystwyth and Bangor Universities.

During the written engagement exercise that followed, there was significant opposition to the HEFCW proposal. A number of respondents challenged the evidential base for the recommendation and many argued in favour of Glyndŵr University maintaining its independence and leading HE in NE Wales, rather than being led or managed by institutions outside the region.

In November 2011, the statement made by the Minister for Education and Skills on *Reconfiguration in the Higher Education Sector* confirmed his decision to reject HEFCW's advice with regard to Glyndŵr, on the basis that there appeared to be a case for considering more closely the existing pattern of provision in NE Wales and for examining further the options for securing greater regional coherence in the delivery of further and higher education.

In February 2012, the Minister announced the appointment of an expert Review Panel to undertake the *Review of Higher Education Provision in North East Wales*.

During the period of the review, significant and ongoing structural change has occurred in both the higher and further education sectors in Wales. For example, the new University of South Wales was launched in April 2013 following the merger of the University of Glamorgan and the University of Wales, Newport; Trinity St David and Swansea Metropolitan Universities have also taken steps towards merger in 2013. A very different FE/HE sector relationship and dynamic is set to emerge in North and Mid Wales following the establishment in April 2012 of Grŵp Llandrillo Menai, and the upcoming launches in August 2013 of Coleg Cambria (following the merger of Deeside College and Yale College) and of Grŵp NPTC Group (following the merger of Coleg Powys and Neath Port Talbot College).

In June 2013 the Welsh Government issued its new *Policy Statement for Higher Education* outlining its vision for HE in Wales to 2020 and a shared ambition for a world-class HE system that serves the interests of learners and the nation in the 21st century. The important role of HE in stimulating innovation and economic growth; enhancing graduate employability and in expanding a highly skilled and capable workforce is clearly stated. The Statement points to the international stage, identifying the need for Wales to become a partner of choice for international business and investment, and a destination of choice for international students and staff. Building a world class reputation for research excellence is a key feature. The Welsh Government's belief that HE should be available to all those with the potential to benefit from it regardless of circumstance, and that Welsh universities should aspire to become the destination of first choice for students from Wales, the UK and across the world is also highlighted. The need for regional coherence – for a more holistic and regional view of post-16 education in Wales, supported by stronger regional planning is identified in the Statement, as is the requirement for the needs of learners to be paramount and for much greater collaboration between HE and FE providers going forward.

This report presents the findings of the *Review of Higher Education Provision in North East Wales*.

2.2 Our Remit and Terms of Reference

The review was established in February 2012 with a remit to identify what form of HE provision will best serve the economic, social and learner needs of the NE Wales region. This included key objectives to:

- establish what a comprehensive HE offering in NE Wales should look like;
- determine the extent to which the existing pattern of HE provision reflects this offering; and
- recommend new or improved models for delivery that take into account the demographic, social and economic profile of NE Wales and the need for there to be greater coherence in the delivery of further and higher education.

The terms of reference for the review state that in conducting its activity the Review Panel will be expected to:

- gather, evaluate and synthesise the best data, research and other evidence available. This will include gathering evidence from stakeholders including higher and further education providers, employers, learners and other relevant groups to ensure their views are heard and taken into account;
- deliver an interim report in early 2013 and a final report to the Minister for Education and Skills by the end of April 2013 (the date for submission was subsequently extended to the end of June 2013);¹⁰ and
- have due regard to the Welsh Government's broad priorities for HE in Wales as set out in *For Our Future*.

¹⁰ On 19 February 2013 the Minister for Education and Skills issued a Written Statement announcing that the date for submission of the Review Panel's final report had been extended from April 2013 to the end of June 2013.

3. Our Approach

In meeting its remit, it is important to note that the Review Panel approached its work with an open mind and did not begin with any notions of structural change or mergers, but rather with the questions *'What does NE Wales need of HE? What should the goals and desired outcome be?* In considering these questions, we made use of a simple thought experiment: if there was currently no HE presence in the region, what would need to be put in place? This allowed the Panel to focus in the initial stages of the review on desired outcomes and the needs of learners and the economy in NE Wales rather than on the structures needed to deliver them. Attention turned to delivery structures only when stakeholder opinion had been gathered and when current arrangements could be evaluated against desired outcomes and identified need.

Our starting point immediately raised the question of whether a HE presence was needed at all in NE Wales as the region is served by a number of strong and well regarded HE Institutions especially in NW England, and has a population level significantly below what is generally considered necessary to sustain a substantial, separate and broadly based HE institution.

The Review Panel quickly concluded that retaining a HE presence in the area is appropriate for a number of reasons, including:

- A local HE presence is vital in meeting the needs of non-mobile and less confident students.
- The current economic environment is giving rise to a growing trend to study closer to home.
- A HE presence is beneficial to the skills profile and economic competitiveness of the region.
- There is and will be a growing need to up-skill the existing workforce, which requires good quality part-time provision at all levels, in all relevant subject categories and within reasonable travel times.
- The powerful industrial base present in NE Wales needs to be supported by a strong R&D and knowledge transfer base.

While the Panel were very clear from early on that there needs to be a strong HE presence in NE Wales that does not necessarily mean having an independent university in the region. That is precisely one of the key questions that the review was established to consider.

To establish a baseline of opinion for moving forward, Panel met with HEFCW representatives at the start of the review process to examine the basis for its recommendation to the Minister in 2011. Panel also sought the views of Glyndŵr University's Senior Executive, Governing Body, staff and student representatives early on, and in May 2012 received *Delivery Economic Prosperity*

and Social Justice – Glyndŵr University’s Written Submission to the Review of Higher Education in North East Wales which articulated the university’s views with respect to each of the review’s key objectives. The Panel engaged with representatives from both Glyndŵr University and HEFCW throughout the course of the review in search of additional information and/or clarification of points raised during the review process.

During the period of the review, responses to the earlier stakeholder engagement exercise on the *Future Structure of Higher Education in Wales* were revisited. The Panel also undertook an extensive stakeholder engagement exercise. We held a series of meetings with key stakeholders, received written submissions from interested parties and presentations from expert witnesses. From the outset it was obvious that we could not review HE provision without looking at its relationship with FE. In terms of skills needs, the boundary between HE and FE is both somewhat arbitrary and porous. We therefore met FE representatives, but also asked all other stakeholders about this relationship and its bearing on raising participation and meeting skills needs.

By the end of the review over 160 stakeholder interviews had been carried out including those with education, local authority, political, employer and industry representatives (Annex B refers). We are extremely appreciative of the openness with which stakeholders approached their interviews and of the informative contributions they made.

Alongside this, the Review Panel collected and examined a large amount of available data and research information, a summary of which can be found at Annex C.

In reaching our conclusions, we have drawn on the stakeholder contributions and the wider evidence base.

4. Profile of North East Wales

For the purpose of the review we have defined NE Wales to be the three local authority areas of Denbighshire, Flintshire and Wrexham. This region is substantially rural and semi rural with urban population centres concentrated on the eastern corridor, the largest of which is Wrexham

We recognise the strong social, business and economic relationship that exists between the region and areas of NW England, particularly West Cheshire and Merseyside. In many senses the border between NE Wales and NW England can be viewed as arbitrary and as such the provision of HE in NE Wales can only be considered in the wider context of supply and demand across this cross border region.

4.1 Population

The region currently has a combined population of just over 381,000.

Table 1: Current population of NE Wales by local authority area and age group

	All ages	Age under 16	Age 16-24	Age 25-44	Age 45-64	Age 65 and over
Denbighshire	93,734	16,953	10,025	20,794	26,272	19,690
Flintshire	152,506	28,644	16,542	38,123	42,361	26,836
Wrexham	134,844	25,818	14,846	35,821	35,508	22,851
NE Wales	381,084	71,415	41,413	94,738	104,141	69,377

Source: Census 2011

The population of NE Wales is forecast to rise by 9 per cent by 2033. However, while the overall population across the region is expected to increase, projections suggest a decline in the traditional HE market with the 16-24 age group expected to fall by 8 per cent over the same period. Over the next decade the number in this age group is expected to fall by some 15 per cent on current levels. The working age population, those aged 16-64, is expected to fall by 5 per cent by 2033 with the most significant decline expected to be in Flintshire. Conversely, the proportion of the population above the age of 65 is set to rise significantly over the same period.

Table 2: Projected percentage population change by local authority area and age group

	All ages	Age under 16	Age 16-24	Age 25-44	Age 45-64	Age 65 and over
Denbighshire						
2018	10%	6%	-10%	4%	8%	33%
2023	13%	10%	-14%	7%	7%	45%
2033	18%	8%	-4%	6%	1%	75%
Flintshire						
2018	0%	-4%	-16%	-7%	0%	23%
2023	0%	-4%	-22%	-6%	-3%	33%
2033	0%	-10%	-19%	-12%	-14%	60%
Wrexham						
2018	5%	2%	-9%	-2%	4%	27%
2023	8%	4%	-9%	1%	3%	40%
2033	12%	2%	1%	-2%	4%	67%
NE Wales						
2018	4%	1%	-12%	-3%	3%	27%
2023	6%	2%	-15%	0%	2%	39%
2033	9%	-2%	-8%	-4%	-4%	67%

Source: Welsh Government 2008 based local authority population projections for Wales

4.2 Deprivation

Overall deprivation in the region, as defined by the Welsh Index of Multiple Deprivation (WIMD) is below the Welsh average. Six per cent of areas in NE Wales are in the most deprived areas compared with a Welsh average of 10 per cent. Nevertheless, NE Wales does play host to some of the most deprived areas in Wales. The region has 15 Lower Layer Super Output Areas (LSOAs)¹¹ in the 10 per cent most deprived areas of Wales; this includes the most deprived small area in Wales (Rhyl West 2).

¹¹ LSOAs are used as areas for statistical comparison and contain an average of 1,500 people. The LSOAs used in WIMD 2011 were based on the 2001 census.

Table 3: NE Wales districts in the 10 per cent most deprived in Wales

Local Authority	LSOA Name	WIMD 2011 Rank
Denbighshire	Rhyl West 2	1
Denbighshire	Rhyl West 1	7
Wrexham	Queensway 1	9
Denbighshire	Rhyl South West 2	12
Wrexham	Plas Madoc	24
Wrexham	Wynnstay	26
Denbighshire	Rhyl West 3	34
Flintshire	Shotton Higher 2	83
Wrexham	Queensway 2	88
Denbighshire	Rhyl South West 1	96
Wrexham	Cartrefle 2	123
Flintshire	Connah's Quay Golftyn 4	153
Flintshire	Holywell Central	155
Denbighshire	Denbigh Upper/Henllan 1	160
Flintshire	Mold West 1	184

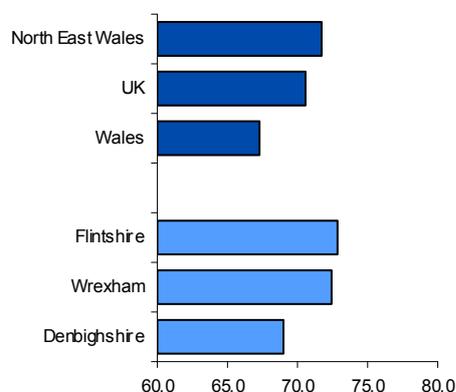
Source: WIMD 2011

4.3 The Economy

Employment, Unemployment and Economic Inactivity Rates

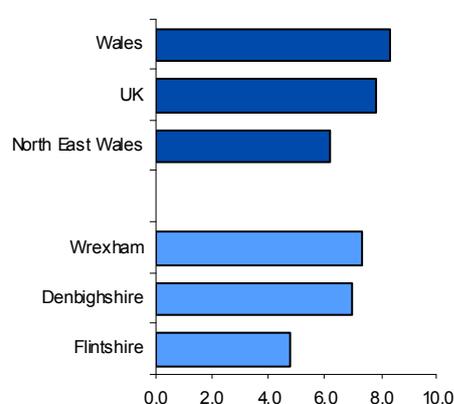
NE Wales is a strong economic driver for Wales. In 2012, it was characterised by employment rates which were above Welsh and UK national averages (71.8 per cent compared with 67.3 per cent for Wales and 70.6 per cent for the UK) and unemployment rates which were below the Welsh and UK averages (6.2 per cent compared with 8.3 per cent for Wales and 7.9 per cent for the UK). The economic inactivity rate (excluding students) in NE Wales (20.3 per cent) was below the Welsh average (22.2 per cent) but slightly above the UK (19.3 per cent) (Figures 1 to 3 below refer).

Figure 1: Employment rate, year to December 2012 (a)



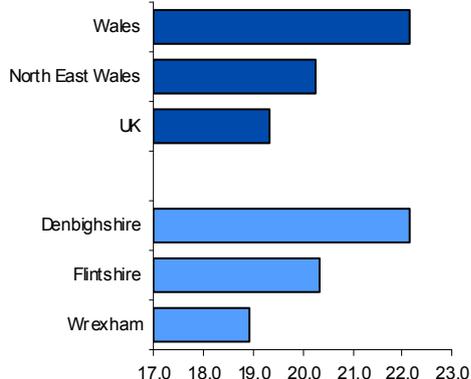
(a) People in employment as a percentage of the population aged 16-64.

Figure 2: ILO unemployment rate, year to December 2012 (a)



(a) People unemployment as a percentage of the economically active population aged 16 and over

Figure 3: Inactivity rate (excl. students), year to December 2012 (a)



(a) People economically inactive (excluding students) as a percentage of the population aged 16-64

Source: Annual Population Survey

Gross Value Added and Gross Disposable Household Income and Earnings

NE Wales had total Gross Value Added (GVA) of £7.8 billion in 2011. This translates to £15,835 per head or 79.0 per cent of the UK average, compared to 75.2 per cent for Wales. Data show a wide variation in GVA per head across the NE Wales region with Flintshire and Wrexham standing at 85.4 per cent of the UK average while Conwy and Denbighshire was significantly lower at 62.8 per cent.

At £14,458, Gross Disposable Household Income (GDHI) per head in NE Wales was 90.2 per cent of the UK average in 2011 and above the Wales average of 88.1 per cent. Again there was some variation across the region with GDHI in Conwy and Denbighshire being 91.5 per cent of the UK average compared with 89.2 per cent in Flintshire and Wrexham.^{12&13}

Average full-time weekly earnings in NE Wales were below the Wales average in 2012. Relative to the UK, earnings in NE Wales were 84.9 per cent of the UK average in 2012; this was below the Wales average (85.8 per cent). Within NE Wales, average weekly earnings varied between 80.0 per cent of the UK average in Wrexham to 89.4 per cent in Flintshire.^{14&15}

¹² For GVA and GDHI data is only available at NUTS3 level.

¹³ GVA and GDHI data from ONS Regional Accounts.

¹⁴ Average weekly earnings data from the ONS Annual Survey of Hours and Earnings.

¹⁵ Average full-time weekly earnings are calculated on a workplace basis and are based on full-time employees only. Gross Disposable Household Income is calculated on a residence basis and includes incomes for all persons, including self employment income and benefits for those who are not in work.

Key Sectors

The economy of NE Wales is dominated by advanced manufacturing with sectors including aerospace, chemicals, pharmaceuticals, ICT and paper and packaging particularly prominent. Flintshire is the most manufacturing dependent area in the UK with around three times the UK average rate of manufacturing jobs, and a significant proportion of Wales' advanced manufacturing jobs located in the county. Production industries account for 19 per cent of all workplace employment across the region (with particularly significant concentrations in Flintshire (28 per cent) and Wrexham (18 per cent)).

The success of the region in attracting inward investment to grow its manufacturing base has led to a position where few of these major companies are indigenous to, or have their head offices based in, NE Wales.¹⁶ There is a widespread view amongst stakeholders that this leaves the region vulnerable as decisions about the future of these businesses are likely to be taken outside the region.

Despite the prominence of manufacturing/production industries and its importance to the region, other sectors play a significant role in the economy of NE Wales in terms of employment as indicated in Table 4 below.

Table 4: Workplace employment by industry – 2010

Percentage of total employment:							
	Agriculture, forestry & fishing	Production	Construction	Wholesale, retail, transport, hotels & food	Finance & business activities	Public admin, defence, education, health & other services	All industries ('000s)
NE Wales	2	19	7	24	14	35	168.1
Denbighshire	4	7	6	26	11	46	44.9
Flintshire	2	28	8	23	17	22	60.8
Wrexham	2	18	6	23	12	39	62.4
Wales	3	11	7	26	16	37	1,301.6
UK	1	9	7	26	24	32	29,760.2

These data show workplace employment (or total jobs) in each area, including self-employment jobs. The United Kingdom (UK) data presented here should not be used for any purpose other than as a comparator for the Wales data.

Source: Labour Force Survey, Annual Business Inquiry and Welsh Agricultural Census

Business Structure

There were 50,800 enterprises active in N Wales¹⁷ in 2012, of which 94 per cent were in the zero or micro size-band (0-9 employees). The percentage in this size-band was similar to that for Wales (95 per cent).

¹⁶ Sector Reports – North Wales – Report to the North Wales Forum, Mickledore – July 2012.

¹⁷ Aggregated data on business structure is only available at North Wales level.

In 2012, 35 per cent of private sector employment in N Wales was in the zero or micro size-bands and a further 35 per cent was in the large size-band (250 plus employees). In Wales these size-bands accounted for 33 and 40 per cent of private sector employment respectively.

For the three authorities in NE Wales, Flintshire had the largest percentage of private sector employment in the large size-band, whilst Denbighshire had the smallest percentage.

In 2012, 0.7 per cent of enterprises active in N Wales were foreign-owned, slightly above the percentage for Wales (0.5 per cent).

In 2012, 17 per cent of private sector employment in N Wales was in foreign owned enterprises, compared to 15 per cent for Wales. For the 3 authorities in NE Wales this percentage varied from 11 per cent in Denbighshire, to 21 per cent in Wrexham and 29 per cent in Flintshire.

Table 5: Proportion of employment by enterprise size-band, 2012 (a)

	<i>Numbers in thousands</i>					
	Zero (0)	Micro (1-9)	Small (10- 49)	Medium (50-249)	Large (250 plus)	All
North Wales	36.8	10.7	2.0	0.5	0.7	50.8
Isle of Anglesey	3.6	1.1	0.2	0.1	0.1	5.0
Gwynedd	9.2	2.4	0.4	0.1	0.2	12.4
Conwy	6.1	1.9	0.4	0.1	0.3	8.8
Denbighshire	4.6	1.6	0.3	0.1	0.2	6.9
Flintshire	6.9	2.1	0.5	0.2	0.3	9.9
Wrexham	6.4	1.7	0.4	0.1	0.3	8.9
Wales	157.0	42.3	7.9	2.0	1.6	210.7

(a) Enterprises which are active in more than one local authority will be counted in each one, so the enterprises total for the regions/Wales will not add up to the sum of the local authorities. The size band is based upon the size of the UK enterprises and includes all enterprises that are active in Wales.

Source: *Size Analysis of Welsh Businesses*

Table 6: Employee numbers by size-band, 2012 (a)

	<i>Numbers in thousands</i>					
	Zero (0)	Micro (1-9)	Small (10-49)	Medium (50-249)	Large (250 plus)	All
North Wales	40.7	42.5	38.1	30.7	82.7	234.8
Isle of Anglesey	4.0	4.2	2.9	2.3	5.6	19.0
Gwynedd	10.4	9.4	7.1	5.6	12.0	44.5
Conwy	6.8	7.5	6.8	4.4	9.3	34.8
Denbighshire	5.1	6.5	5.9	3.7	7.7	28.9
Flintshire	7.4	8.1	8.6	7.7	30.7	62.4
Wrexham	7.1	6.8	6.8	7.0	17.6	45.2
Wales	174.4	164.8	148.3	128.1	401.9	1,017.5

(a) Enterprises which are active in more than one local authority will be counted in each one, so the enterprises totals for the regions/Wales will not add up to the sum of the local authorities. The size band is based upon the size of the UK enterprises and includes all enterprises that are active in Wales.

Source: *Size Analysis of Welsh Businesses*

Cross Border Considerations

NE Wales must be considered in the context of its wider geography. The scale of the economy running along the A55/M56 corridor from Anglesey to Manchester Airport generates an output of over £30 billion per annum, more than the M4 corridor from the Vale of Glamorgan to Bristol.¹⁸ This illustrates the scale of opportunity that can be gained from closer linkages between NE Wales and NW Wales and NW England. In many respects, NE Wales can be seen as a natural link between NW Wales and NW England, especially with regard to the renewable energy industry which is developing throughout this geographical arc from Bangor to Liverpool. We were consistently told by stakeholders of the arbitrary nature of the border between NE Wales and NW England in an economic sense and the need for HE to meet the needs of the combined economies of these two regions.

4.4 Qualifications and Skills

At higher skills levels, NE Wales performs less well than Wales as a whole. In 2012, 31 per cent of working age adults in the region had qualifications at National Qualification Framework (NQF)¹⁹ level 4 or above. This was slightly below the national average for Wales (33 per cent). Two of the three local authority areas in the region were lower than the rate for Wales, with the remaining authority, Flintshire, the same as for Wales. Although rates have improved in recent years in all three authorities, higher skill levels in the region as a whole have consistently been below that seen for Wales as a whole.

¹⁸ Sector Reports – North Wales – Report to the North Wales Forum, Micklethorpe – July 2012.

¹⁹ The following link provides a description of and compares NQF, QCF and FHEQ qualification levels - <http://ofqual.gov.uk/help-and-advice/comparing-qualifications/>.

Table 7: Percentage of working age adults in NE Wales with NQF level 4+ as highest qualification – 2007 to 2012 (a)

	2007	2008	2009	2010	2011	2012
Denbighshire	28	27	29	28	29	31
Flintshire	24	25	28	31	31	33
Wrexham	26	25	25	27	31	30
NE Wales	26	25	27	29	30	31
Wales	27	28	30	31	32	33

(a) Adult working age is defined as 18-64 for males and 18-59 for females.

Source: Annual Population Survey

When looking at the proportion of the population with NQF level 3 as their highest qualification, NE Wales has consistently been in line with or above the Welsh national average in the period 2007 to 2012. Rates have been particularly high in Flintshire over this period.

Table 8: Percentage of working age adults in NE Wales with NQF level 3 as highest qualification – 2007 to 2012 (a)

	2007	2008	2009	2010	2011	2012
Denbighshire	18	20	19	20	20	20
Flintshire	24	27	22	23	23	23
Wrexham	18	20	21	21	20	24
NE Wales	20	23	21	21	21	23
Wales	20	21	20	20	21	21

(a) Adult working age is defined as 18-64 for males and 18-59 for females.

Source: Annual Population Survey

Working Futures – Wales 2010-2020 report²⁰ provides projections for output and the demand and supply of skills between 2010 and 2020. As part of the review we were presented with summary analysis for the four economic regions of Wales – N Wales, SE Wales, SW Wales and Mid Wales (a specific breakdown for NE Wales was not available). This analysis confirms that higher skill levels for those in employment in the N Wales economic region were lower than other parts of Wales. In 2010, the proportion of employed persons holding Qualification and Credit Framework (QCF) 4-8 qualifications in N Wales was 34 per cent – lower than all other regions in Wales. While this is projected to rise to nearly 42 per cent by 2020, the proportion of employed persons in N Wales with higher qualifications is expected to remain below all other regions except SW Wales. The proportion of employed people in N Wales holding qualifications at QCF level 3 in 2010 was above the national average and is projected to remain so to 2020.

²⁰ <http://www.ukces.org.uk/publications/working-futures-wales> .

Table 9: Projections of employment by highest qualification held, 2010 and 2020²¹

	N Wales		SE Wales		SW Wales		Mid Wales		Wales		NW England		UK	
	2010	2020	2010	2020	2010	2020	2010	2020	2010	2020	2010	2020	2010	2020
No Qualifications	10.5	6.5	9.6	6.0	10.0	6.2	10.5	6.4	10.0	6.2	10.0	6.5	9.1	6.5
QCF 1	15.9	13.2	15.4	12.5	15.6	12.8	15.4	12.3	15.5	12.7	15.9	13.9	15.8	16.6
QCF 2	21.9	20.8	21.4	20.1	21.9	21.0	21.4	20.0	21.6	20.4	21.3	21.2	19.7	18.4
QCF 3	17.7	17.7	17.5	17.3	17.9	18.1	17.1	17.3	17.6	17.5	19.8	17.3	21.2	16.3
QCF 4-6	26.4	29.5	27.6	30.3	26.8	29.6	27.1	30.6	27.1	30.0	25.5	28.5	24.9	27.7
QCF 7-8	7.6	12.4	8.5	13.8	7.8	12.3	8.6	13.5	8.1	13.2	7.6	12.7	9.3	14.6
QCF 4-8	34.0	41.9	36.1	44.1	34.6	41.9	35.7	44.0	35.3	43.1	33.0	41.1	34.2	42.2

Source: Working Futures 2010-2020

With respect to longer term changes in employment, *Working Futures 2010-2020* predicts a modest shift from full-time to part-time in N Wales to 2020. The proportion of full-time employees is expected to decline from 55.4 per cent in 2010 to 54.2 per cent in 2020, with part-time employment levels rising from 29.5 per cent to 30.6 per cent over the same period. Self employment levels are expected to remain static.

Table 10: Projections of employment status, 2010 and 2020

	Full-time		Part-time		Self-employed	
	2010	2020	2010	2020	2010	2020
N Wales	55.4	54.2	29.5	30.6	15.2	15.2
Wales	55.2	53.9	29.7	31.0	15.0	15.0
NW England	59.5	59.9	27.5	29.1	13.0	11.1
UK	57.8	56.9	27.9	29.3	14.3	13.8

Figures are proportion of employment that is full-time, part-time, or self-employment in 2010 and 2020.
Source: Working Futures 2010-2020

Employment growth in N Wales to 2020 is expected to be in line with UK and Welsh averages; however employment in manufacturing in N Wales is expected to decrease over this period - albeit at a slower rate than for the UK as a whole. The largest employment growth is expected in construction and the business and other services sectors at 1.3 per cent per annum and 1.2 per cent per annum respectively.

²¹ Please note that the projections of qualification levels of those in employment have been updated and differ from those in the Working Futures 2010-2020: Summary Report for Wales and Working Futures 2010-2020: Main Report.

Table 11: Projections of long-term changes in employment by broad sector, 2010-2020

	N Wales	Wales	N W England	UK
Primary sector and utilities	0.6	0.7	0.4	-0.3
Manufacturing	-0.4	-0.4	-0.5	-0.7
Construction	1.3	1.4	0.7	1.1
Trade, accomod. & transport	0.8	0.8	0.1	0.5
Business and other services	1.2	1.1	1.1	1.3
Non-market services	-0.2	-0.1	-0.2	-0.1
Total	0.5	0.5	0.3	0.5

Figures are per annum projected percentage change in employment between 2010 and 2020.

Source: Working Futures 2010-2020

In terms of employment by occupation, the greatest growth is expected in higher skilled occupations such as managers, professionals, associate professionals and technical occupations. Growth in N Wales for these occupations is expected to be broadly in line with both Wales and UK averages. Growth is also projected in sales and customer service, caring, leisure and other service and skilled trades occupations.

Table 12: Projections of long-term changes in employment by occupation, 2010-2020

	N Wales	Wales	N W England	UK
Managers, directors and senior officials	1.6	1.6	1.3	1.7
Professional occupations	1.4	1.4	1.0	1.4
Associate professional and technical	1.3	1.2	0.9	1.3
Administrative and secretarial	-1.2	-1.0	-0.8	-1.1
Skilled trades occupations	0.4	0.4	-1.0	-0.7
Caring, leisure and other service	0.6	0.9	1.1	1.1
Sales and customer service	0.8	0.9	-0.2	0.0
Process, plant and machine operatives	-1.2	-1.3	-1.2	-1.1
Elementary occupations	0.0	-0.1	0.6	0.3
Total	0.5	0.5	0.3	0.5

Figures are per annum projected percentage change in employment between 2010 and 2020.

Source: Working Futures 2010-2020

These data suggest an equivalent demand to Wales and the UK for levels 3, 4 and above, including graduates/postgraduates in professional and managerial roles, in a region with relatively low output of graduates and postgraduates.

In addition to the net change in employment resulting from the creation of new jobs (expansion demand), *Working Futures 2010-2020* also considers employers' workforce replacement needs arising from mortality, retirement or other reasons (replacement demand). Replacement demand is around eight times larger than the net change in employment between 2010 and 2020 for N Wales. Even in occupations where there is expected to be a net decline in employment, replacement demand is

projected to result in a positive total requirement for workers between 2010 and 2020.

Table 13: Projections of expansion demand, replacement demand and total requirement by occupation, 2010-2020 (thousands)

	Expansion Demand	N Wales Replacement Demand	Total Demand
Managers, directors and senior officials	4	11	15
Professional occupations	8	20	28
Associate professional and technical	4	11	15
Administrative and secretarial	-4	15	11
Skilled trades occupations	2	18	20
Caring, leisure and other service	2	12	14
Sales and customer service	2	10	13
Process, plant and machine operatives	-3	11	8
Elementary occupations	0	15	15
Total	15	123	138

Source: *Working Futures 2010-2020*

We also received regional analysis from the *Employer Skills Survey 2011*.²² The survey found that a higher proportion of employers in N Wales than any other region in Wales felt HE leavers were well prepared for work; and where employers did feel HE leavers were poorly prepared, fewer in N Wales attributed this to a lack of required skills or competencies than in other regions of Wales (although this is partly due to fewer employers finding HE leavers as poorly prepared in general).

The survey also suggests that the regional labour market is generally able to meet employer demand, with very few employers indicating that vacancies existing at the time of the survey could not be filled due to a lack of applicants with the appropriate skills, qualifications or experience. Where this did occur the lack of job specific skills was the most prevalent reason in N Wales. This contrasts markedly with the evidence received by the Panel as part of our extensive stakeholder engagement exercise – which consistently pointed to difficulties in recruiting appropriately skilled employees from the local labour market. In the case of advanced manufacturing, in particular, we were consistently told by employers that they had had to recruit from outside the region and, indeed, from beyond the UK to address their higher level skills needs. The overall picture seems to mask quite specific shortages of high end skills experienced by employers in advanced manufacturing and these shortages are one element in fears regarding the competitiveness of the region.

²² <http://www.ukces.org.uk/publications/er74-employer-skills-survey-11-wales> .

4.5 The Higher Education Profile in North East Wales: An Overview

NE Wales is very well served by established HE and FE institutions based in the region, across the border in NW England, and in NW Wales. The location map at Annex D shows the location of HE and FE institutions in these areas.

Glyndŵr University is the main provider of HE provision delivered in the region. Formerly the North East Wales Institute (NEWI) it is one of the newest universities in Wales, having gained university status and Degree Awarding Powers in 2008 (the university currently does not have Research Degree Awarding Powers, although an application has been made to the Quality Assurance Agency (QAA)). Glyndŵr delivers provision from sub-degree to postgraduate level, predominantly from its campus in Wrexham, but also from its Northop site in Flintshire. Further employer linked provision in composites technology is offered at sub-degree to postgraduate level through the Advanced Composites Training and Development Centre at Broughton in Flintshire. In St Asaph, the university has a dedicated, industry focussed, research and development facility primarily working on optics and opto-electronics technologies. Glyndŵr also has a campus in London which became part of the University in 2011. It has more than 1,000 students representing 50 different nationalities and offers undergraduate and postgraduate courses across a range of subjects such as business management, accounting, marketing and healthcare. Data relating to activity at the London campus is not included in the following analysis of provision in NE Wales.

Bangor University has a satellite site in Wrexham from which it predominantly delivers undergraduate provision in subjects and professions allied to medicine.

HE in FE provision is delivered via Yale and Deeside Colleges from sites in Wrexham, Connahs Quay and Northop in Flintshire, and Llysfasi in Denbighshire, and by Grŵp Llandrillo Menai. Grŵp Llandrillo Menai delivers HE provision from its Denbighshire campus in Rhyl. It also has a site adjacent to the NE Wales region at Rhos on Sea.

The Open University (OU) is the largest provider of HE in the UK.²³ Whilst it does not have a campus in NE Wales, it is a significant provider of HE, delivering part-time provision across most subject areas via distance learning.

Other HE institutions within commuting distance include the Merseyside and Manchester based universities. The University of Chester is the closest HE Institution to NE Wales (located 5 miles from the Welsh border and 12 miles from Wrexham) and it plays a significant role in meeting the HE needs of the region.

²³ In 2011/12, the Open University had a total student population of 201,270.

4.6 Enrolments at Institutions in North East Wales

Figures 4 and 5 below show enrolments at institutions in NE Wales by level of study and by domicile of learner for the 2011/12 academic year. A fuller breakdown of enrolments, including by mode of study, is shown in Table 14.

Figure 4: Enrolments at institutions in NE Wales by level of study – 2011/12

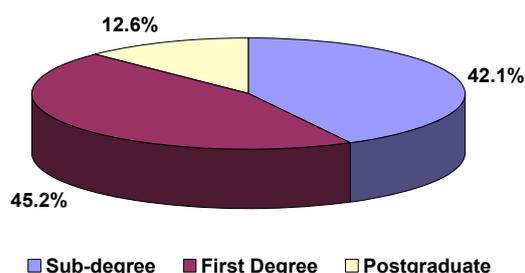
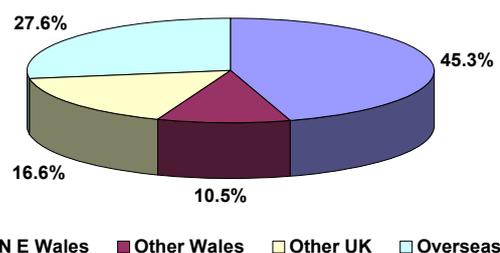


Figure 5: Enrolments at institutions in NE Wales by domicile – 2011/12



Overseas students include non UK European Union students and non European Union students.

Source: HESA

Table 14: enrolments at institutions in N E Wales by mode, level and domicile – 2011/12

	Enrolments					Percentage			
	NE Wales	Other Wales	Other UK	Overseas	Total	NE Wales	Other Wales	Other UK	Overseas
Full-time									
Sub-degree	126	24	88	36	274	46.0%	8.8%	32.1%	13.1%
First Degree	1473	325	783	578	3159	46.6%	10.3%	24.8%	18.3%
PG	45	22	15	381	463	9.7%	4.8%	3.2%	82.3%
Total	1644	371	886	995	3896	42.2%	9.5%	22.7%	25.5%
Part-time									
Sub-degree	1311	432	413	1595	3751	35.0%	11.5%	11.0%	42.5%
First Degree	944	115	102	0	1161	81.3%	9.9%	8.8%	0.0%
PG	426	86	182	49	743	57.3%	11.6%	24.5%	6.6%
Total	2681	633	697	1644	5655	47.4%	11.2%	12.3%	29.1%
Total									
Sub-degree	1437	456	501	1631	4025	35.7%	11.3%	12.4%	40.5%
First Degree	2417	440	885	578	4320	55.9%	10.2%	20.5%	13.4%
PG	471	108	197	430	1206	39.1%	9.0%	16.3%	35.7%
Total	4325	1004	1583	2639	9551	45.3%	10.5%	16.6%	27.6%

Overseas students include non UK European Union students and non European Union students.

Source: HESA

There was a total of 9,551 HE enrolments at institutions in NE Wales in 2011/12, of which 3,896 (just under 41 per cent) were full-time and 5,655 (just over 59 per cent)

were part-time. The vast majority of full-time learners were undertaking study at undergraduate first degree level while part-time learners were largely on sub-degree programmes.

Just over 45 per cent of enrolments were on undergraduate first degree programmes. Around 42 per cent were on sub-degree courses with the remainder (just under 13 per cent) studying at postgraduate level.

There was a total of 8,345 enrolments on undergraduate programmes (4,025 on sub-degree and 4,320 on first degree programmes) of which around 41 per cent were full-time and 59 per cent were part-time. Almost three quarters of first degree enrolments were full-time while over 93 per cent of sub-degree enrolments were part-time.

With regard to postgraduate study there was a total of 1,206 enrolments at institutions in the region. Around 90 per cent of these were enrolled on postgraduate taught degree programmes with the remainder undertaking research degrees. Over 60 per cent of postgraduate enrolments were part-time.

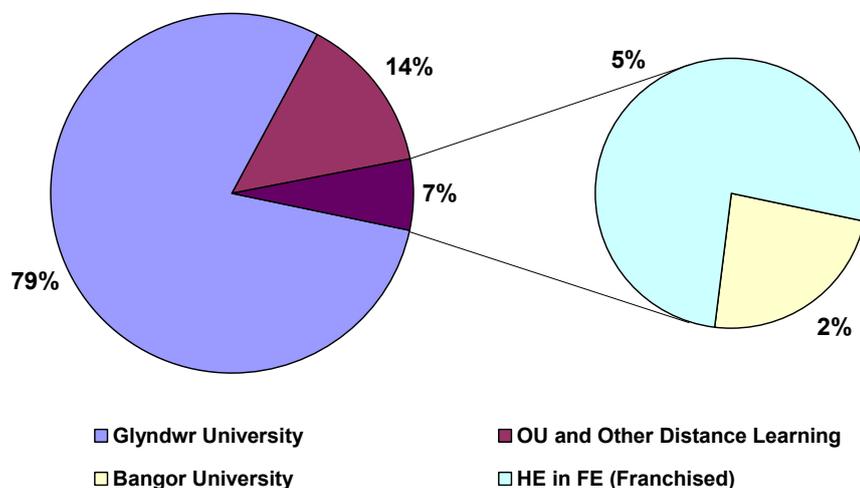
In terms of region of domicile, just over 45 per cent of students studying at institutions in NE Wales came from the region, while around 27 per cent were from other parts of Wales and the UK. Just under 28 per cent were from overseas, almost half of which were non EU students.

There is a similar split when looking at total undergraduate students (sub-degree and first degree programmes combined). In 2011/12, approximately 46 per cent of enrolments were from the NE Wales region, around 27 per cent were from other parts of Wales and the UK, while circa 27 per cent were from overseas. Over 40 per cent of overseas students were from outside of the EU.

For first degree programmes, approximately 56 per cent of students were from NE Wales. Around 10 per cent were from other parts of Wales, while just under 21 per cent were from elsewhere in the UK. Just over 13 per cent were from overseas with almost two thirds of these coming from non EU countries. Overseas students account for a more significant proportion of total enrolments on sub-degree courses – making up more than 40 per cent of the total number. With regard to postgraduate enrolments, more than a third of all postgraduate students at institutions in NE Wales were from overseas, of which the vast majority were non EU nationals.

Figure 6 below summarises enrolments in NE Wales in 2011/12 by provider. A fuller breakdown by mode and level of study is provided at Table A in Annex E.

Figure 6: Enrolments at institutions in NE Wales by provider – 2011/12



Source: HESA

In 2011/12, there were 7,578 enrolments at Glyndŵr University, accounting for around 79 per cent of all enrolments at institutions in NE Wales. We consider Glyndŵr enrolments in greater detail later in this chapter.

The OU is the second largest provider of HE to learners in NE Wales with 1,132 learners (just under 12 per cent) enrolled on its programmes in 2011/12. They were all part-time. In addition to the OU, there were 219 enrolments with other distance learning providers. In total, distance learning accounts for around 14 per cent of all HE delivered in the NE Wales region.

Bangor University had 147 enrolments in NE Wales in 2011/12, accounting for approximately 2 per cent of the total at institutions in the region. All Bangor enrolments related to nursing and other healthcare provision delivered at its Maelor Hospital campus in Wrexham.

There were 475 enrolments on franchised HE provision delivered at FE colleges, accounting for 5 per cent of all enrolments in the region. The vast majority of HE delivered in FE colleges was on a part-time basis.

At Deeside and Yale Colleges, the two main FE providers in NE Wales, there were 237 HE enrolments in 2011/12. HE delivered at these colleges was primarily franchised from Glyndŵr and is predominantly part-time sub-degree provision in the areas of Engineering and Technology, Built Environment and Education. A small amount of full-time undergraduate first degree provision was also delivered in Art, Design and Performing Arts. In 2011/12 provision at what is now Deeside's Llysfasi College site related to part-time sub-degree provision in Science franchised from Bangor. During the stakeholder engagement exercise we were told by both Deeside and Yale that their HE provision accounts for around 0.8 per cent of

the projected total income for Coleg Cambria. They saw this as very low when compared with equivalently sized FE institutions across the UK.

At Grŵp Llandrillo Menai there were 238 HE in FE enrolments on franchised provision in N Wales in 2011/12. The college delivers HE across the whole of N Wales and franchises provision from a number of universities including Glyndŵr, Bangor, Cardiff Metropolitan and the University of Wales, Newport (now part of the University of South Wales). Much of this is delivered at its sites in NW Wales and in particular at the Rhos on Sea Campus in Conwy. A review of prospectus information indicates that a limited amount of its HE provision is delivered at sites in the NE Wales region mainly via the Rhyl campus. For 2011/12, franchised provision from Glyndŵr included part-time sub-degree programmes in Subjects and Professions Allied to Medicine, Engineering and Technology, Mathematical Sciences, IT and Computing and Education. The college also delivered a small amount of part-time sub-degree provision franchised from Cardiff Metropolitan University in Built Environment and part-time postgraduate provision franchised from Bangor in Education. HE provision franchised from Newport related to part-time sub-degree and first degree courses in Education. Grŵp Llandrillo Menai also delivers provision which is directly funded from HEFCW. This is not included in Table A in Annex E since enrolment information is assigned to the college's base in NW Wales and therefore falls outside the NE Wales region for analysis purposes.

4.7 Enrolments at Glyndŵr

In the following analysis we refer to enrolments at Glyndŵr campuses in NE Wales only. It excludes franchised HE in FE provision considered earlier and enrolments at the university's London campus.

Figures 7 and 8 below show enrolments at Glyndŵr in 2011/12 by level of study and domicile of learner. A more detailed breakdown of enrolments at the university is provided in Table 15.

Figure 7: Enrolments at Glyndŵr University by level of study – 2011/12

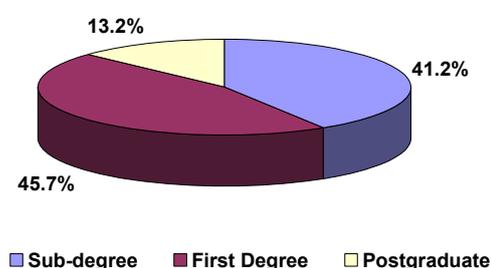
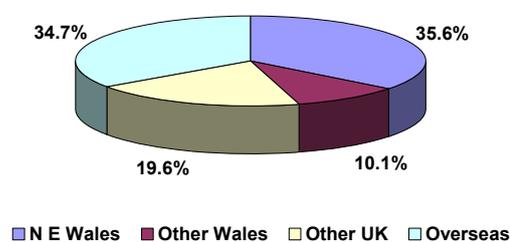


Figure 8: Enrolments at Glyndŵr University by domicile – 2011/12



Overseas students include non UK European Union students and non European Union students. In addition to the numbers included in this chart, Glyndŵr had 1,275 overseas students at its London Campus in 2011/12.

Source: HESA

Table 15: enrolments at Glyndŵr by mode, level and domicile – 2011-12

	Enrolments					Percentage			
	NE Wales	Other Wales	Other UK	Overseas	Total	NE Wales	Other Wales	Other UK	Overseas
Full-time									
Sub-degree	126	24	88	36	274	46.0%	8.8%	32.1%	13.1%
First Degree	1418	298	748	570	3034	46.7%	9.8%	24.7%	18.8%
PG	45	22	15	381	463	9.7%	4.8%	3.2%	82.3%
Total	1589	344	851	987	3771	42.1%	9.1%	22.6%	26.2%
Part-time									
Sub-degree	651	250	351	1595	2847	22.9%	8.8%	12.3%	56.0%
First Degree	220	104	102	0	426	51.6%	24.4%	23.9%	0.0%
PG	235	68	182	49	534	44.0%	12.7%	34.1%	9.2%
Total	1106	422	635	1644	3807	29.1%	11.1%	16.7%	43.2%
Total									
Sub-degree	777	274	439	1631	3121	24.9%	8.8%	14.1%	52.3%
First Degree	1638	402	850	570	3460	47.3%	11.6%	24.6%	16.5%
PG	280	90	197	430	997	28.1%	9.0%	19.8%	43.1%
Total	2695	766	1486	2631	7578	35.6%	10.1%	19.6%	34.7%

Overseas students include non UK European Union students and non European Union students.

Source: HESA

In 2011/12, there were 7,578 enrolments at the university's campuses in NE Wales, 3,771 were full-time and 3,807 part-time, almost a 50:50 split between the two modes. 6,581 students (just under 87 per cent of all enrolments at Glyndŵr) were enrolled on undergraduate programmes, including 3,460 who were following undergraduate first degree programmes (around 46 per cent of all enrolments at Glyndŵr) and 3,121 who were on sub-degree programmes (just over 41 per cent of all enrolments). There were just under 1,000 postgraduate enrolments at Glyndŵr in 2011/12 (roughly 13 per cent of the total), the vast majority of which were following postgraduate taught degrees.

In terms of region of domicile, 3,461 enrolments at Glyndŵr in 2011/12 were from Wales (just under 46 per cent of the total) including 2,695 from NE Wales (approximately 36 per cent of the total). A total of 1,486 enrolments were from other parts of the UK (around 20 per cent), while 2,631 were from overseas (just under 35 per cent), with almost half of these (1,277 enrolments) coming from outside of the EU. A significant proportion of overseas students were studying sub-degree level programmes on a part-time basis (1,595 enrolments) with the vast majority of these (1,110 enrolments) being non UK EU students. For non EU students, there was a fairly even spread between full-time undergraduate first degree programmes (374 enrolments), full-time postgraduate programmes (355 enrolments) and part-time sub-degree programmes (485 enrolments). A small number were undertaking full-time sub-degree and part-time postgraduate programmes (31 and 32 enrolments respectively). Of Glyndŵr's total student population (9,535), including its London campus and all franchised provision (not shown in the table above), around 43 per cent were from overseas. The majority of home students, including those from

NE Wales, were enrolled on undergraduate first degree programmes predominantly on a full-time basis.

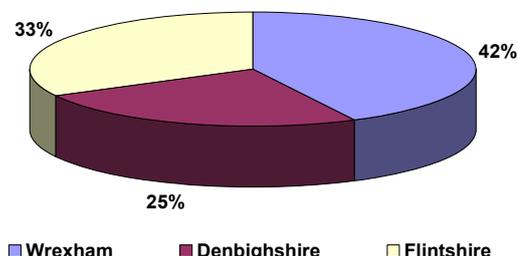
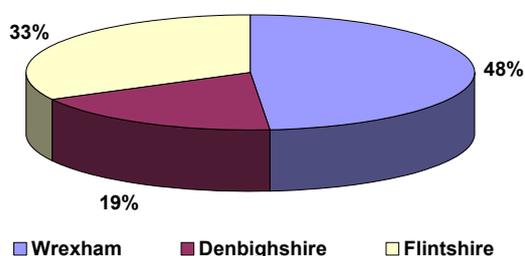
HESA data²⁴ indicate that Glyndŵr recruits a significant proportion of its students from low participation neighbourhoods (LPN). In 2011/12, the university recruited around 1,300 LPN students to full-time undergraduate programmes. Of these more than two thirds were from the local region. A similar scenario is played out at all other post-92 HEIs in Wales.

In terms of Glyndŵr’s recruitment by county in NE Wales, data suggest that there is more of a focus on the Wrexham area with respect to all undergraduate programmes (sub-degree and first degree). Recruitment from Denbighshire and Flintshire, at 19 per cent and 33 per cent respectively (with circa 25 per cent and 40 per cent of the regional population), is low when compared to Wrexham at 48 per cent (with 35 per cent of the region’s population). Figure 9 below refers.

When looking at sub-degree programmes only, recruitment in Denbighshire appears more closely aligned with the county’s relative population size to NE Wales. However, recruitment again appears low for Flintshire. Figure 10 refers.

Figure 9: Glyndŵr recruitment from NE Wales – all undergraduate programmes 2011/12

Figure 10: Glyndŵr recruitment from NE Wales – sub-degree programmes 2011/12



Source: HESA

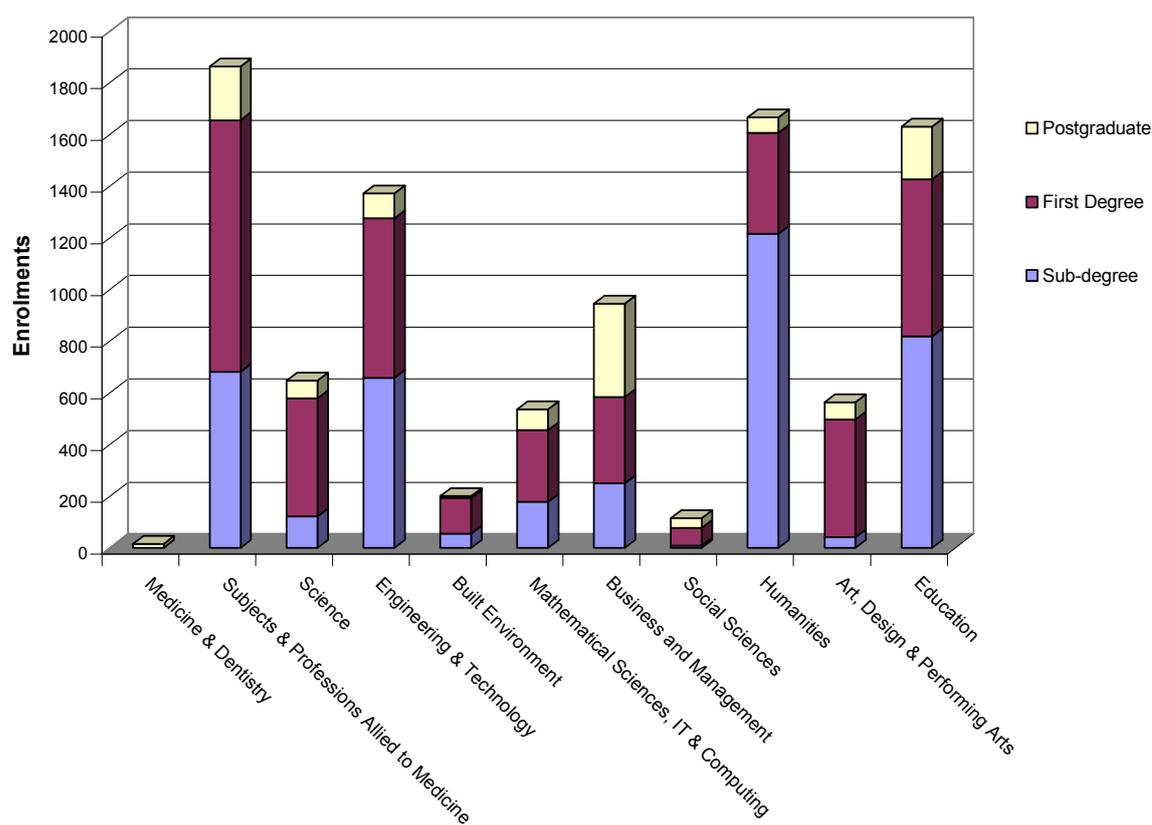
In terms of its recruitment from local FE colleges, we received unverified data from Glyndŵr University which showed that 584 (around one third) new undergraduate entrants in 2012/13 came from N Wales FE colleges (Yale College 300, Deeside College 150, Grŵp Llandrillo Menai 134). Progression from FE was shown to be highest (around 40 per cent) in applied social sciences, engineering and applied physics, and early childhood and family studies.

²⁴ HESA Student Record 2011/12.

4.8 Subject Range

Figure 11 below provides a breakdown of HE enrolments at institutions in NE Wales by subject area and level in 2011/12. A full breakdown, including by mode, is shown in Table B in Annex E.

Figure 11: Enrolments at institutions in NE Wales by subject area and level – 2011/12 (includes full and part-time enrolments)



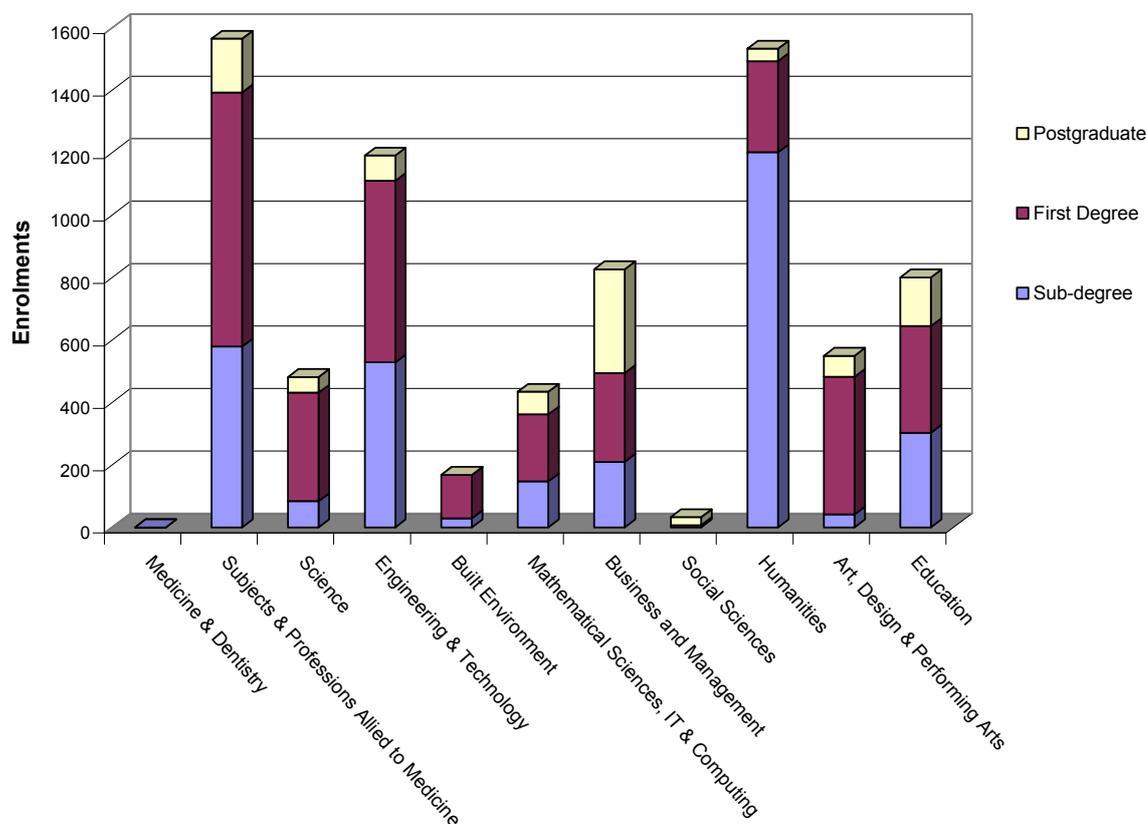
Source: HESA

In 2011/12, the subject areas with the largest number of HE enrolments at FE and HE institutions in the region were Subjects and Professions Allied to Medicine, Engineering and Technology and Education. This highlights the vocational focus of current HE provision in NE Wales. Humanities also accounted for a high number of HE enrolments, with a significant proportion of these being at sub-degree level.

These enrolment data suggest a shortage of provision in the subject areas of Built Environment and Social Science and limited provision in Science, Mathematical Sciences, IT and Computing, Business and Management. In addition data highlight a shortage of first degree provision in Humanities. This position is mirrored at Glyndŵr.

Figure 12 shows HE enrolments at Glyndŵr University by subject area and level in 2011/12. A full breakdown, including by mode, is shown in Table C in Annex E.

Figure 12: Enrolments at Glyndŵr University by subject area and level – 2011/12 (includes full and part-time enrolments)²⁵



Source: HESA

Details of Glyndŵr’s current undergraduate and postgraduate programmes in NE Wales and at the London Campus can be found at the web addresses shown in the footnote below.²⁶ A review of the university’s provision in NE Wales suggests that the institution is focussed on areas that complement the economic strengths of the region and in many instances supports specific industries such as aerospace.

However, therefore, overall provision at Glyndŵr appears relatively narrow, particularly at undergraduate first degree level. A number of gaps can be identified including:

- General Biology provision, with Glyndŵr’s bioscience provision focusing on the areas of Environmental, Forensic Sciences, Sports Sciences and Psychology;
- General Physics provision, with most being applied in nature and related to specific vocational areas such as engineering;

²⁵ Future nursing provision in the region will be delivered by Bangor University.

²⁶ Details of Glyndwr’s undergraduate courses can be found at – <http://www.glyndwr.ac.uk/en/Undergraduatecourses/> .
 Details of Glyndwr’s postgraduate courses can be found at – <http://www.glyndwr.ac.uk/en/Postgraduatecourses/> .
 Details of courses at Glyndwr’s London Campus can be found at – <http://london.glyndwr.ac.uk/> .
 Details of Glyndwr’s part-time courses can be found at – <http://www.glyndwr.ac.uk/en/Part-timestudy/> .

- General Chemistry provision, although we are aware of developing collaboration with Staffordshire to deliver provision in this area. We are also aware that Glyndŵr deliver courses in Forensic Sciences;
- Agriculture and related subjects, with no provision other than Equine Psychology, Equine Science and Animal Studies;
- Mathematical Sciences;
- General Engineering provision, with Glyndŵr's engineering provision focusing on the specific areas of aerospace, performance car and renewable energy technologies;
- Social Studies other than Criminal Justice, Social Work and Youth Work, with no provision in Economics, Politics or Sociology;
- Law;
- Linguistics/Languages/Literature, with no Modern Foreign Language provision;
- Philosophical Studies, with no Archaeology or Heritage related provision; and
- Creative Arts other than Art and Design and Theatre/TV/Film related, with no Fashion or Music provision other than a degree in Music Technology.

When looking at HE provision across the wider North and Mid Wales region it is the case that many of the identified gaps in provision at Glyndŵr are covered by Bangor and Aberystwyth Universities, as well as by the Open University and former Coleg Llandrillo Cymru (see Figure A in Annex E for a mapping of HE provision based on the HE Regional Strategy for North and Mid Wales and updated by HEFCW in 2012). In addition, the University of Chester delivers a range of subject areas that address some of the gaps (such as Biology, Mathematics, Geography, Politics, Sociology, Tourism, Modern Foreign Languages, Archaeology and Religious Studies – see Figure B in Annex E for an analysis of undergraduate provision at Glyndŵr University and the University of Chester).

4.9 Widening Participation

Figures 13 to 15 below show Glyndŵr's performance against HESA widening participation performance Indicators (PIs)²⁷ in 2011/12.

Figure 13: Percentage of young full-time entrants from NS-SEC classes 4, 5, 6 and 7²⁸ – 2011/12

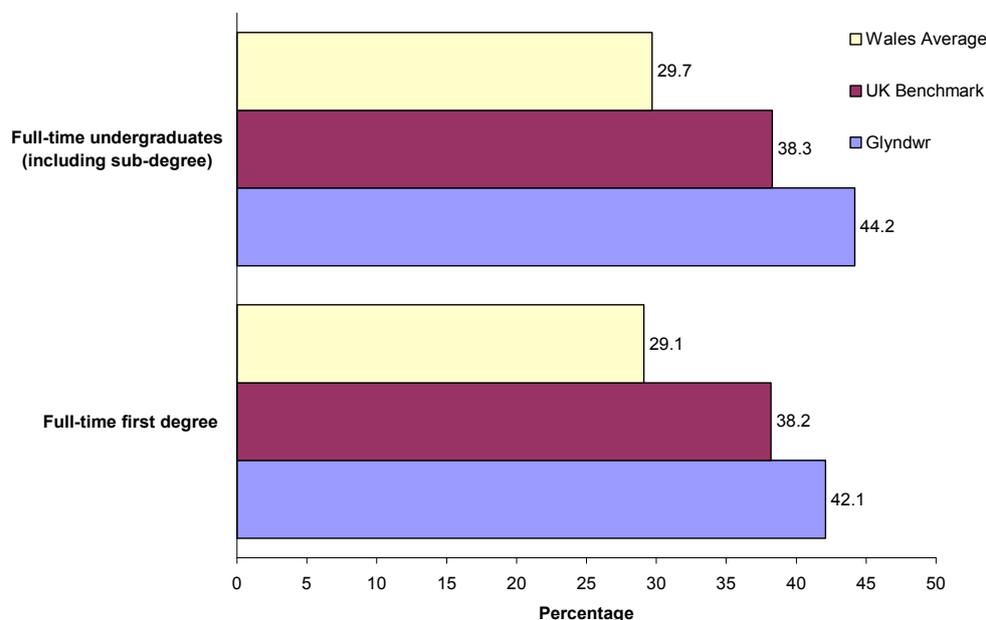
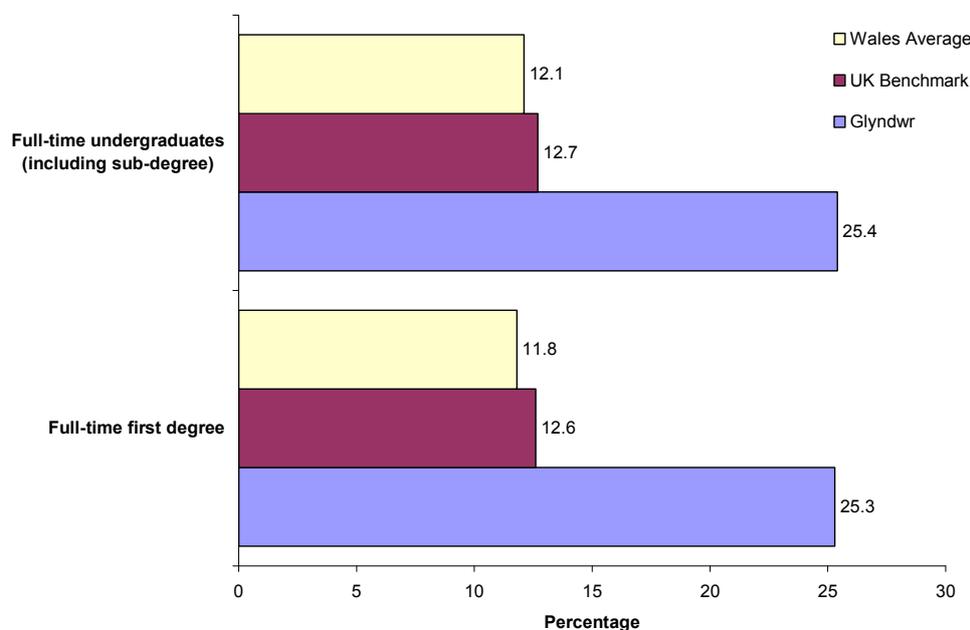


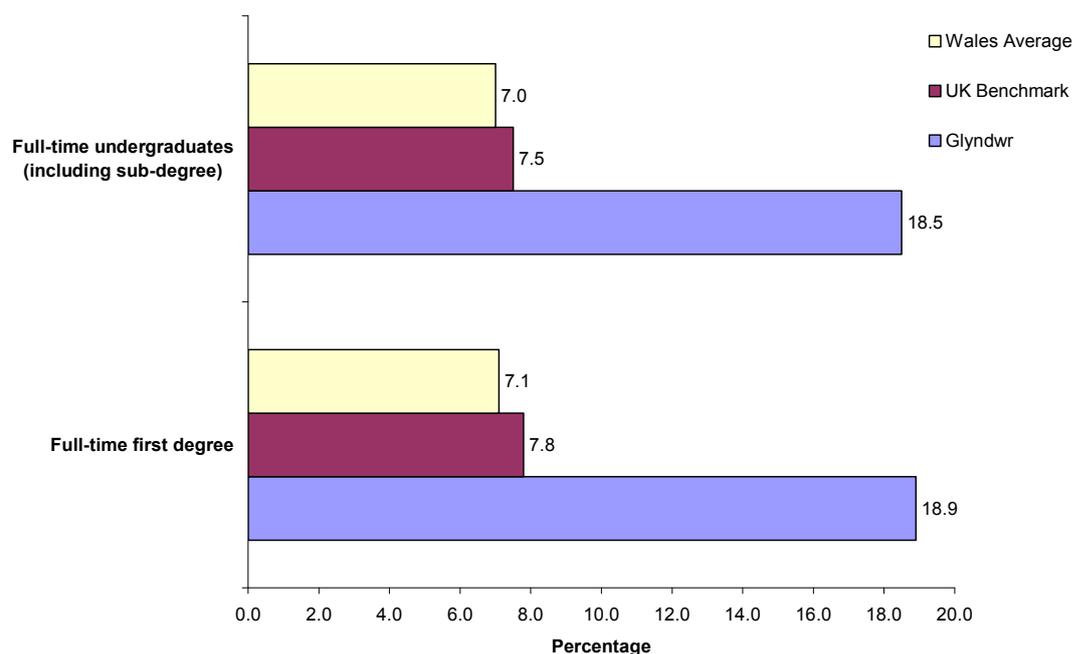
Figure 14: Percentage of young full-time entrants from low participation neighbourhoods – 2011/12 – based on POLAR 3 classifications



²⁷ http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=2072&Itemid=141 .

²⁸ Further information on National Statistics Socio-economic Classifications (NS-SEC) can be found at <http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/soc2010/soc2010-volume-3-ns-sec--rebased-on-soc2010--user-manual/index.html> .

Figure 15: Percentage of full-time students who are in receipt of Disabled Students Allowance – 2011/12



Source: HESA

In 2011/12, Glyndŵr performed above the benchmark level and Welsh national averages for all HESA widening participation PIs.

4.10 Research and Knowledge Transfer

Research Groups

Glyndŵr University is involved primarily in applied research, involving engagement with business and the public services through knowledge transfer. The University has grouped its major areas of business related research into the Centre for Materials, Engineering and Manufacturing. The activities of this centre include the following:

- The work of Optic Glyndŵr in St Asaph, the former Optic Technium which was acquired by Glyndŵr University in 2009. The leading area of activity is in optoelectronics, including precision polishing of mirrors. This high level R&D is linked to international companies and HE partners. The unit has secured a substantial contract in connection with a large telescope to be built by the European Southern Observatory in Chile. This project includes partnerships with the University of Oxford, University College London (UCL), the Astrology Technology Centre and the Science Technology Facilities Council. Optic Glyndŵr's activities also include advanced photovoltaics and solar energy research.

- The Centre for Water Soluble Polymers and the Glyn Phillips Hydrocolloids Research Centre, in Wrexham, which was initiated as the result of links with a Japanese food company.
- The Advanced Composite Training and Development Centre at Broughton. This is a partnership between Glyndŵr, Airbus, Deeside College and the Welsh Government. A large component of its activities relates to training, but the development of the Centre's work includes research into faster manufacturing and processing techniques to help meet future demand for aircraft and composites in general.

Alongside the above, Glyndŵr is involved in computer science and informatics research with a particular focus on data communications networks and human-computer interactions. The research group is a partner in the High Performance Computing Wales project which we outline in greater detail below.

The university undertakes multi agency research at its Centre for the Child, Family and Society. This centre provides facilities for the study of early childhood development and behavioural research and links educationalists and psychologists with healthcare professionals and nutritional scientists.

The University is also involved in a range of high profile collaborative research partnerships and knowledge transfer developments such as:

- **Low Carbon Research Institute (LCRI)** - Glyndŵr University is a partner in the LCRI, which also involves Cardiff, Bangor, Glamorgan and Swansea Universities. Through drawing together and building on existing research expertise, the LCRI aims to establish Wales as an internationally recognised centre for low carbon energy research, increasing competitiveness and research grant income. Glyndŵr University's involvement in LCRI centres on The Centre for Solar Energy Research at Optic Glyndŵr, which plays a key role in the photovoltaics research undertaken by the Institute.
- **High Performance Computing Wales (HPCW)** – Glyndŵr University is associated with the HPCW, which will develop world class high performance computing capacity in Wales at a scale not attempted anywhere else in the UK or Europe. The capacity will be based on dual Hubs to be established at Cardiff and Swansea Universities, linked to a wider network consisting of Tier One spokes at Aberystwyth, Bangor and Glamorgan Universities. Tier Two spokes will also be established through a combination of 'starter kits' to be placed in University of Wales Alliance Universities, including Glyndŵr University, and in the Techniums to provide access for business use and training.
- **Welsh Centre for Crime and Social Justice (WCCSJ)** - The Centre is led by Aberystwyth University, with the other partners being: Bangor University, Cardiff University, University of Glamorgan, Glyndŵr University, University of Wales Newport and Swansea University. It brings together academics from the partner universities to encourage inter-institutional collaboration to

generate high quality, theoretically informed, policy-relevant research on crime and social justice in Wales and beyond.

Glyndŵr currently has around 100 postgraduate research students, accounting for around 2.5 per cent of the sector total.

In terms of the future development of its research capacity, HEFCW have recommended that Glyndŵr adopt a collaborative approach involving partnerships with other HEIs in order to create critical mass in its research groups. In this regard, stakeholder evidence presented to us during the course of the review highlighted a range of R&D networks that Glyndŵr were not currently engaged with but which could play a key role in developing the university's research capacity if they were. These included research Catapult Centres such as the National Composites Centres.

Research Income

The University possesses high quality research capacity, but in a limited number of areas and with these pockets being relatively small in scale. In 2011/12, total research income at Glyndŵr was £1.785m accounting for around 3.7 per cent of the university's total income. Glyndŵr informed us that the university derive a higher percentage of its research income from industry sources than any other university in Wales, underlining the applied nature of its research.²⁹ Since achieving university status in 2008, Glyndŵr's total research income had risen each year up to 2010/11 (from £1.123m to £2.764m) but fell between 2010/11 and 2011/12 (as it did in other post-92 institutions). A comparison with other Welsh post-92 institutions over the same period is provided in Table 16 below.

Table 16: Total research funding (research grant and contract income, plus HEFCW QR and PGR funding)³⁰ and as a percentage of total university income (includes HEFCW recurrent research funding)

	Glyndŵr University		Cardiff Metropolitan University		University of Glamorgan		UW Newport		Swansea Metropolitan University	
	£'000	% Total	£'000	% Total	£'000	% Total	£'000	% Total	£'000	% Total
2007/08	1,123	3.3%	2,856	4.0%	8,951	6.8%	766	1.8%	294	1.0%
2008/09	1,597	4.1%	3,264	4.2%	5,710	4.8%	781	1.7%	387	1.2%
2009/10	2,655	6.1%	3,918	4.9%	6,855	4.8%	1,008	2.1%	529	1.4%
2010/11	2,764	6.2%	4,057	4.9%	7,886	5.5%	992	2.0%	565	1.5%
2011/12	1,785	3.7%	3,779	4.6%	6,816	4.6%	867	1.7%	326	1.0%

Source: HESA and HEFCW

R&D income from HEFCW has been historically low and is now zero, reflecting Glyndŵr's relatively poor performance in the 2008 Research Assessment Exercise (RAE). Glyndŵr returned one of the lowest numbers of staff in Wales to the RAE with just 2 per cent of these being assessed as undertaking 4* research - *quality that*

²⁹ Delivering Economic Prosperity and Social Justice – Glyndwr University's Written Submission to the Review of HE Provision in North East Wales.

³⁰ Total research income is the sum of HESA data for research grant and contract income; and HEFCW QR and PGR funding.

is world-leading in terms of originality, significance and rigour - lower than any other institution in Wales.

However, Glyndŵr has been successful in terms of securing wider research income, a significant proportion of which relates to European funding. As noted in Table 16 above, the university generated over £1.7m in research income in 2011/12. In terms of its income from Research Councils, the University secured total grants of £439,000 in 2011/12 from the Engineering and Physical Sciences Research Council (EPSRC) and Biotechnology and Biological Sciences Research Council (BBSRC). The University is currently a partner in two EPSRC projects on photovoltaics via Optics Glyndŵr and leads on a relatively small BBSRC project relating to bio-refining.

4.11 Institutional Size

Turnover

The Welsh Government set a target that 75 per cent of HE institutions in Wales will have an annual income above the UK median and none will be within the lower quartile by the end of 2012/13.

While evidence presented to the Review Panel suggests that Glyndŵr is currently relatively sound financially, the university is small in terms of its income and turnover level. In 2011/12 Glyndŵr's turnover was £48.3m. In 2010/11, the university was below the UK median: in the lower quartile for income for UK HEIs.³¹ Data presented to us by HEFCW demonstrated that the university has a lower turnover than most UK comparator universities in similar sized cities and towns such as Worcester, Northampton and Bournemouth (see Table 17). By way of local comparison, we also looked at neighbouring institutions in NW England and NW Wales which are popular choices with HE students from NE Wales. Turnover levels for these institutions can also be found in the table below.

Table 17: Institutional turnover – 2011/12³²

Institution	Turnover (£m)
Glyndŵr University	48.327
Aberystwyth University	120.392
Bangor University	132.163
University of Chester	79.802
University of Liverpool	433.744
Liverpool John Moores	170.426
Liverpool Hope University	52.274
University of Manchester	807.311
Manchester Metropolitan University	245.405
University of Salford	184.722
University of Worcester	70.871
University of Northampton	97.995
Bournemouth University	117.145

Source: HESA³³

³¹ Quartile analysis for 2011/12 was not available within the timeframe of the review.

³² In addition to the comparator institutions included in the table, we noted that the Open University had a turnover of £453.551m in 2011/12.

³³ http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=1900&Itemid=239 .

Student Population

Table 18 shows that Glyndŵr University had a total student population of 9,535³⁴ in 2011/12, which was relatively small when compared to most post 1992 institutions in Wales and other equivalent UK locations not directly served by another institution. It was also significantly smaller than other HE institutions in the wider N Wales/NW England region.

Table 18: Total student population – 2011/12

Institution	Total Student Population
Glyndŵr University	9,535
Aberystwyth University	15,605
Bangor University	23,545
University of Glamorgan	31,550
Cardiff Metropolitan University	13,105
University of Wales Newport	10,155
Swansea Metropolitan University	5,985
University of Chester	15,215
University of Liverpool	21,875
Liverpool John Moores	24,455
Liverpool Hope University	7,770
University of Manchester	40,680
Manchester Metropolitan University	34,595
University of Salford	21,755
University of Worcester	10,695
University of Northampton	14,605
Bournemouth University	19,750

Source: HESA

The relative size of Glyndŵr in income and student population terms compared to neighbouring HE institutions, illustrates the sheer scale of the competition faced by the institution. Looking to the future, it will also be much smaller in income terms than Coleg Cambria.

While the university is relatively small in scale when income and student population are used as the benchmark, Glyndŵr highlighted to us in its written submission the role that the institution plays in NE Wales as a major local employer. In this respect, Glyndŵr employs around 835 staff.³⁵ This compares with 2,000 at the University of Chester and a projected staffing level of around 1,500 for Coleg Cambria.

4.12 Fee Levels

The average fee level at Glyndŵr for the current academic year (2012/13) is £6,643. This is lower than all other institutions directly funded by HEFCW. Fee levels matter for two different reasons: budget and standing.

³⁴ Includes all students (including franchised) enrolled at Glyndŵr both at locations in N E Wales and outside the region.

³⁵ http://www.hesa.ac.uk/index.php/component/option.com_datatables/Itemid,121/task/show_category/catdex,2/.

Glyndŵr told us that they had suffered a loss of 53 per cent of HEFCW grant funding for 2012/13 compared with a small average increase (2 per cent) in the rest of the Welsh HE sector and they argued that they had been discriminated against. This is a serious allegation and we explored it in some detail with HEFCW.

HEFCW noted that in 2012/13, some Welsh HE institutions had actually suffered a *greater loss* of grant income than Glyndŵr but had offset it by the fees they earned.³⁶ Glyndŵr argued that the HEFCW grant should have been distributed so as to offset income lost by institutions that set low fees – in other words, on a different basis. We put this to HEFCW and were told that they had advised Glyndŵr on more than one occasion how the new system would in fact work and that their proposed fee levels would inevitably lead to a substantial reduction in income.

Our understanding therefore is that the rules were made fully known to Glyndŵr and that the loss the university referred to was the result of setting low fees compounded by significant under recruitment. However, we would also note that setting low fees may be seen as an indication of a university's standing and thereby affect recruitment.

Table 19: Average fee levels at Welsh institutions 2012/13 and 2013/14

	Average Fee Level 2012/13	Average Fee level 2013/14
Aberystwyth University	£9,000	£9,000
Bangor University	£8,977	£8,975
Cardiff University	£9,000	£9,000
Swansea University	£9,000	£9,000
Cardiff Metropolitan University	£9,000	£7,500
University of Glamorgan	£8,673	£7,499
Glyndŵr University	£6,643	£6,999
University of Wales Newport	£8,644	£7,500
Swansea Metropolitan University	£8,578	£7,500
University of Wales, Trinity Saint David	£8,557	£7,500
Grŵp Llandrillo Menai	£7,200	£7,300
Coleg Sir Gar	£7,900	£7,500
Bridgend College	£7,000	£7,000

University of Glamorgan fee for 2013/14 excludes the 'Performance Element' at Royal Welsh College of Music and Drama.

Source: HEFCW

4.13 Quality and Performance Indicators

Inspection Outcomes

The main bench mark for determining the quality of provision at a HE institution is the QAA inspection report. At the time of writing, the latest available report for Glyndŵr was dated 2007. It stated that "confidence can be placed in the soundness of the

³⁶ W12/10E – HEFCW Funding Allocations 2012/13
http://www.hefcw.ac.uk/publications/circulars/circulars_2012.aspx.

institution's current and likely future management of the quality of its academic programmes and the academic standards of its awards". We are aware that a further institutional assessment was undertaken at Glyndŵr in March 2013. It is expected that the findings of this assessment will be published by QAA in the autumn. Similar statements of confidence have been made by QAA with respect to competitor universities in NW England and NW Wales.³⁷

National Student Survey for 2012

The overall quality of student experience at Glyndŵr University is just below the UK performance indicator benchmark for equivalent institutions, as illustrated by the results of the National Student Survey for 2012.³⁸

Glyndŵr University has an overall student satisfaction score of 77 per cent (down from 79 per cent in 2011) compared with a benchmark of 82 per cent. The overall satisfaction score of 77 per cent was somewhat lower than the scores for the other universities in the North and Mid Wales region and in NW England. For example Aberystwyth University and Bangor University recorded overall satisfaction scores of 87 per cent and 84 per cent respectively compared with benchmarks of 85 and 86 per cent while the University of Chester achieved an overall satisfaction score of 86 per cent against a benchmark of 85 per cent.

Table 20: Overall student satisfaction

	2011		2012	
	Satisfaction %	Benchmark %	Satisfaction %	Benchmark %
Aberystwyth University	89	84	87	85
Bangor University	86	84	84	86
Glyndŵr University	79	80	77	82
Cardiff Metropolitan University	82	82	75	83
University of Glamorgan	81	82	83	84
University of Wales, Newport.	76	80	74	82
University of Chester	84	83	86	85
University of Liverpool	86	85	86	86
Liverpool John Moores University	80	82	83	84
University of Manchester	79	85	83	86
Manchester Metropolitan University	75	82	81	84

Source: National Student Survey

University League Tables

In terms of its ranking in university league tables, Glyndŵr appears at a relatively low position in all UK university league tables, being ranked 108th out of 119 in the

³⁷ Copies of the latest reports are available at: <http://www.qaa.ac.uk/InstitutionReports/Pages/default.aspx> .

³⁸ <http://www.hefce.ac.uk/whatwedo/it/publicinfo/nationalstudentsurvey/nationalstudentsurveydata/2012/> .

Guardian University Guide 2014; and 115th out of 124 in the *Complete University Guide* 2014. There has been a deterioration in the rankings from the previous years in these league tables. In terms of individual components within the league tables, Glyndŵr consistently performed very well in terms of graduate employability, but less well in terms of research, teaching and student satisfaction.

The table below compares Glyndŵr's performance with Aberystwyth, Bangor, and competitor universities in the NW of England across two of the main university league tables. Its performance is not incomparable with other post-92 institutions in Wales. However, the direction of travel is not upward (which is also true of Cardiff Metropolitan University, the University of Glamorgan and the University of Wales, Newport). However, over the same period the University of Chester, Glyndŵr's most direct competitor, moved strongly in an upward direction.

Table 21: University league table performance

Institution	National ranking			
	The Guardian University Guide		The Complete University Guide	
	2014	2013	2014	2013
Aberystwyth University	88/119	81/120	70/124	58/116
Bangor University	74/119	63/120	64/124	66/116
Glyndŵr University	108/119	106/120	115/124	100/116
Cardiff Metropolitan University	105/119	66/120	96/124	79/116
University of Glamorgan	-	81/120	91/124	91/116
University of Wales, Newport.	-	111/120	-	105/116
University of Chester	46/119	52/120	71/124	68/116
University of Liverpool	54/119	45/120	38/124	31/116
Liverpool John Moores University	69/119	98/120	82/124	90/116
University of Manchester	31/119	41/120	25/124	29/116
Manchester Metropolitan University	93/119	108/120	88/124	86/116

We were told during the stakeholder engagement exercise how important league table rankings are to prospective students, their parents and other advisors when it comes to selecting a university. This is borne out in the recently published London Economics *Research Brief: Determinants of University Selection*³⁹ which considered a range of factors that influence university selection based on the choices made by almost 700 parents. In addition to rankings, this report also considered factors such as, employment outcomes of graduates, tuition fees, and the brand value of a university's name. The significant strength on which Glyndŵr could build, judging by this research, is its graduate employment record.

³⁹ A copy of the London Economic research brief and findings can be accessed via at the following link: <http://www.londecon.co.uk/wp-content/uploads/2013/04/Determinants-of-university-selection-08-04-2013.pdf>

4.14 UCAS Applications and Acceptances

Table 22 below shows that over the period 2008 to 2012, UCAS applications and acceptances for full-time undergraduate students have been consistently lower for Glyndŵr University than for other small post-92 institutions and universities in North and Mid Wales. They have also been significantly lower than its nearest competitor, the University of Chester over the same period.

Table 22: UCAS applications and acceptances 2008 to 2012

	2008	2009	2010	2011	2012	% Change 2008-12	% Change 2011-12
Glyndŵr University							
Applications	1383	2034	2380	2492	2290	66%	-8%
Acceptances	703	954	1084	926	731	4%	-21%
Ratio	1.97	2.13	2.20	2.69	3.13		
Aberystwyth University							
Applications	8373	9599	10565	12450	10769	29%	-14%
Acceptances	2658	2949	2826	3283	2655	0%	-19%
Ratio	3.15	3.26	3.74	3.79	4.06		
Bangor University							
Applications	8774	9657	10129	12204	10647	21%	-13%
Acceptances	2244	2752	2426	2372	2410	7%	2%
Ratio	3.91	3.51	4.18	5.15	4.42		
Cardiff Metropolitan University							
Applications	10357	9997	10376	10695	8710	-16%	-19%
Acceptances	2728	2650	2603	2704	2646	-3%	-2%
Ratio	3.80	3.77	3.99	3.96	3.29		
University of Wales Newport							
Applications	4544	5251	5436	5930	5370	18%	-9%
Acceptances	1171	1430	1527	1426	1147	-2%	-20%
Ratio	3.88	3.67	3.56	4.16	4.68		
Swansea Metropolitan University							
Applications	3737	3660	4317	4137	3986	7%	-4%
Acceptances	1414	1539	1257	1446	1425	1%	-1%
Ratio	2.64	2.38	3.43	2.86	2.80		
University of Chester							
Applications	16082	16807	20764	24861	21512	34%	-13%
Acceptances	2702	2908	2883	2936	3064	13%	4%
Ratio	5.95	5.78	7.20	8.47	7.02		

Source: UCAS

Although Glyndŵr University saw a significant increase in overall applications between 2008 and 2011, levels decreased by 8 per cent between 2011 and 2012. This was a difficult year across the UK system and Glyndŵr's decline in applications was lower than that recorded at several other institutions, but the fall in acceptances at Glyndŵr (21 per cent) was higher. We discuss the possible implications of this in later chapters. Bangor University and the University of Chester saw an increase in acceptances over the same period.

The application to acceptance ratio at Glyndŵr has been consistently lower than all Welsh institutions except Swansea Metropolitan University. In 2012, Glyndŵr recorded an application to acceptance ratio of 3.13 applications per place, compared with 4.06 per place at Aberystwyth, 4.42 at Bangor (and 7.02 at Chester). However, the Glyndŵr figure was in part an artefact of the drop in acceptances. In 2010, when most Welsh universities were at or about their maximum level of acceptances, Glyndŵr's ratio was only 2.20 compared with 3.56 at Newport and 3.43 at Swansea Metropolitan.

These data suggest that Glyndŵr has benefitted from acquiring university status in terms of overall numbers of applications, but that it is still less "popular" than comparators in Wales and much less so than its nearest competitor - the University of Chester. What the large drop in acceptances this past year (when competition became much stiffer and universities turned away fewer students that missed the required grades) reveals is that Glyndŵr receives relatively few first choice applications.

However, in considering these figures, we must note that Glyndŵr – like some other post-92 institutions - recruits a significant proportion of its students from outside the UCAS process, which may explain the fact that there was a small increase in overall full-time undergraduate entrants (22 students) between 2011 and 2012 despite the downturn in applications and acceptances.

Enrolment data for the academic year 2012/13 year are not yet available, however, Glyndŵr informed us that recruitment was down overall by 200 for this year.

4.15 HE Participation in North East Wales

A number of stakeholders, particularly in Wrexham, expressed concerns about low participation in HE. We looked at *provisional HEFCW standard participation rate analysis* for the period 2007/08 to 2009/10 to explore this issue. While it did not allow us to establish how participation compares across socio economic groups, it did appear to show that overall participation in HE in NE Wales has improved relative to the Welsh average between 2007/08 and 2009/10.

Over this period, HEFCW analysis also show that full-time participation in HE, compared to the Welsh average, increased in Flintshire and Wrexham whilst in Denbighshire it remained high throughout. All three counties were in line with or above the Welsh average in 2009/10. A similar trend was apparent when we looked specifically at the traditional HE market (under 25's). In 2009/10, it was established that all three counties were at or above the national average for this age group.

Over the analysis period participation rates amongst the over 25s remained high, compared to the Welsh average, in Wrexham, very high in Denbighshire and improved from low to average in Flintshire.

The data highlighted a different position in terms of part-time participation, with all three local authority areas being at or below the national average in 2009/10 having

shown no improvement against the Welsh benchmark since 2007/08. Part-time participation was low in Flintshire and Wrexham across this period.⁴⁰

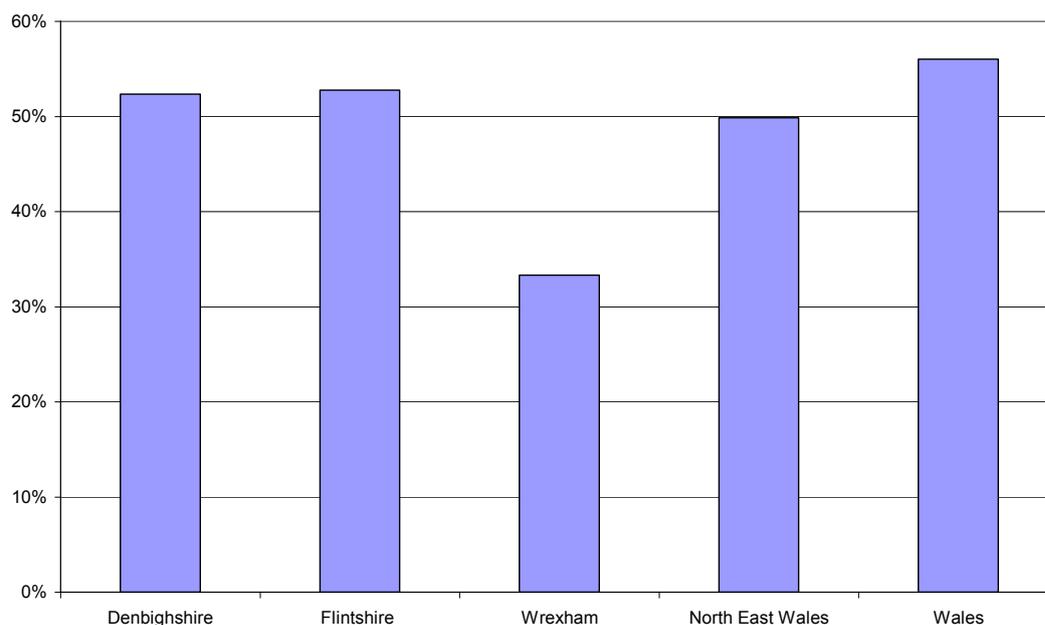
The participation rate analysis reflected participation in HE regardless of where students studied, not participation through purely regional providers (we consider student flows in and out of the region later in this chapter).

We recognise that the data used in HEFCW's analysis are not current and as such may not reflect more recent changes in participation.

4.16 Pupil Destinations

Pupil destination data for 2012⁴¹ show that the proportion of year 13 pupils progressing to full-time HE from schools in NE Wales (50 per cent) is below the Welsh national average (56 per cent). The proportion progressing to HE from schools in Wrexham (33 per cent) is particularly low. The Wrexham figure is based on a smaller cohort than the other counties due the tertiary arrangements that are in place.

Figure 16: Year 13 pupils continuing in full-time higher education – NE Wales – 2012



Source: *Careers Wales Pupil Destination Survey*

⁴⁰ For the purpose of the review, HEFCW shared provisional data with the panel. We have attempted to show trends in participation based on this data.

⁴¹ <http://www.careerswales.com/prof/server.php?show=nav.3850>

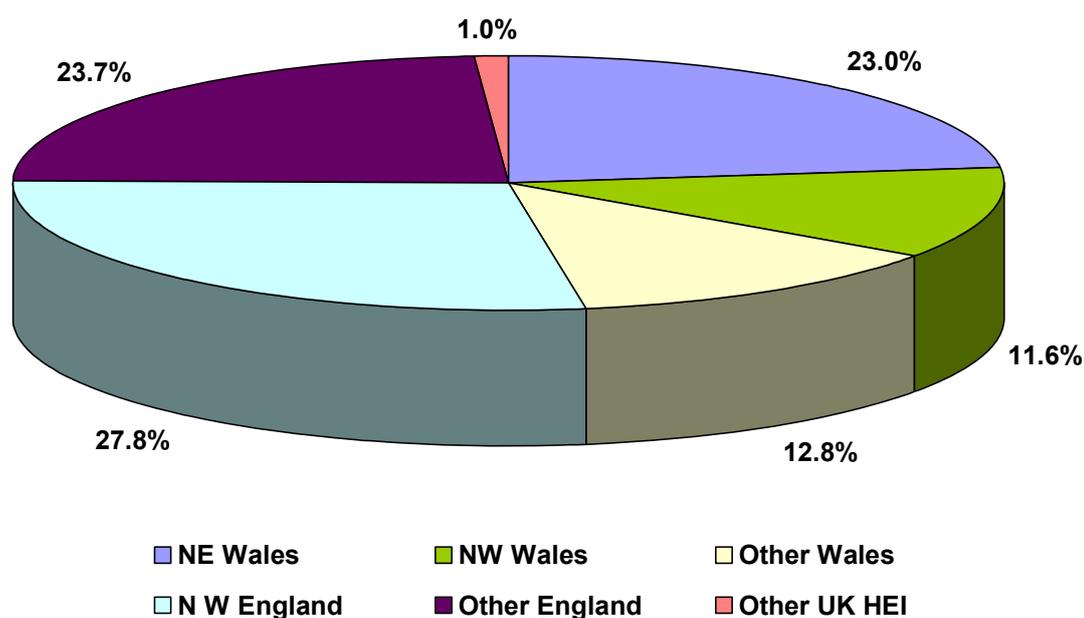
4.17 Region of Study for North East Wales Domiciled Students

Full-time Undergraduate Students

During the course of our analysis we looked at where HE full-time undergraduates domiciled in the region undertook their study during 2011/12. For the purpose of comparison we also looked at another border region namely SE Wales.

In 2011/12, there were 6,734 NE Wales domiciled learners undertaking full-time undergraduate programmes. HESA data highlight that less than quarter of all full-time undergraduate students domiciled in NE Wales remained within the region to study. 27.8 per cent chose to undertake their study at institutions in NW England, 11.6 per cent in NW Wales, 12.8 per cent at other Welsh HE Institutions, with the balance spread across the rest of England and the UK. Overall, 77 per cent of NE Wales domiciled students chose to study outside the region.

Figure 17: Full-time undergraduate enrolments by location of institution – NE Wales domiciled learners – 2011/12



Source: HESA

By way of comparison, HESA data show that in SE Wales around 54 per cent of full-time undergraduates domiciled in the region remain in SE Wales to study whilst 46 per cent chose to study elsewhere.

Students from Low Participation Neighbourhoods, and High Achievers

We also looked at the where students from low participation neighbourhoods (LPN) and those with higher entry qualifications (AAB and above) chose to study.

In 2011/12, of the 6,734 NE Wales domiciled learners undertaking full-time undergraduate programmes, HESA data indicate that 3,009 were from LPN and 1,413 domiciled learners had entry qualifications at AAB or above.

Table 23: Full-time undergraduate enrolments for NE Wales domiciled learners by location of institution – 2011/12.

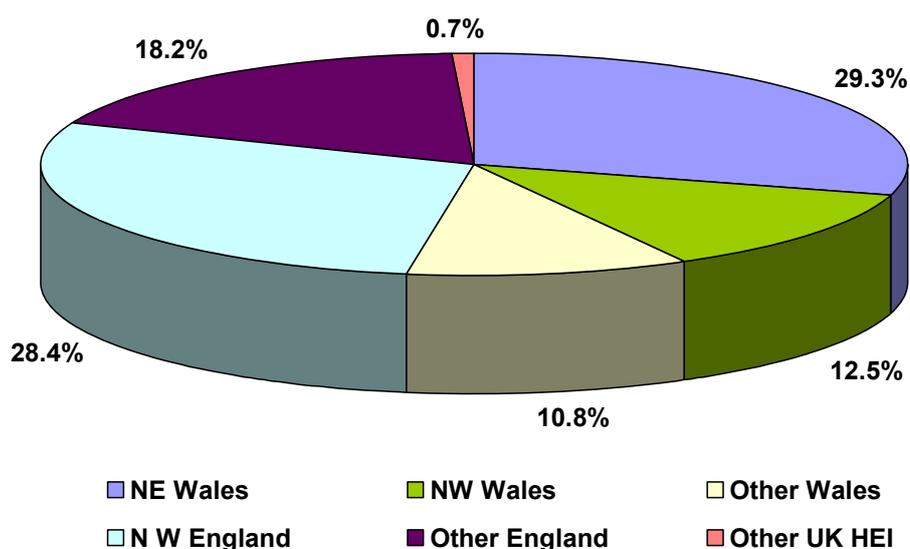
Location of institution	Total	LPN (POLAR 3)	AAB+ students	% Total	% LPN	% AAB+ students
NE Wales	1,551	882	253	23.0%	29.3%	17.9%
NW Wales	778	377	63	11.6%	12.5%	4.5%
Other Wales	865	324	170	12.8%	10.8%	12.0%
NW England	1,873	856	349	27.8%	28.4%	24.7%
Other England	1,599	548	552	23.7%	18.2%	39.1%
Other UK HEI	68	22	26	1.0%	0.7%	1.8%
Total	6,734	3,009	1,413	100%	100%	100%

NE Wales data shown in this table does not include Bangor University provision delivered in Wrexham.

Source: HESA

In 2011/12, 29.3 per cent of full-time undergraduate students from LPN remained in the region to study. Whilst this is a higher proportion than for total full-time undergraduates (23.0 per cent), it indicates that a substantial majority (70.7 per cent) of LPN students chose to study elsewhere including 28.4 per cent in NW England (Figure 18 refers).

Figure 18: Full-time undergraduate enrolments from low participation neighbourhoods by location of institution – NE Wales domiciled students – 2011/12

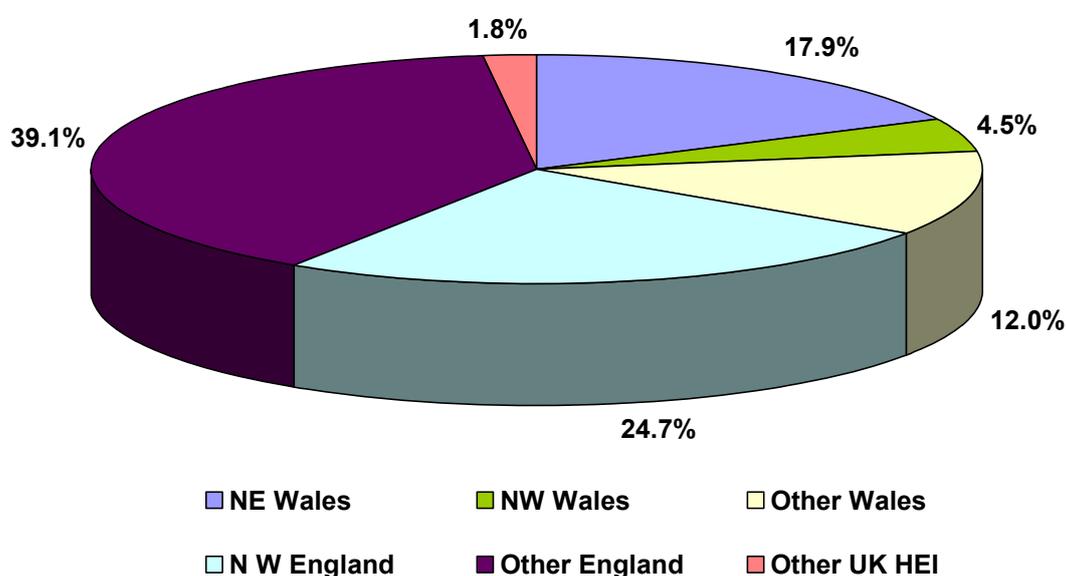


Source: HESA

By way of contrast, in SE Wales 65 per cent of LPN students remained in the region to study.

In the case of full-time undergraduate students with high entry qualifications, HESA data show that 17.9 per cent remained in the region to study. More students chose to undertake their study at institutions in NW England (24.7 per cent) and elsewhere (57.4 per cent).

Figure 19: Full-time undergraduate enrolments with qualifications on entry graded AAB+ by location of institution – NE Wales domiciled students – 2011/12



Source: HESA

In SE Wales, 48 per cent of full-time undergraduates with higher entry qualifications remained in the region to study.

We recognise the difficulty in drawing firm conclusions from these datasets (relating to LPN and high achieving students). It may be that they are merely a reflection of relatively low levels of provision in NE Wales compared to a higher level of provision in NW England. Equally, they may reflect the closeness of the England/Wales border to centres of population in NE Wales compared with the position in SE Wales. We discuss their implications in more detail in later chapters.

Sub-degree Students

In 2011/12, there were 2,456 NE Wales domiciled learners enrolled on sub-degree courses. This included 1,094 from low participation neighbourhoods and 996 with higher entry qualifications. Most were undertaking their study on a part-time basis.

The majority (58.1 per cent) of NE Wales domiciled students on sub-degree programmes were studying at institutions in the region. Approximately a quarter travelled across the border to undertake their studies, particularly at institutions in NW England.

Table 24: Sub-degree enrolments for NE Wales domiciled learners by location of institution – 2011/12.

Location of institution	Total	LPN POLAR 3	AAB+ students	% Total	% LPN POLAR 3	% AAB+ students
NE Wales	1,427	645	634	58.1%	59.0%	63.7%
NW Wales	201	100	26	8.2%	9.1%	2.6%
Other Wales	221	93	62	9.0%	8.5%	6.2%
NW England	363	161	184	14.8%	14.7%	18.5%
Other England/UK	244	95	90	9.9%	8.7%	9.0%
Total	2,456	1,094	996	100%	100%	100%

NE Wales data shown in this table does not include Bangor University provision delivered in Wrexham.

Source: HESA

4.18 Net Student Flows In and Out of North East Wales

As part of our analysis we also looked at the flow of full-time undergraduate students in to and out of the region.

Net Flow for Full-time Undergraduate Students

HESA data point to a net outflow from the region of full-time undergraduates. In 2011/12, more than four times as many UK domiciled full-time undergraduate students left the region to study (5,183) as came in (1,164). This was in sharp contrast to SE Wales which saw a net inflow of such students during the same period (12,020 UK domiciled left SE Wales while 21,226 UK domiciled students came in).

Table 25: Net student flows for full-time undergraduates – 2011/12

	Total Inflow inc Overseas Students	Inflow - UK Students only	Outflow	Net - Total	Net - UK Only
North East Wales	1772	1164	5183	-3411	-4019
South East Wales	25642	21226	12020	13622	9206

Source: HESA

For those NE Wales domiciled students choosing to leave the region to undertake full-time undergraduate programmes, HESA data show the most frequently studied subject areas were Subjects Allied to Medicine, Biological Sciences, Creative Arts and Design, Business and Administrative Studies, Social Studies and Education. While it would seem reasonable to conclude that this is, at least in part, due to existing gaps in provision in NE Wales, it is the case that NE Wales domiciled learners are also leaving the region to study subjects that are catered for within the

region, such as Subjects and Professions Allied to Medicine and Business and Management.

Net Flow for Full-time Undergraduate Students with High Entry Qualifications

A number of employers argued (see Chapter 5) that net flow patterns matter to them because students who study in a region are more likely to be available to the regional labour market. They emphasised in particular the importance of net flows of the most able students. Data underline a net outflow from the region for students with high entry qualifications. Table 26 below shows that in 2011/12, 179 UK students with high entry qualifications came to the region to study, while 1,160 NE Wales domiciled students chose to study elsewhere in the UK. In contrast, SE Wales saw a significant inflow of students with high entry qualifications.

However, 514 overseas students with high entry qualifications also chose to study in NE Wales which represents more than half of all students with high entry qualifications at institutions in the region.

Table 26: Net student flows for full-time undergraduates with entry qualifications graded AAB+ – 2011/12

	Inflow in Overseas Students	Inflow - UK Students only	Outflow	Net - Total	Net - UK Only
North East Wales	693	179	1160	-467	-981
South East Wales	8550	6961	3521	5029	3440

Source: HESA

Net Flow for Full-time Undergraduate Students from Low Participation Neighbourhoods

There is a similar picture when focussing on full-time undergraduate students from LPN. Table 27 shows that in 2011/12, only 413 LPN students from other regions studied in NE Wales while 2,127 LPN students left to study elsewhere, creating a large net outflow for this group. SE Wales witnessed a net inflow.

Table 27: Net student flows for full-time undergraduates from low participation neighbourhoods – 2011/12

	Inflow	Outflow	Net
North East Wales	413	2127	-1714
South East Wales	4686	3503	1183

Source: HESA

Net Flow for Sub-degree Students

HESA data show that at sub-degree level there was a small net outflow (-90 students) from NE Wales of UK domiciled HE students as well as for students from LPN (-130 students). There was a small net *inflow* of UK students with higher entry qualifications (+83 students). However, when the significant influx of overseas students is taken into account, the region records a large net *inflow* both in terms of total sub-degree enrolments (+1,545 students) and enrolments for students with higher entry qualifications (+1,689).

While the outflow of UK students may well be a loss to the local labour market as employers argue, it is not clear whether the inward flow of overseas students provides a compensatory supplement to the local labour market.

Table 28: Net student flows sub-degree HE students – NE Wales – 2011/12

	Inflow- inc Overseas students	Inflow - UK Students only	Outflow	Net - Total	Net - UK Only
Total Enrolments	2574	939	1029	1545	-90
LPN Enrolments		319	449		-130
AAB Enrolments	2051	445	362	1689	83

Source: HESA

These flow data are also difficult to interpret. Net in and out flow is in part a reflection of different recruitment traditions across the UK. Older universities tend to recruit from a wider catchment area with significant mobility present amongst their student bodies. Post-92 institutions recruit more heavily from their local areas. While NE Wales has a post-92 institution, NW England has several old universities within easy reach. These flow data may also reflect issues of institutional branding, which we will return to later.

Some stakeholders (Chapter 5) argued, sometimes quite vehemently, that these flow data reflect a long-standing under investment in HE within NE Wales compared with other Welsh regions. We also discuss this issue in later chapters.

4.19 Further Education Institutions

Coleg Cambria (Deeside & Yale Colleges)

From 1 August 2013, the FE landscape in NE Wales will change significantly with the formation of Coleg Cambria from the merger of Yale and Deeside Colleges. This will create a single FE institution in NE Wales which will be the second largest in Wales and among the ten largest in the UK. The college will be significantly larger in scale than Glyndŵr University.

It is anticipated that Coleg Cambria will have an annual turnover of some £60m and employ around 1,500 staff. The college will have a total student population of around 30,000 learners, including 7,000 full-time learners.⁴²

Income from HE activity is currently around 0.8 per cent of projected turnover. College representatives have expressed a strong desire to increase the level of HE provision delivered by the institution in order to extend the progression routes available for its level 3 learners.

Deeside and Yale Colleges have established relationships with a number of HE institutions. Details of franchised HE activity in NE Wales via Glyndŵr University have been provided earlier in this chapter. Deeside College also has strategic alliances and/or Memoranda of Understanding in place with Aberystwyth University, Bangor University and with the University of Chester.

Data presented to the review indicate that quality and performance is high at both existing institutions and they are financially sound. In their most recent Estyn inspections Yale and Deeside performed well across all criteria assessed.⁴³

The main catchment for the new college is likely to mirror existing arrangements – concentrated in the three local authority areas of Denbighshire, Flintshire and Wrexham, with some recruitment from further afield, especially in relation to land-based provision. Details relating to the main campuses were provided earlier in this chapter.

Grŵp Llandrillo Menai

Grŵp Llandrillo Menai was established in April 2012 following the merger of Coleg Llandrillo and Coleg Menai.

With a turnover of around £75m Grŵp Llandrillo Menai is the largest FE institution in Wales. The college employs around 2,000 staff and has a student population of around 34,000 learners, including around 8,000 full-time learners.⁴⁴ HEFCW data for 2011/12 show that the college had 804 directly funded HE enrolments across full and part-time courses. This is in addition to the franchised provision outlined earlier.

⁴² Projections are based on information provided to the Review Panel by Deeside and Yale College representatives during the stakeholder engagement exercise.

⁴³ The latest Estyn Inspection Reports for Deeside and Yale Colleges can be viewed at the following web links: <http://www.estyn.gov.uk/english/provider/F0009007/> , <http://www.estyn.gov.uk/english/provider/F0009026/> .

⁴⁴ Based on information provided by Grwp Llandrillo Menai during the stakeholder engagement exercise.

The college has established relationships with HE institutions throughout Wales. This includes a Memorandum of Understanding with Bangor University for the validation of Foundation Degree programmes and with Glyndŵr University for franchised provision. Information relating to the college's HEI relationships was provided earlier in this chapter.

Data obtained during the review indicate that quality and performance is high and the college is financially sound.

The main catchment area for the college includes NW Wales and Denbighshire, with some recruitment from the wider NE Wales area and further afield. Grŵp Llandrillo Menai has 14 campuses located in N Wales. Its main campuses are situated in Rhos-on-Sea in Conwy; Bangor, Dolgellau, Pwllheli and Glynllifon in Gwynedd, and Rhyl in Denbighshire.

5. What North East Wales Needs

An overwhelming majority of stakeholders were in agreement about many underlying issues and needs.

Throughout the stakeholder engagement exercise, two themes stood out:

- the status quo is not an option; and
- NE Wales needs a HE presence which it can feel it owns and which is focussed on the needs of the region. In this regard, one stakeholder commented:

"The region needs an institution based in NE Wales of strength, scale and prestige that has the capacity and capability (educationally and in R&D terms) to respond to the economic and educational needs of the whole region and to deliver high quality HE support to local businesses and residents".

Other widely held views also emerged:

- the region needs a strategic approach to raising aspirations and skills needs;
- to underpin its competitiveness, there needs to be clear focus on addressing the HE needs of the local economy;
- HE provision needs to grow and be re-balanced;
- far closer working between HE and FE is essential;
- generally, far greater collaboration is required;
- more high quality and collaborative R&D capacity is essential;
- Glyndŵr University has areas of strength that need to be recognised and built on (most often quoted was its proactive approach to widening participation for those from disadvantaged and non traditional backgrounds, its community focus, success in terms of graduate employability and earnings, and employer engagement);
- Glyndŵr University is driven by an opportunistic approach to survival, not a broader strategy;
- constant uncertainty inhibits a strategic and (locally) collaborative approach by Glyndŵr University;
- Glyndŵr University needs a period of significant growth to make it secure and self confident;
- poor standing and brand as well as resources limit the potential for such growth;
- clear sighted, strategic leadership and strong governance is required at Glyndŵr University, but also across the system as a whole.

5.1 Four Bodies of Opinion

In terms of meeting the HE needs of NE Wales, there was a divergence of views that can be summarised as four primary bodies of opinion:

1. NE Wales does not need a university as the region is served by a number of strong and well regarded institutions in NW England. This was very much a minority view.
2. The region has both HE (Glyndŵr University) and FE providers (Deeside College and Yale College and Grŵp Llandrillo Menai) that meet current need quite well, though the scale, range and balance of HE provision needs further development.

With regard to HE, Glyndŵr University is seen by some to be a strong institution with a good record in terms of widening access and employer engagement. It is also viewed as being innovative, entrepreneurial and adequately linked with FE providers. While this is by no means a majority view, it is one that emerged strongly in Wrexham and amongst certain business stakeholders; however, it was often coupled with an apparent lack of awareness of weaknesses and vulnerabilities that other stakeholders identified.

3. The majority view is that Glyndŵr University does a number of things very well but that there are clear weaknesses that need to be addressed.

This body of opinion does typically support the need for a strong, self confident university in NE Wales. It is seen as the potential core of a partnership embracing other institutions provided that the university works in a genuinely collaborative way and has the self confidence to be strategic in meeting the needs of NE Wales rather than opportunistic in its pursuit of survival. However, some of these stakeholders added that to be strategic rather than opportunistic a university for NE Wales would need to feel secure about its future.

4. An influential fourth group raised concerns about the present and future competitiveness of the regional economy. One argument was that Glyndŵr University cannot meet the needs of NE Wales as the industrial base in the region needs an institution with appropriate prestige, such as a Russell Group university. Proponents of a Russell Group university see a prestigious university as a general magnet for increased investment in the region not merely as a source of research and development. It is an opinion held strongly by some elements in business and industry.

Given that companies typically relate to individual researchers or small groups rather than institutions as a whole, others argued that perhaps what is needed is increased knowledge transfer into the local economy via strong brokerage rather than a research led university.

Each of these four bodies of opinion tended to conflate views about the outcomes needed in the region with views about what the provider network should look like. Outcomes and provider characteristics are, therefore, dealt with separately below.

5.2 Outcomes and Characteristics

From both stakeholder views and our own analysis of the wider evidence base, the following are the foremost needs identified for NE Wales:

Outcomes

Outcome 1 – Aspiration and attainment – In the interest of learners and the skills base, NE Wales needs to extend opportunity, raise aspirations and ambition, and increase participation in HE. To do this there needs to be an "end to end" approach from school to FE to HE. There also needs to be seamless progression from FE to HE and an increased flow of graduates and postgraduates into the NE Wales workforce.

Outcome 2 – A coherent strategy for skills – We were repeatedly told that the region needs a clear strategy for skills, underpinned by strong, productive relationships between institutions. Such a strategy would need to be fully informed by information on the current and future demand for skills as a basis for a strategic approach to the supply those skills. This would necessitate strong interaction between employers and providers.

Outcome 3 – Subject breadth – To raise aspirations and participation among learners there needs to a sufficiently wide breadth of subjects, but this is also needed to meet the skills needs of the NE Wales economy now and especially into the future.

Outcome 4 – A strategic approach to well balanced provision – The region needs an overall expansion of HE provision, with an appropriate balance between sub-degree, undergraduate first degree and postgraduate programmes that can meet the needs of learners and the region's economy. This in turn needs to be embedded in a respected brand that will attract more students to study (and subsequently work) within the region.

Outcome 5 – High quality higher education – NE Wales needs high quality provision, both in terms of academic and vocational experiences, of a standing that will meet the expectations of learners (including high achievers) and of employers.

Outcome 6 – Responsiveness to the needs of the North East Wales economy – A strategic approach to meeting employer needs must be responsive not only to the areas of expertise needed by employers but also to the patterns and styles of learning that best suit employers and their employees. Provision would need to be part-time as well as full-time; innovative; and include "bite size" tailored learning as well as more traditional programmes. It would need to meet the needs of *all* current and future sectors such that the region's economy would be sustainable and would grow. Advanced manufacturing is a particular strength, but by no means the only source of current and future jobs.

Outcome 7 – The promotion of manufacturing and STEM – However, advanced manufacturing is an important, and in Welsh terms a unique, strength of the NE Wales economy. We were told that employers need to go well beyond the region, and indeed the UK, to source many of the skills that they need, especially at the highest level. There is a perceived shortage of skills in the STEM subjects and a reluctance to see manufacturing as an attractive career prospect; what is required is a systematic promotion of manufacturing and vocational routes as career options and STEM as an academic option at all levels, including post-graduate.

Outcome 8 – Research and development and knowledge transfer - research and development and knowledge transfer must be of a scale, range and standard fully to support the current and future economic needs of the region, but also to act as a magnet for further investment.

Characteristics

The majority of stakeholder opinion points to the need for a NE Wales HE system that is owned, and run by and for the region; one in which NE Wales can take pride. Logically this suggests it must be based around Glyndŵr University. Such a HE system must also be: sustainable; well balanced; strategic; collaborative.

For it to be sustainable implies that it must be of sufficient scale. At present Glyndŵr falls short of the size that government policy identifies as the minimum, let alone the desirable. Lack of scale also means that it has limited ability to invest in new developments.

The view advanced by a number of stakeholders is that there needs to be an appropriate balance between sub-degree, first degree and postgraduate work, reflected in distinctive and sustainable HE and FE offerings. The region is seen to need more undergraduate and postgraduate education.

The need for a strongly strategic approach to the needs of learners and the skills needs of the economy was a constant refrain. This in turn was seen to require collaboration of a high order, both to identify the needs of employers in conjunction with them and with the economic development arms of the local authorities, but also to deliver the needed strategic approach across the various institutions in the provider system.

Stakeholders identified five key characteristics of the HE provider system needed by NE Wales:

Characteristic 1 – An aspirational HE system based in NE Wales in which the region can take pride.

Characteristic 2 – A HE system which is sustainable.

Characteristic 3 – A HE system which is well balanced.

Characteristic 4 – A HE system which is systematically strategic, addresses the needs of NE Wales, and does so in a highly collaborative way.

Characteristic 5 – Leadership and governance across the provider system that ensures, among other things, a strategic approach to skills in NE Wales.

We concur with the stakeholder view regarding these outcomes and characteristics of the desired provider system. In the next chapter we assess the extent to which current arrangements in NE Wales measure up.

A summary of some of the views expressed by certain stakeholder groups which helped inform our analysis of need is included below. It is not intended to be exhaustive.

5.3 Stakeholder Views

Every stakeholder that was interviewed commented on the tremendous achievement of Glyndŵr University, its staff and leadership in obtaining university status. The vast majority also highlighted that if the current and future HE needs of the region are to be met, there is need for new or improved models for HE delivery in NE Wales that involve greater collaborative working between HE and FE institutions in the region and with institutions further afield.

Glyndŵr University

Glyndŵr University provided an array of background information to inform the review. This included *Delivering Economic Prosperity and Social Justice – Glyndŵr University's Written Submission to the Review of HE Provision in North East Wales*, May 2012. This detailed report provided an overview of the university's current activities and views in connection with the review's key objectives.

Glyndŵr University's position is that it recognises there is a need for new or improved models for delivery in NE Wales that involve greater joint working between HE and FE institutions. In this respect, the university favours a model that is a **"federal structure"**, with different relationships depending on the various social and economic profiles within the region. It proposed that in NE Wales, this relationship could take the form of strategic partnerships between the university and Deeside and Yale Colleges (Coleg Cambria following merger); in the NW it could be collaborative provision; while in the Mid Wales it could take the form of a group relationship. (The position regarding Mid Wales may have changed in light of the subsequent announcement of the merger of Coleg Powys and Neath Port Talbot College).

In terms of what NE Wales needs from HE, Glyndŵr strongly express the view that the region requires a financially sustainable HE system that reflects, and is aligned to, the social and economic needs of the region. The university's written submission identified a number of key attributes that HE must deliver. It points to a HE system that:

- contributes to raising levels of aspiration and educational achievement with knock on effects in reducing poverty, deprivation and social exclusion.
- delivers seamless education pathways from FE to HE, increasing learner progression and overall attainment levels;
- provides the higher level skills needed by the region's employers in all significant sectors of current economic activity, to sustain and grow that activity;
- provides flexible delivery models of education and training that meet the needs of learners with complex modern lifestyles, personal circumstances and work patterns;
- creates and nurtures the seeds of new sectors of economic activity by educating to a high level the innovators and entrepreneurs who have the potential to start successful new businesses;
- undertakes applied research and development to enable both existing and new businesses to establish new products and/or processes that will give them a competitive edge and enable the public sector to invest in enhanced front line services;
- supports the engagement of NE Wales with other regions of the UK and the world, to provide markets for the regions products and services and increases inward investment;
- supports the cultural development of the region by providing opportunities for citizens to widen their horizons and modes of personal expression and to engage with their fellow citizens in contributing to the well-being of society.

Glyndŵr were of the view that the social, cultural and economic profile of the region demands a HE offer that includes:

- Engineering and Manufacturing, Computing, Creative and Media Production Technologies, Construction and Built Environment, Applied and Health Sciences.
- Mathematics and Pure Sciences.
- Business, Management and Finance.
- Education, Youth and Community, Social Care, Children and Families, and other public services.
- Humanities, Languages, Art and Design and Performance.

Glyndŵr's submission highlighted the significant contribution that current HE provision in the region makes towards each of these attributes. It also recognised that more needs to be done. This included the need to address gaps in provision where they have been identified, particularly at undergraduate and postgraduate level. The university pointed to a "*deficit in HE in North East Wales*" which it argued must be addressed by building on and strengthening existing relationships and by working more collaboratively with other educational providers in the region and beyond.

The university also highlighted the need to address the current imbalance between sub-degree, undergraduate and postgraduate provision in the region but stressed that this must be balanced against the need to deliver an appropriate mix of levels to meet the needs of all learners and employers and provision which is sustainable.

Glyndŵr highlight the need for provision to support economic development in NE Wales. In particular, we were told that HE must support the economically important manufacturing and public sectors. Glyndŵr also told us of the need to grow the business services sector, which is currently under-represented in the region.

A strong theme throughout Glyndŵr's evidence was the need for HE to support social justice and the cultural development of the region. This is something which Glyndŵr sees as embedded within its mission. The university continually expressed to us the key role that it plays in the region and Wrexham in particular. The university highlighted its decision to purchase the Racecourse Football Ground as a clear demonstration of this commitment. We were informed that the football ground not only offered a cost effective solution to the university's need for increased space and facilities on campus, but that it was also "appropriate from a community perspective". Glyndŵr's written submission highlighted the widespread community support for the purchase of the stadium as a way to "safeguard a key community asset" and added that "the stadium has become a focal point for a range of community activity and is a key factor in building links between the university, the student body and the wider population of Wrexham and NE Wales".

Glyndŵr presented evidence to underline its focus on widening participation, with the University performing above national benchmarks. Glyndŵr is portrayed as a "widening participation university" which derives a significant proportion of its student population from areas of disadvantage where household income is low. The university also told us that this commitment to widening participation and access was a key driver in its decision to set fees lower than elsewhere in Wales.

The university strongly conveyed its view that Wrexham and NE Wales had suffered as a result of Welsh Government/HEFCW policy. Growth in provision was seen as being restricted by intake controls, based on historical recruitment patterns which have not changed significantly since university status was achieved in 2008. In its written submission, Glyndŵr highlighted that NE Wales has a ratio of around 13 FTEs per 1,000 head of population compared to 36.9 in SE Wales and 33.2 in South West Wales. To address this issue and in order to grow provision, the university called for a structured rebalancing of support across Wales (although part-time and post-graduate numbers have not been capped and growth in those areas has been within the institution's control).

In terms of R&D and knowledge transfer, Glyndŵr confirmed to us its focus on applied research and pointed to areas of research excellence. (These have been covered in the earlier profile chapter). The university also referred to the unique expertise held by some of its research staff, which it sees as a significant asset to both the institution and to Wales. The university acknowledged that its specialism lies in a relatively narrow range of areas and that its current research groups lack scale. To address this position, Glyndŵr highlighted the need to enhance research capacity and capability in the region through the development of strategic relationships with other research led institutions. It also highlighted the need to bring in academic expertise from research intensive institutions to lead and develop research that is relevant to NE Wales.

The university underlined its aspiration to achieve Research Degree Awarding Powers (RDAPS) which it sees as being critical to improving and building research capacity in the region in support of business, the economy and learners.

Other HE Institutions

The review panel took evidence from a range of HE providers including Bangor University, Aberystwyth University, the University of Chester, Staffordshire University, and the Open University. A meeting with Cardiff University focused exclusively on the extent to which it had research links in the region.

While there was widespread agreement amongst those interviewed that current arrangements in NE Wales deliver a number of things well, with particular focus on the widening participation and employer engagement strengths of Glyndŵr, there was also agreement that the status quo was not an option in meeting the current and future HE needs of the region.

Going forward, there was a broad consensus amongst this stakeholder group that a HE presence was required in the region to support the dual economies of NE Wales and NW England. There was support for a FE/HE model in the region complemented by closer strategic partnerships with HE providers operating in the region and beyond. HEI stakeholders saw this as a means to deliver a broader curriculum base, reduce unnecessary competition and increase progression pathways and opportunities for the region's learners. These stakeholders felt that such a model also had the potential to deliver major economies of scale and significant cost savings in the provision of shared services while creating a system with greater critical mass. There was an acknowledgement, however, that this would require stronger and more productive relationships than those that had existed to date.

All HEIs interviewed could see benefits from closer collaborative partnership and expressed a strong desire to be an integral part of a solution for the region. However, there was limited support for full mergers with Glyndŵr University due to cultural and mission differences and in the case of Chester, cross border issues, political sensitivities and the operation of different funding systems in England and Wales. Concerns were also expressed by some about the potential impact of full merger on league table positions and institutional brand.

In terms of what HE needs to deliver for NE Wales, HEI stakeholders echoed the need for a broadening and rebalancing of provision in the region that would clarify and increase the HE offer available to learners, particularly at undergraduate and postgraduate level. They saw this as vital if HE was to extend opportunity, raise aspiration and increase participation in the region. However, HE (and FE) stakeholders prefaced the need to re-balance provision with a concern that Glyndŵr had a much greater proportion of sub-degree work than most universities and that this added an element of confusion to Glyndŵr's offering and brand.

Stakeholders were clear that the HE presence in NE Wales needs to be sustainable and of sufficient scale to be competitive. They shared concerns over the long term sustainability of current HE arrangements due to the relatively small size of the

turnover and student population at Glyndŵr. Questions were raised as to whether the current economic and funding environment and the existence of strong competition from the FE sector in NE Wales and from HEIs in NW England would allow Glyndŵr sufficient scope to grow and establish itself as a *"median income level institution"*.

HEI stakeholders drew our attention to business sector requirements for a *"high quality research and development university"* operating in the region. There was a general acknowledgement that there are examples of high quality research being undertaken in NE Wales. We were also told that current capacity and capability is perceived as being too limited in scope and scale to support the current and future needs of the region's economy (by virtue of being applied and specific, research activity and capacity does not necessarily offer general advantages to the industrial base). In order to address this situation, some HEI stakeholders pointed to the need for strong collaborative partnerships with research led universities, including Russell Group institutions, to create a high end research base with scale and breadth. Other HEI stakeholders highlighted the potential for a knowledge transfer brokerage/exchange, similar to the White Rose Universities or Scottish model for a Single Enterprise Unit for HEIs, based in the region and which promotes and brings together knowledge and expertise to ensure viable sized research communities.

As the representative body for the HE sector in Wales, Higher Education Wales (HEW) held no formal position on the specific needs of NE Wales or in respect of potential models for delivery in the region. Their evidence to us focused on the challenging operating environment facing the HE sector in the coming years.

Higher Education Funding Council for Wales (HEFCW)

HEFCW provided a wide range of information to support the review including at the start of the review process a paper outlining its views regarding the case for change. It considered HE in the region in a wider sense and focused on Glyndŵr University as the largest provider of HE in NE Wales. HEFCW highlighted the key challenges facing the university and the sector going forward.

As with other stakeholder groups there was an acknowledgement that current arrangements deliver a number of things well, HEFCW pointed to Glyndŵr's success in terms of widening participation, its relationship with business and to pockets of high end research. It also argued that change is needed to deliver the HE required by the region – in particular, the need for a sustainable HE presence of scale.

HEFCW pointed to the need to extend the scope of the HE offer in NE Wales and to rebalance provision to increase undergraduate and postgraduate opportunities for learners. HEFCW highlighted the relatively limited scope and volume of provision at Glyndŵr and the narrower undergraduate subject offering when compared to most comparator universities across the UK. A number of specific gaps in provision, for example those in general biology, physical and mathematical sciences, law and linguistics, were highlighted.

In order to ensure a wider range of provision for learners in the region, but avoid unnecessary competition between providers across North and Mid Wales, HEFCW

argued that provision to close identified gaps could potentially be offered by other institutions which have capacity and experience in these subject areas.

HEFCW identified a need to extend the research capacity in the region and highlighting Glyndŵr University's ineligibility for HEFCW research funding which will impact on its future ability to investment in the research environment.

For HEFCW, the model proposed in its advice to the Minister in 2011 (that Glyndŵr University should develop strong structural relationships with a range of FE colleges within a group structure led by Aberystwyth and Bangor Universities) was the best option for addressing gaps in provision and for enhancing research capability and capacity in NE Wales. HEFCW felt this option also offered significant potential for the development of close structural relationships with FE colleges that would extend and strengthen progression opportunities.

Although not the recommended option, HEFCW's advice to the Minister also acknowledged the merits of other solutions – including cross border collaboration with the University of Chester and strong FE-HE structural collaboration. HEFCW saw the former as providing a means to coordinate the undergraduate portfolios of the two institutions and close gaps in provision, but recognised that it would not necessarily enhance the region's research capability. The latter would extend the reach of the HE curriculum, create stronger progression routes, and reduce competition, but not increase the HE offer in the region. To do this would require strategic relationships with other HEI's.

HEFCW submitted, at the panel's request, a range of additional evidence, data and research throughout the review process. These largely supported HEFCW's views regarding the case for change, but also highlighted a number of further considerations relating to current HE arrangements, in particular:

- the net outflow of students from NE Wales;
- the limited amount of HE delivered at FEIs in NE Wales compared with other areas;
- Glyndŵr's performance in university league tables compared to other HEIs;
- the low application ratio at Glyndŵr compared to other HEIs which suggests that Glyndŵr is not an institution of first choice.

Former Chairs of Governors – Glyndŵr University/North East Wales Institute (NEWI)

The Review Panel heard from two serving and three former Chairs of Governors. The views of the serving Chairs are deemed to be consistent with the Glyndŵr University view.

With regard to former Chairs of the Glyndŵr and NEWI Boards of Governors, all commented on the significant achievement of Glyndŵr University, its leadership and staff in obtaining university status. They reflected that this has meant a great deal to the area, its employers and students existing and potential. They were firmly of the

view that the presence of a university set in the community of NE Wales makes a great deal of difference in terms of raising confidence and aspiration.

Looking to the future all were of the view that in order to meet the significant challenges that lie ahead the status quo is not an option if the region is to be served by the HE provision and institutions it needs.

In considering the direction of travel at Glyndŵr University in recent years, the need for greater clarity regarding strategic direction was noted. They believed the university had lost focus, especially with regard to meeting the needs of the region, and as a result it has been operating in a "pseudo-entrepreneurial and opportunist manner" driven perhaps by challenging circumstances and the need to gain critical mass and student numbers. The acquisition of the London base and the purchase of the Football Stadium were noted in this context. Former Chairs also pointed to blurred edges between FE and HE in NE Wales with FE doing foundation HE type work and HE doing FE type work. There was some concern that opportunities afforded by the Optic Centre Technium had not been fully embraced and developed, and about the lack of effective partnerships between Glyndŵr and local FE institutions. With regard to partnership arrangements, the Chairs mentioned that they saw exciting collaborative aspirations come and go. They highlighted issues around trust, mutual respect and parity of esteem that will need to be addressed if the situation is to improve.

Attention was drawn to the challenging funding regime, the growing strength of FE with the establishment of Coleg Cambria and the increasingly competitive HE environment. In meeting these challenges the former Chairs mentioned a need for Glyndŵr to focus its attention on building on identified strengths rather than growth on all fronts.

In structural terms, a number of potential options were explored, including cross border links between Glyndŵr and HEIs in NW England, and the opportunity to revisit the Glyndŵr/Bangor link. With regard to Glyndŵr/Bangor, potential benefits to Glyndŵr in terms of teaching and learning, academic leadership and R&D; and to Bangor in establishing deeper links to the industrial seam in NE Wales were noted. Infrastructure challenges and costs (not least geographical stretch) were also noted in this regard.

The former Chairs thought the review presented an opportunity to consider a unique structural solution based on the best interests of NE Wales rather than on perpetuating existing educational silos. In this respect, they believed the region would be best served by a model that delivered a seamless interface between FE and HE, and leading on from this a seamless interface with customers (employers and learners) – a market led approach, and one that was focused more directly on the needs of the region.

One former Chair offered a vision that would see FE and HE in NE Wales behaving as if it were one organisational unit. Potential benefits of forming a single HE/FE structure included:

- better/single interface with employers – current system of engagement was thought to be too fragmented and complex;
- community and student benefits, include improved access and entry points and well managed progression pathways;
- opportunities for cost reductions and increased investment resulting from shared services and facilities; and
- the avoidance of wasteful competition and reduced bureaucracy.

All former Chairs were of the view that coherently integrated FE/HE provision would be a desirable development. They also noted that coherence would depend on there being strategic clarity and stability, as well as trust and mutual respect – *"success would depend on partners valuing each others contributions"*.

The former Chairs reflected on the importance of leadership and good governance in any arrangement. In this respect, they highlighted a need to strengthen arrangements at Glyndŵr to ensure stronger interaction between the governing body and the leadership; and to ensure a governing body that in terms of its make up was tied in more to the community and economy of NE Wales.

Further Education Institutions

There was a strong consensus among FEIs that, although current arrangements in the region delivered a number of things well, there was a need for change in order to deliver the HE needed by the region.

Importantly, FE stakeholders pointed to the need for a coherent HE strategy in NE Wales which reflects and supports the combined economies of NE Wales and NW England and is driven by the needs of the region rather than by providers' self interests.

We were told of a *"blurring of the HE/FE offer in NE Wales"* and as such a perceived *"incoherence in the current arrangements"*. There was a strong view amongst FEIs that a skills strategy for the region must be coupled with a rebalancing and redistribution of provision across the provider network. Opinion pointed to competition and overlap in provision between FE and HE providers at sub-degree degree level and to gaps in the current HE offer, particularly at undergraduate and postgraduate level. A need to address the current low proportion of HE delivered in FE was highlighted. FEIs expressed the need for a clear differentiation between FE and HE provision that was supported by strong partnerships and progression routes.

There was a view that Glyndŵr University would benefit from greater clarity of vision and suggestions that the university's current focus on sub-degree work meant that it straddles a position somewhere between FE and HE. There was an acknowledgement that this was, to a certain extent, a consequence of current uncertainty surrounding the future structure of HE in NE Wales which may have led the university to embark on a strategy of growth for survival rather than on a strategic approach to the overall HE/FE provision needed by the region. FEI stakeholders also highlighted the need for increased research capacity and capability in the region if HE is to fully support the economic needs of the region.

A range of options were explored within this stakeholder group as to what solution would best deliver the HE needed by the region. The prevailing view was that NE Wales needs to retain a strong, independent university. This was thought to be critical in terms of raising aspirations. FEIs also saw a need for change as current arrangements did not deliver the HE needed by the region. It was argued that what NE Wales needs is a *"high end, cutting edge"* university, with a strong reputation for research and innovation, which works in close partnership with the region's strong FE sector and can act as a strong anchor university that pulls other HEIs/FEIs' activity in to the region.

There was broad support for a strong structural relationship between FE and HE. Stakeholders also expressed to us that this must be built on better and more productive relationships. We were told by FEIs that any HE-FE solution must be proactive and built on trust between strong, capable and confident institutions. Furthermore, given the strength of the FE sector in NE Wales, there was a consensus that it would not be appropriate to have a model in which HE was leading FE. Any HE/FE solution would need to recognise equality of status based on the different values and missions of FE and HE.

FE stakeholders felt that there was a strong argument for drawing in expertise from HEIs outside the region, especially on the research front, noting that all the HE needs of NE Wales could not be met from within NE Wales alone. We were told that *"the region cannot be parochial and needs to find ways in which expertise from Bangor, Aberystwyth and HEIs further afield can be brought to the fore in NE Wales"*. FEIs also pointed to existing and future opportunities for other universities to enhance their roles and contribution to a HE strategy for NE Wales through their relationships with the FE sector.

As an alternative way forward, some stakeholders contemplated the potential for a *University of North Wales* centred on Bangor and Glyndŵr – a university with a presence in both NE and NW Wales supported by strong FE partnerships. While it was felt that a University of N Wales would deliver benefits for both institutions and would align with the Welsh Government's policy for regional coherence and the developing work of the North Wales Economic Ambitions Board, there were some concerns over the acceptability of such a solution. As such it was argued that what was presently needed for the region was a *"North East Wales solution driven by North East Wales"* which is sustainable and works strategically with institutions in Wales and across the border.

As the representative body for FE institutions in Wales, Colegau Cymru held no formal position on the best model for delivery in NE Wales. Their evidence to us focused on the need for *"a fit for purpose solution that had quality HE at its core"*. Colegau Cymru also saw a clear argument for a relationship between HE and FE in the region that delivered seamless progression opportunities and increased access for the region's learners. The need for stronger and clearer vocational routes from level 2 to level 3 and on to higher level provision and for partnership in the delivery of Foundation Degrees was emphasised. The need for perceived barriers between NE and NW Wales to be broken down was also highlighted. In particular, we heard that there is a need to recognise that the Welsh language is a strong political driver – not just in NW Wales, but also in the North East.

High Schools

Views were sought from head teachers and sixth form heads at an English medium high school and a Welsh medium high school with sixth form provision. We heard that students in NE Wales are very fortunate since the region is served by a rich variety of HE settings. Within a one hour commute, students have access to Russell Group and other well respected universities. They also have access to a range of institutions that cater for applicants of all abilities.

We received trend data on their students' UCAS choices and acceptances which showed that the most popular choices included Liverpool; Liverpool John Moores; Bangor; Aberystwyth; Cardiff and the Manchester based universities. The rise in popularity of the University of Chester in recent years was also highlighted. With regard to Glyndŵr University, we heard that whilst the university has a lot to offer (engineering, childhood studies, youth work provision and excellent support for students was mentioned in this regard), generally sixth form students do not choose to go there, and especially not those with grades C and above at A-level.

Looking to the future, high school representatives identified a need to strengthen locally based HE provision to accommodate a likely increase in demand due to rising fees and the increased cost of going away to study. It was also thought that a locally based university is needed for students that are less confident and from poorer backgrounds. In this respect, Glyndŵr was thought to be an ideal outlet to make university education accessible for all. Potential benefits to local employers by retaining students in NE Wales were also mentioned.

Schools representatives thought that in some cases students applied to Glyndŵr as an insurance application. The need for Glyndŵr University to improve its brand image if it is to become a first choice university was noted, along with the need for greater clarity regarding the strategic direction of the institution. Representatives mentioned that there is some confusion locally about how Glyndŵr has come about and what it is about. *"Glyndŵr gives the impression of being more of a FE college rather than being a university"*.

With respect to brand image, a good reputation (especially regarding the quality of degrees and research capability) and the importance of an institution's position in university league tables to students, teachers and parents when choosing or recommending a HEI was emphasised. It was noted that whilst Glyndŵr has performed well in certain subject areas and in terms of graduate employment, generally, it does not perform well in league tables. Glyndŵr, therefore, needs to be more competitive in the league tables if it is to become more attractive to students.

Location and scale were thought to be important considerations when students choose a university. We were told that generally they want to study somewhere more glamorous than Wrexham. Students are also attracted to larger institutions that are better able to invest in state of the art facilities and equipment and that offer the prospect of a more exciting student experience.

Politicians

The Review Panel sought views from Assembly Members (AMs) and Members of Parliament (MPs). Amongst this stakeholder group there was a widespread view that Glyndŵr was a *"young and growing university"* and that its strengths and progress since achieving university status must be recognised and built upon, in particular its strengths in widening participation and its community focus. The presence of the university was viewed by all as *"a huge asset to NE Wales"*.

Whilst recognising the strengths of current arrangements, the majority of those interviewed also recognised that the status quo is not an option if the current and future HE needs (education and R&D) of business, the economy and learners in NE Wales are to be met. They pointed to an ever changing and global industrial and economic landscape and an increasingly competitive HE market place. The need to strengthen the focus on up-skilling the population of NE Wales, particularly the adult working population was highlighted by most, along with the need to push academic achievement higher by expanding undergraduate and post graduate work. In this regard, most recognised that gaps exist in the current HE offer that need to be addressed and that provision needs to be rebalanced across the provider network in NE Wales to allow the undergraduate and postgraduate offer to be increased.

The need to develop high end R&D capability was highlighted by most AMs and MPs. This was thought to be particularly important in terms of maintaining the competitiveness of the region, attracting inward investors and leading academics to the region, and in supporting key sectors – particularly the advanced manufacturing sector. There were several references to the Deeside Enterprise Zone and the potential for developing a research presence in this area. With regard to R&D one stakeholder commented:

"the region needs a strong research base that is capable of responding not only to what is happening now, but what will be happening in the future – and is capable of keeping pace with new technology".

With regard to up-skilling, most stakeholders referred to the respective roles and responsibilities of schools, FE and HE institutions and recognised the need to develop seamless learning pathways – an end-to-end approach across these educational sectors, if learners and businesses are to be better supported. The need for closer collaboration between HE and FE providers and with schools was highlighted in this regard, along with opportunities that closer collaboration would bring in terms of reducing duplication and competition.

Concerns were expressed by some about the size and long term sustainability of Glyndŵr University if it remains in its current form. There was, however, a divergence of opinion with some stakeholders believing that size was not an issue, one stakeholder commented that *"the size of a university does not necessarily measure its success"*, whilst others thought it was. Another stakeholder commented *"the proposition that small is beautiful does not stack up globally"*.

Regarding potential models for delivery, AMs and MPs considered the merits and drawbacks of a variety of potential models. Above all they highlighted that the needs

of students must be placed at the centre of any proposals, along with the need to push for a model that will deliver the best that HE has to offer the region. There was some support for closer links between Glyndŵr and other HE institutions, in particular Bangor and Chester Universities, and for alliances with institutions further afield especially on the R&D front. Most emphasised the need for closer collaboration between Glyndŵr and Coleg Cambria.

There was a strong view, however, amongst this stakeholder group that whatever final solution was arrived at it must include a sustainable, independent university in Wrexham/NE Wales. This was seen as essential for the status and esteem of the town and the wider region and for raising aspiration and participation. It was also seen as essential to support the HE needs of the region's industrial base and in terms of up-skilling the local workforce. There was a clear view that boundary considerations are arbitrary and that any future model for delivery must be able to serve a cross border catchment area and support the combined economies of NE Wales and NW England. There was strong acknowledgement that this university of and for NE Wales must be one of scale, possess self confidence and must act strategically in collaboration with other providers in the region and beyond.

A few from this group were critical of the decision to hold the review of HE provision. They were of the opinion that the HE sector across Wales should be free of interference and that Glyndŵr University in particular should be left to find its own place in the market. Also, whilst recognising there are benefits to collaboration between FE and HE institutions, one stakeholder expressed the view *"that a clear distinction should be drawn between the two to protect the future of an independent university in NE Wales"*.

There was a feeling amongst AMs and MPs that the region has been disadvantaged in terms of funding and student number controls. A number also referred to an adverse impact on the region arising from the transfer of ITT provision to Bangor University.

Local Authority Representatives

The panel received evidence from senior economic development and education officers from each of the region's three local authorities (LAs). Panel also heard the views of two chief executives and LA leaders.

There was clear recognition amongst this stakeholder group of strengths in the current HE arrangements and of the achievements of Glyndŵr University. Of particular note was the institution's approach to widening access and its A55 Knowledge Industry Corridor developments.

LA stakeholders were also in agreement that there is a need for change in order to deliver the HE required by the region in the future. One stakeholder told us *"Glyndŵr's achievements have been tremendous but there is now a need for it to leap forward in size, stature and breadth"*. LA stakeholders felt that Glyndŵr University has a "big part" to play going forward, but they also highlighted a need to raise the status of the HE entity in NE Wales if it is to compete effectively with more

prestigious HE institutions elsewhere, and if it is to play a bigger and more supportive role in meeting the region's economic development and learner needs.

It was a LA stakeholder that we quoted at the beginning of this chapter who told us *"the region needs an institution based in NE Wales of strength, scale and prestige that has the capacity and capability (educationally and in R&D terms) to respond to the economic and educational needs of the whole region and to deliver high quality HE support to local businesses and residents"*.

With regard to current arrangements, most LA stakeholders were of the view that Glyndŵr needs a clearer vision, especially with respect to its position in the market place. A number were unclear about who the university is trying to attract - its target audience. One person commented *"It is not clear what Glyndŵr is trying to be in the market place. It has yet to define its transferable UK offer and as a result it appears to be struggling with its image and looking towards international links to find its place"*. Positive benefits of attracting overseas students were noted. However, there was a perception that Glyndŵr places too much emphasis on marketing itself internationally and that this was at the expense of local engagement.

Questions were raised by some about the long term sustainability of Glyndŵr given that it is relatively small in size in UK HE terms, the challenging financial climate and strong competition from larger HE institutions in close proximity. This stakeholder group highlighted the need for a wider subject range to address gaps in HE provision in NE Wales. The need for a rebalancing of provision and for growth in the undergraduate and postgraduate offer to better meet the skills and qualifications requirements of local businesses was underlined. In this respect it was noted that Glyndŵr currently delivers a high proportion of sub-degree level provision that may be more suited to the FE sector. There was some concern that limitations with regard to the current HE offer was contributing to the number of students that leave the area to study.

There was a feeling amongst LA stakeholders outside Wrexham that Glyndŵr was very much a university for Wrexham rather than for the wider NE Wales region. In this regard, we heard that Glyndŵr would benefit from increasing its presence across the wider region and that relationships with schools and colleges in Flintshire and Denbighshire in particular needed to be stronger. Stakeholders thought this might encourage more students to study there.

LA stakeholders pointed to the need to raise aspirations and participation levels in HE in NE Wales. In this respect we were told of the need for an end to end approach, from school to FE to HE, that creates a *"continuous learning pathway"* that increases progression opportunities, raises skill levels and creates a stronger flow of appropriately skilled graduates into the local workforce. They argued for stronger and more productive relationships between HE and FE and schools and for a coherent approach to skills development and delivery.

LA stakeholders also emphasised the need for a high calibre HE presence that is able to meet the needs and aspirations of locally based learners that are less able to travel. There was a strong view that local demand for HE provision was likely to

grow in both the traditional 18-24 age and 25+ age groups and that there would be an increasing need for part-time provision to up-skill the local workforce.

LA stakeholders strongly expressed the view that the region needed a coordinated and coherent strategy for addressing skills needs. Some were of the view that competition between HE and FE providers was inhibiting the development of such a strategy and the current lack of a skills strategy was thought to be a threat to long term prosperity. We were informed that NE Wales is part of a cross border economy with NW England and as such any future strategy for HE needs to take into account the wider economic region.

In terms of economic prosperity, we heard about NE Wales' reliance on the long term success of advanced manufacturing. In this regard concerns were raised about the difficulties that manufacturing companies are experiencing in recruiting suitably qualified and skilled people from the local labour market, especially at the higher skills and qualification levels. Stakeholders were concerned that if this situation is not resolved it could leave the region vulnerable – noting that the headquarters of most of the major manufacturing companies are based outside of NE Wales and these companies are subject to external pressures and decision making. We were told that there is a need for bespoke training at HE level to support the advanced manufacturing sector and for more apprenticeships. There was also a view that the pool of people available and attracted to the manufacturing sector was not large enough and that there was a clear need to *"raise the profile of advanced manufacturing as an attractive career path"*.

LA stakeholders also stressed that the needs of the regional economy are changing and that any strategy for HE needs to be embedded in a strategy for economic development. Attention was drawn to the importance of other key sectors including: the public sector; tourism and leisure; creative industries; and the growing importance of high value added pharmaceuticals and medical companies and the green energy sector.

In terms of meeting the region's R&D and knowledge transfer needs, a dearth of top end research capability in NE Wales was mentioned. LA stakeholders suggested that the local economy and businesses had *"not benefitted from a long term relationship with HE"*. They told us that in reality, there are no geographic boundaries to meeting R&D and knowledge transfer needs and that businesses' in the region look beyond the Welsh border for HE and R&D support. To develop research capacity and strength within NE Wales, stakeholders pointed to the need for increased networking and strong collaboration with specialist "blue-chip"/"Russell Group" HEIs (a key component). There was a feeling that Glyndŵr would need to work with bigger and more prestigious universities in this regard or risk being by-passed. There was support within this stakeholder group for a R&D brokerage model. Proposals and opportunities linked to the creation of an advanced manufacturing park and Integrated Skills Training Centre in the Deeside Enterprise Zone were also outlined by some LA stakeholders.

In terms of potential models for delivery going forward, the general consensus was that there is a need to retain a university in NE Wales that is NE Wales owned and in which the region can take pride. We heard that there is a need for a HE presence of

sufficient status to compete with prestigious universities elsewhere and which can play a more significant role in supporting economic development.

We were told that any solution arrived at must be sustainable and workable and focused on outcomes that deliver a highly skilled workforce and citizens. There was general support amongst this stakeholder group for a strong FE/HE solution in NE Wales that has the benefit of size and scale. Some suggested that a strategic direction timeline was required with staged developments over a 10-15 year period. Others thought there was a more immediate need to move things forward. All LA stakeholders pointed to the need for closer strategic relationships with neighbouring universities and with the University of Chester in particular.

Some within this stakeholder group also saw benefits emanating from a more integrated approach between FE and HE across the whole of N Wales. They felt it would be easier to deliver an extended range of high calibre courses and other services, including research activity, if the universities in N Wales pooled their resources. They highlighted opportunities for universities in N Wales (and beyond) to work together better to meet the training and skills needs of key industries throughout N Wales. Closer alignment with the work of the North Wales Economic Ambitions Board was also noted in this regard.

Stakeholders opposed to a N Wales model cited previous opposition to the model proposed by HEFCW in 2011 and geographic, economic, and cultural (mainly language) differences between NE Wales and NW Wales.

Regarding Welsh language considerations, a number of stakeholders highlighted a growing demand for Welsh language HE provision and the need to ensure availability in NE Wales. In this regard they saw benefits of closer links with other universities in Wales, including Bangor.

Finally we heard that the review needs to recognise that Glyndŵr University is a significant business service provider and employer. The support it currently provides to the local economy and its draw in terms of attracting other business interests to the region should not be underestimated.

Industry and Business

The panel received evidence from a wide range of industry and business sector stakeholders including anchor companies based in NE Wales, SMEs (Small Medium Enterprises) and their representative bodies. There was wide acceptance amongst this stakeholder group that change was necessary – *"a step change is needed to take the regional economy forward."*

There was a strong view that the border between NW England and NE Wales does not exist in economic terms and that any model for HE provision in NE Wales needs to be able to serve the economies of both regions. There was also a view that any future strategy for HE in NE Wales should ideally be embedded in a regional strategy for economic development.

Stakeholders stressed the importance of the advanced manufacturing sector to the region's economy and the need to promote this sector and related vocational routes as a career option. The need for a strategic cross-educational sector approach in respect of STEM provision was also noted. However, whilst it was accepted that manufacturing was central to the region's future, it was also emphasised that it is not the only important sector. Industry and business sector stakeholders highlighted the importance of SMEs to the local economy and made it clear that HE needed to respond to other sectors, such as those involved in social care, tourism and the emerging energy sectors etc. It was also made clear that this needed to be done in a way that suited learners and employers, which included the delivery of part-time, flexible, bespoke training courses.

There was a consistent view that a more strategic approach by providers to meeting the skills needs of the region was required. We were told this must be characterised by an end-to-end approach from school through to HE. In order to achieve this, business and industry stakeholders specifically highlighted the need for a closer and more strategic relationship between FE and HE to deliver clearer and stronger progression pathways which could in turn deliver highly skilled employees and graduates for the local labour market (often through work based learning as a "top-up" to initial skill development).

Many stakeholders within this group appeared closely aligned to FE providers. They told us of positive relationships with FE colleges in the region and a preference for recruiting via the FE and apprenticeship routes. They were generally impressed with people recruited via the FE route. There was also a view that this approach allowed employees to be more successfully assimilated into the wider culture of businesses than employing graduates directly. We were told that strengthening the links between FE and HE would facilitate a clearer pathway to higher level learning and skills development for their workforce. Stakeholders also stressed the need for coherence and complementarity when it comes to FE/HE links in order to reduce competition and duplication of provision.

Business and industry sector stakeholders also highlighted difficulties in recruiting highly skilled employees from the region's workforce and indicated that they often had to look outside the region (and sometimes overseas) for employees/graduates with appropriate professional qualifications and higher level technical skills. Concerns were expressed about the outflow of students from the region to HE institutions elsewhere, especially the more able students. Referred to by one commentator as a "brain drain" from NE Wales, stakeholders were of the view that students that study outside the region are less likely to be available to the local labour market.

There was general recognition amongst this stakeholder group that in order to respond to higher level skills needs and to stem the outflow of students, more high quality undergraduate and postgraduate provision was required in the region.

When it came to views about current HE arrangements two bodies of opinion seemed to emerge with respect to Glyndŵr University.

The first saw Glyndŵr as engaging well with business and industry and being very much in touch and responsive to their needs. Reference was made to the

university's involvement with high profile companies in this regard. There were strong statements by some that Glyndŵr is a *"huge success story"* with dynamic leadership; an institution that produces graduates that are highly employable. The development of the university's London campus and the purchase of the Racecourse Football Ground were cited as examples of the university's innovative approach. Our attention was also drawn to Glyndŵr's existing and developing collaborative arrangements with HE institutions in the UK and overseas.

The view expressed by the second group was that Glyndŵr cannot meet the needs of business and industry in NE Wales and that what is needed is a high powered and prestigious university to support and be responsive to the HE needs of the region. We were told that many businesses already look outside the region for teaching and learning as well as R&D. There were concerns that the university's provision and facilities did not support sustainable economic development and that the region lacked the high level technical skills required to support both current needs and future growth and development, especially in manufacturing. Some small business representatives also expressed the view that whilst Glyndŵr was well connected with some businesses, it did not fully engage or support the needs of the wider SME sector despite an apparent willingness to do so.

In terms of the solution going forward and potential models for delivery, some stakeholders, particularly those in the first opinion group, strongly expressed the need to retain an independent university in the region. However, it was recognised that this HE institution must be confident, strategic and forward thinking and make use of subject specific relationships with other HE institutions to expand the HE offer in NE Wales. These stakeholders pointed to the need for a university in NE Wales that can support the needs of the vitally important manufacturing sector. One stakeholder told us that *"ideally NE Wales should have a university that is closely engaged in meeting the needs of the manufacturing base – a university that produces high quality graduates that understand and can apply practical and technical aspects"*. Another within this group saw Glyndŵr's future as a small "specialist niche" university working with a larger, more prestigious university to deliver undergraduate and postgraduate provision that increases the flow of appropriately skilled graduates to the local labour market.

Stakeholders within the second body of opinion were clear that what NE Wales needs is a high powered, large scale university that could support growth in the region and be flexible and responsive to employer needs particularly in terms of advanced manufacturing.

There was a general recognition that R&D and knowledge transfer capacity and capability in the region needed to be enhanced and strengthened to meet current and future needs. The majority were supportive of the idea of a brokerage model that was able to link local businesses with, and able to access the strengths of, relevant and specialist universities in the UK and elsewhere. Other potential models included a more research intensive HE institution based in NE Wales; links with a prestigious Russell Group institution able to support the research needs of the region's economy; and enhanced knowledge transfer rather than a strong R&D presence.

Some industry and business stakeholders were of the view that R&D did not need to be provided locally since businesses were already looking outside the region for such support. Some also felt that a brokerage model would add cost and bureaucracy. They noted that businesses would (and do) make direct approaches to research intensive HE institutions outside the region.

Most stakeholders stressed the importance of collaboration as the way forward on the R&D front. The need for a mixture of HE and industry partners was highlighted.

Airbus UK

Throughout the stakeholder engagement exercise numerous references were made to the university's flagship relationship with and support for anchor company Airbus UK to illustrate the strength and scale of Glyndŵr University's support for local industry. In order to understand the nature of this key relationship the Review Panel met with Airbus representatives at the Composites Training and Development Centre in Broughton.

Positive aspects of the university's support for Airbus UK were clearly evident. Airbus representatives told us that they were impressed by teaching and learning and laboratory facilities at the Broughton Composites Training and Development centre and with the joint Foundation Degree training programme (and facilities) delivered in conjunction with Deeside College. Significant developments were also noted in terms of HE support for the company following the appointment by Glyndŵr of a Professor for Aerospace Technology.

However, Airbus representatives told us about significant outstanding concerns that they felt needed to be addressed in order to maintain the relationship into the future. In this regard, company representatives highlighted the need for improvement in facilities made available to its undergraduate apprentices at the university's Wrexham campus. The need for Glyndŵr to demonstrate that it has a clear strategy to improve its brand image and position in university league tables was also emphasised. This was of particular importance to Airbus UK in light of the company's need to attract and recruit high calibre candidates to its undergraduate apprenticeship programme.

With regard to R&D, Airbus representatives drew our attention to the changing shape of research grant funding in the UK – noting that funding for R&D in the UK requires HE institutions to collaborate. It was also mentioned that future UK research funding is likely to be directed through "Catapult Centres" and as such any university that wished to work with the company will be directed to these centres.

We were informed that conversations were taking place between the university and the company. We trust that any outstanding concerns will have been addressed by the time this report is submitted.

HE and FE Staff Representatives

Panel met staff representatives from Glyndŵr University, Deeside and Yale Colleges. A written submission was also received from UCU (Universities and Colleges Union).

Representatives from all three institutions highlighted areas of good practice and excellent provision at Glyndŵr University, noting in particular the university's strength in delivering vocational HE courses and provision via its Department for Art & Design.

With regard to what the region needs there was general agreement about there being a need for change. Representatives were also in agreement about the need for there to be a university in NE Wales.

Representatives also highlighted the need to expand the breadth of subjects at Glyndŵr and to increase progression opportunities locally in order to provide learners with the same educational opportunities as in other parts of Wales. There was recognition of the need to rebalance provision across the region's provider network to allow growth in first degree and postgraduate provision. Staff representatives also highlighted the need to enhance the region's research capacity and capability in order to support the needs of business and industry.

With regard to progression routes, the need for an end-to-end approach, from school to FE to HE was highlighted and for providers in all educational sectors in NE Wales to work more closely together. Opportunities for such an approach to increase progression routes into Glyndŵr and for Glyndŵr to improve its position as a university of first choice for local people were noted.

Overall, staff representatives felt relationships between HE and FE providers in the region were good, referring in particular to Glyndŵr's relationship with Deeside College on Foundation Degrees for Airbus, and HNC construction provision which is franchised at Yale College.

FE staff representatives told us of their concerns about the number of students from their colleges that are choosing to study at HE institutions outside the region. They thought this was due to a number of factors including: the lack of suitable HE progression opportunities locally; strong and increasing competition from HE institutions across the border; and Glyndŵr University's brand image.

Regarding the Glyndŵr brand, FE staff representatives highlighted a need for the university to focus attention on improving its image and reputation across the board. In this regard it was suggested that Glyndŵr needs to focus on:

- developing a clear mission and strategy;
- developing specialist/niche areas; and
- improving the university's position in university league tables.

With regard to potential future models for delivery, staff representatives at Glyndŵr emphasised that whatever model is recommended, it needs to provide long term stability and opportunity for staff and prospective students.

There was a lack of support for HEFCW's original proposal. This was viewed by some as a route to takeover by Aberystwyth and Bangor universities and a seizure of Glyndŵr's assets. Opposition to this proposal sprung from representatives' concern about the detrimental effect it would have had on HE provision in the region, and on the local community given Glyndŵr's role as a significant employer in the area.

Staff representatives recognised the complimentary nature of provision at the University of Chester and benefits of closer collaboration. They were also of the opinion that a merger of the two institutions would not provide a stable basis for moving forward due to cross border differences in funding arrangements and HE policy.

Representatives saw merit in closer collaboration between FE and HE institutions in NE Wales. In the event of any proposal for a FE-HE structural solution staff representatives emphasised the need to ensure that the status of Glyndŵr as a university is maintained and they expressed strongly that staff need to be protected in any arrangement. With regard to HE in FE provision the need for clear and agreed remission time for research and scholarly activity was also noted. In relation to governance, clear lines of accountability were considered to be an important part of any future development.

6. How Does Current Provision in North East Wales Measure Up?

6.1 Outcomes

Desired outcomes were outlined in the previous chapter. How does current provision measure up?

Outcome 1 – Aspiration and attainment

In the interest of learners and the skills base, NE Wales needs to extend opportunity, raise aspirations and ambition, and increase participation in HE. To do this there needs to be an "end-to-end" approach from school to FE to HE. There also needs to be seamless progression from FE to HE and an increased flow of graduates and postgraduates into the NE Wales workforce.

Many stakeholders saw NE Wales as a region of deprivation, low esteem, low aspiration and low participation in HE. Although overall deprivation in the region falls below the Welsh average, some of Wales' most deprived areas are in NE Wales. It was argued that only an end-to-end approach combined with excellent opportunities for progression would raise participation in these areas.

As we noted in Chapter 4, provisional participation analysis, provided by HEFCW, suggest an improvement in overall participation in HE in NE Wales between 2007/08 and 2009/10 with full-time participation being at or above the Welsh average in all three counties at the end of this period. At the same time, however, it highlighted a particular issue in terms of part-time participation, with both Flintshire and Wrexham being below the national average.

Similarly, higher skills levels in NE Wales are low, with the proportion of working age adults holding qualifications at NQF level 4+ in the region being below that for Wales as a whole – and particularly low in Wrexham. Stakeholders consistently told us of difficulties in recruiting highly skilled employees.

Glyndŵr University has a very positive record in terms of participation amongst students from low income areas. In 2011/12, Glyndŵr recruited a high proportion of its students from lower socio economic classes or low participation neighbourhoods and performed above UK widening participation benchmarks. There was recognition of Glyndŵr's strength in this regard across all stakeholder groups. Glyndŵr told us that a commitment to widening participation is strongly embedded within the University's mission and was at the forefront of its policy to set fees lower than other universities in Wales. However, some stakeholders questioned whether Glyndŵr's widening access track record was simply a result of the university's location within a low socio-economic area rather than from a truly active widening participation strategy.

In Chapter 4, we noted the net outflow of full-time undergraduate students from the region, including many from low participation neighbourhoods – which certainly raises questions. Is the issue one of supply? Is the overall scale of Glyndŵr and of provision within NE Wales too low to cater for the needs of this group (at least compared with SE Wales where there is a net in-flow of students from disadvantaged backgrounds)? A number of stakeholders argued strongly that there had been an under-investment in HE in NE Wales compared with other regions. The fact that in 2011/12 more NE Wales domiciled full-time undergraduate students were studying in NW England than in NE Wales would seem to support this view. However, some stakeholders wondered whether Glyndŵr is doing too little to attract these students across the whole of the region as opposed to the Wrexham area. Fewer than one in three students from low participation neighbourhoods choose to study in the region compared to nearly two-thirds in SE Wales. We were not able fully to answer these questions. However, we note both that HEFCW has acknowledged a need to expand the range of provision and that there is an overwhelming call from stakeholders for more pro-active outreach through joint work by both HE and FE.

We must also note that it is part-time and postgraduate participation that is seen to be behind by stakeholders in this region - and there have been no student number limits in these areas. An expansion of this provision and thereby of the university has been within Glyndŵr's control.

The outflow of high achieving students (those with AAB or greater at A level) is a different issue; as we outlined in Chapter 4, less than 18 per cent remain in the region to study, in sharp contrast to SE Wales where almost half of all AAB students remain in the region. Purely in terms of raising aspirations it does not matter whether learners stay in the region providing they have the confidence and funds to study away from home, but employers are concerned that an outflow of AAB students to other regions reduces the likelihood that they will seek employment in the region. So why do so few AAB students remain in the region to study?

Provision in NE Wales is currently too limited in scale and subject range to cater for them all, but it is also clear that at present Glyndŵr is simply not attractive to many of these students. Application data suggest that more student numbers would not currently solve the problem. Glyndŵr undertakes significant recruitment other than through the UCAS process, but over the period 2008 to 2012 applications and acceptances via UCAS were consistently lower than for other North and Mid Wales universities and most small Welsh post-92 institutions. In particular they were significantly lower than at the University of Chester (a ratio of 3.13 applications per place compared to 7.02 in 2012). Moreover, for far too many of those who do apply through UCAS, Glyndŵr is not a university of first choice. This is evidenced by this year's figures: there has been a UK wide drop in applications with more competition for students, however Glyndŵr's ratio of students accepting a place fell very sharply as competitor first choice universities held on to applicants they would not have accepted in previous years. In short, Glyndŵr faces a "brand" issue common to varying degrees among many of the post-92 institutions. To reduce the flow out of the region would require both an increase in student numbers *and* a successful strategy for tackling the brand dilemma. We return to this issue later.

Many stakeholders highlighted the need for a highly active and genuinely strategic engagement of FE and HE (jointly) in communities and schools to raise aspirations and participation and improve progression opportunities. Others emphasised that this is also needed to underpin a coherent skills strategy. But for Glyndŵr, significantly greater progression from FE to HE is also the most likely route to expansion.

A strategy for aspiration and attainment across the whole of NE Wales clearly remains an unfilled need. If put in place it could help a new university like Glyndŵr grow its demand, and raise its reputation and standing, as well as meet more fully the needs of learners and employers.

Strengths

Full-time participation has improved in recent years.

Glyndŵr performs above national benchmarks in terms of widening participation. It recruits a significant proportion of its students from low participation neighbourhoods.

The University has a strong community focus, particularly within the town of Wrexham.

Shortcomings

Part-time HE participation in NE Wales remains relatively low and Glyndŵr has not faced student number limits in part-time – or post-graduate – provision.

Qualification levels are below the national average at NQF Level 4+. Stakeholders highlight difficulties recruiting appropriately skilled employees from the local workforce.

There is a net outflow of students from NE Wales with possible implications for the labour market.

UCAS application to acceptance ratios at Glyndŵr are low compared to other institutions and Glyndŵr is not sufficiently a university of first choice.

Closer collaboration between HE and FE is needed, to meet skills needs and as a strategy for growth.

There is a stakeholder view that current HE provision in NE Wales is too focussed on Wrexham rather than the whole region, with recruitment in Flintshire and Denbighshire being low compared to their relative population sizes in the region.

Outcome 2 – A coherent strategy for skills

We were repeatedly told that the region needs a clear strategy for skills, underpinned by strong, productive relationships between institutions. Such a strategy would need to be fully informed by information on the current and future demand for skills as a

basis for a strategic approach to the supply those skills. This would necessitate strong interaction between employers and providers.

Many stakeholders commented on the very welcome focus by Glyndŵr on vocationally oriented HE designed to meet the needs of local employers. Glyndŵr's engagement with employers is by no means limited to its work with Airbus UK, but this relationship and especially the apprenticeship programme delivered jointly with Deeside College were cited as exemplars of good practice.

However, evidence presented to the panel highlighted current and probable future skills gaps in the region and the difficulties experienced by employers in recruiting appropriately skilled staff from the local workforce. There was wide recognition amongst respondents that there was a need for a coherent strategy for skills to address these issues and that this must be driven by the needs of the region rather than by providers' self interest. Indeed, it was argued that there is a need to address the skills needs of the combined economies of NE Wales and NW England. There was also a view that skills strategies must align with the wider strategies of the Mersey Dee Alliance and the North Wales Economic Ambition Board.

Stakeholders were clear that what is needed is strong and productive partnerships within and outside Wales. Glyndŵr has developed a number of promising partnerships, including a Memorandum of Understanding with Staffordshire University and connections with universities beyond the UK (for example with the Bauman Moscow State Technical University in Russia). In part these overseas links arise from the specialist work in optics and the work on composites.

However, stakeholders did not see these developments as amounting to a broad and coherent strategy for skills. In large measure their focus was somewhat more parochial: we were consistently told that there had been a history of poor or ineffective relationships and tensions between FE and HE within the region itself (and with HEIs in NW and Mid Wales). The recently established strategic alliances with Yale and Deeside Colleges may already have led to an improvement in relationships between HE and FE, but the overall message was that what had gone before was insufficient and that substantial improvement was needed. We were also told of missed opportunities for collaboration with other HEIs both within and outside the region.

Meeting the skills needs of NE Wales (and of the wider Mersey Dee area more generally and, indeed, the whole of N Wales) was seen to require a strong strategic focus on the needs of the region(s) embedded in collaborative relationships which transcend institutional interests. There was an overwhelming sense that these conditions do not prevail at present and that relationships have to be far more fully developed.

These relationships would need to span HEIs, FEIs, the local authorities and the key players in the regional economy, but there was no doubt that HE and FE could and should play the leading role. While removing the threat of Glyndŵr's survival was widely seen as a pre condition, a number of stakeholders noted that people have to

want to collaborate. They argued that willingness to work closely together depends on leadership and that it is a matter for governing bodies as well as other players.

Strengths

Glyndŵr has a strong track record of focussing on vocationally led HE of direct relevance to strengths within the regional economy.

Some good strategic relationships exist with providers in the region and beyond.

Strategic Alliances between FE and HE have been established recently.

Shortcomings

Glyndŵr alone does not and cannot meet all the skills needs of the wider regional economy; strong and extensive collaboration is required.

Stakeholders highlight the lack of an overall strategic approach to skills needs – which would require joint working by HE, FE, local authorities and other players.

There appears to have been a history of difficult relationships in the region and with HEIs in NW and Mid Wales. There is a consistent and strongly held view that collaboration in the region is insufficient.

Outcome 3 – Subject breadth

To raise aspirations and participation among learners there needs to a sufficiently wide breadth of subjects, but this is also needed to meet the needs of the North East Wales economy now and especially into the future.

Stakeholder opinion and other evidence suggest that more HE provision is needed in the area and that it needs to cover a broader subject range. The current offer is limited, particularly in terms of first degree and postgraduate provision. If HE that is locally provided is important - to the less mobile learner (and FE colleges identified significant potential demand arising from cost pressures on learners) and to employers/the skills base – it follows that it should be available across a breadth of disciplines.

As we noted earlier in the report, Glyndŵr is the largest provider of HE in NE Wales accounting for almost 80 per cent of all provision in the region in 2011/12. The OU was the second most significant provider. By comparison, the amount of HE delivered at FE colleges in NE Wales was limited and largely related to engineering and technology and education programmes.

Subject coverage at Glyndŵr is focussed to an unusual degree on areas that complement the economic strengths of the region. This is both a major strength and a potential weakness. Provision appears relatively narrow when compared to most post-92 comparator universities, particularly at undergraduate first degree level, with much of it having a vocational focus on specific industries such as aerospace.

We identified a number of important subject gaps in the university's current offer including those in the areas of general science, social science, law, modern foreign languages, creative arts, agriculture and construction and the built environment. Many of these identified gaps are covered by universities in Mid and NW Wales as well as by the University of Chester.

Compared with the ambitions for HE expressed to us, provision in NE Wales lacks scale and this itself limits subject breadth. As we described in Chapter 4, Glyndŵr's total student population was low compared to other post-92 HEI's in Wales. It is also small in scale relative to most of the UK post-92 institutions located in small cities and county towns not directly served by another full university.

Evidence received by the panel points to a strong desire for growth in HE provision in NE Wales, particularly at undergraduate first degree and postgraduate level. For some this is about greater coordination between providers in the region and beyond to address identified gaps in provision and to ensure the widest possible opportunities for learners and improved progression opportunities, and to meet the current and future labour market needs. However, for others this reflects a strong sense that the region has been disadvantaged by Welsh Government/HEFCW policy in respect of student number allocations (which, however, have applied only to full-time undergraduate provision). Whilst it is the case that Glyndŵr does have some flexibility to redistribute full-time sub-degree student numbers to undergraduate first degree level, the complaint is that current allocations are based on historical recruitment patterns and have restricted the overall growth of provision in the region.

In essence, three possible ways of achieving greater scale and broader subject provision were mooted:

- Glyndŵr to remain as a relatively small, but specialist provider focussed closely on the 'high spots' in the regional economy - greater scale and breadth to be achieved through collaboration with other HEIs;
- Glyndŵr to grow gradually with collaborative arrangements as part of that growth strategy and as a means of filling gaps in provision;
- Glyndŵr to grow considerably and broaden its own offering.

The last option is what many stakeholders desire and see as the natural trajectory for a new university. However, the most recent UCAS data show that while applications to Glyndŵr have increased since the institution gained university status in 2008 (1,383 in 2008 and 2,290 in 2012), applications per place remain relatively low and acceptances have remained relatively static (703 in 2008 and 731 in 2012). Although we have identified a widespread desire to increase provision in NE Wales, Glyndŵr has a long way to go to be able greatly to expand student demand. Taken together with resource constraints in Welsh HE, a small catchment population in the region and the competition from NW England, this suggests some gradual and well targeted growth at Glyndŵr would be the most probable way forward (perhaps especially in part-time provision in the first instance which is not limited by HEFCW in the same way as full-time), combined with much closer working between the various HE deliverers within N Wales as a whole – and beyond.

For employers, full-time programmes are not the only issue: part-time opportunities to up-skill are seen as critical into the future. Much of the provision will need to be in the broad field of management, but some will be in advanced technical and professional skills. The role of the OU, but of IT enhanced and 'distance learning more generally, may be central to meeting these needs into the future. Linkages between mass on-line providers and local delivery and support may feature strongly in the future development of HE internationally. There is no reason why the North East should not benefit from such transformations – a close link between Glyndŵr and the OU could help enable this outcome.

Strengths

Current HE provision in NE Wales is substantially and beneficially focussed on economic strengths in the region.

Shortcomings

There is a lack of scale and breadth in provision in NE Wales, particularly at undergraduate first degree and postgraduate levels – and part-time – with the student population at Glyndŵr being lower than many comparator post-92 institutions.

HE provision at FE colleges is limited in NE Wales when compared with other regions.

The lack of subject breadth available in the region restricts the opportunities of less mobile learners and may pose issues for the regional labour market.

Growth at Glyndŵr is widely favoured, especially at first degree and post-graduate levels, but at present the university seems not to be attractive enough to students to facilitate a rapid expansion.

There are significant gaps in provision, but many could be addressed by closer strategic links with other providers in the region and beyond.

The next two desired outcomes are closely linked and we will therefore address them together.

Outcome 4 – A strategic approach to well balanced provision

The region needs an overall expansion of HE provision, with an appropriate balance between sub-degree, undergraduate first degree and postgraduate programmes that can meet the needs of learners and the region's economy. This in turn needs to be

embedded in a respected brand that will attract more students to study (and subsequently work) within the region.

Outcome 5 – High quality higher education

North East Wales needs high quality provision both in terms of academic and vocational experiences – and of a standing that will meet the expectations of learners (including high achievers) and of employers.

Many stakeholders referred to a need to "re-balance" provision in the region and specifically at Glyndŵr. However, talk of re-balancing provision was closely related to views about Glyndŵr's strategic approach, or perceived lack of strategy, and Glyndŵr's brand and attractiveness to potential students – which in turn relate to perceptions of quality. We begin with re-balancing.

Throughout the stakeholder groups there was a wide perception of the need to rebalance provision across the provider network in order to extend the HE offer available in the region, reduce unnecessary competition and duplication and to increase seamless progression pathways. Rebalancing was therefore seen as having three elements:

- the expansion of graduate and postgraduate output;
- a move by Glyndŵr away from much sub-degree work by gradually transferring more of it to FE; and
- the creation of seamless progression.

HESA data presented to us highlighted that more than 40 per cent of the total student population at Glyndŵr (all campuses) were studying at sub-degree level in 2011/12. There was a similar picture when looking only at those campuses in our defined NE Wales area. This percentage is high when compared with comparator institutions in Wales and the UK. In 2011/12 sub-degree provision accounted for more than a third of the HEFCW teaching grant received by the university.⁴⁵ In sharp contrast, there is limited HE delivered in FE in the region.

Not surprisingly, FEI stakeholders (and other stakeholders) expressed a desire to see a stronger differentiation between FE and HE in the region, supported by strong partnerships and progression opportunities. Concerns were expressed to us about competition with one stakeholder telling us that *"HEIs should be encouraged to focus on the delivery of HE business and FEIs on the delivery of FE, including high end FE (Foundation Degrees and HNC/HND level provision) as is developing in other parts of Wales and across England"*. The current balance of provision was seen as a source of actual or potential competition and confusion by a variety of stakeholders, not just FE.

In January 2013 Estyn published *A review of standards and the quality of provision for engineering in further education colleges and work-based learning providers in*

⁴⁵ Based on HEFCW teaching funding figures for 2011/12 (excluding premium allocations).

Wales.⁴⁶ Overall, the review was positive, with all FE colleges inspected being above the quality threshold. All but three WBL providers were assessed at grade 3 or above. However, importantly in terms of our review, Estyn recommended that the Welsh Government:

"review arrangements to allow colleges and other providers to offer HNC(D) programmes in their specialist areas without the need to enter franchising arrangements with the university sector".

Glyndŵr recognised the issue of its balance of work, but emphasised the need for a mix of types and levels of programme to meet the needs of all learners. The university told us that some reprofiling of its provision had already taken place and that as part of its wider foundation degree strategy, the university had decided to reduce the number of commissioned full-time Foundation Degrees that it provides.

However, some stakeholders saw the amount of sub-degree work undertaken at Glyndŵr as having disadvantaged the university for some time. They felt the weight of sub-degree work confused its brand, positioning it somewhere between a FEI and a university and lowering its standing. It was suggested that this confusion of course offerings had prevented Glyndŵr escaping from its past as NEWI; a sharp contrast with the University of Chester was highlighted. As one stakeholder commented, the University of Chester had been on the journey that Glyndŵr needed to have been on, but had failed to grasp – a journey up league tables and towards a much stronger brand.

The FE colleges told us of latent demand to study close to home for financial reasons, of a more general possibility of greater progression into Glyndŵr on existing courses, and of potential to develop new courses jointly. They praised the commitment of staff on and quality of some of Glyndŵr's programmes and saw these as of high standard and inherently attractive to their students who wanted to progress. But they were concerned by the resistance among the more able students due to Glyndŵr's overall image. For FE students, especially at Yale, Wrexham as a town was not the significant barrier that it was in the view of the schools. The latter saw the low standing of Glyndŵr as a combination of its own weak brand and its location in a town that was not inherently attractive to university students – especially when compared with the University of Chester as the nearest rival.

Given the apparent strength of specialist engineering courses at Glyndŵr, we expected to see an exemplar of best practice in apprenticeships and undergraduate apprenticeship education and training. The achievements, and quality, of the apprentices are most impressive, but we were particularly surprised to hear of the grave concerns Airbus UK had over some of the workshop and laboratory provision, which they described as far below industry standards and inferior to some at Yale and Deeside Colleges. This observation was encapsulated within a wider concern about the amount and quality of practical work undertaken by apprentices at Glyndŵr, or lack of it. The proposed response, a significant new investment by Glyndŵr in workshops, was seen as an example of where joint user arrangements

⁴⁶ <http://www.estyn.gov.uk/english/docViewer/264891.9/a-review-of-standards-and-the-quality-of-provision-for-engineering-in-further-education-colleges-and-work-based-learning-providers-in-wales-january-2013/?navmap=30,163> .

(with Yale and Deeside/Coleg Cambria) would be more appropriate than duplication. We very much hope that, as a matter of urgency, these issues will have been resolved by the time we report.

It was in respect of engineering courses that we were told that curricula needed to be adjusted to improve the experience of progression; it was said that much of the first year at Glyndŵr was a repetition of work already done at college. However, more worrying was the reported difficulty of attracting high flying candidates into the new undergraduate stream of the Airbus apprenticeship based at Glyndŵr; other universities were seen as more attractive. We were told by school and college representatives that few students achieving the grades demanded by Airbus would contemplate a programme leading to a Glyndŵr degree. We also heard that students wanting to be employed by Airbus would in some instances prefer to forego earning during an undergraduate apprenticeship so that they could graduate at another more prestigious university. Sadly, this reflects the realities of brand and of league tables in a highly competitive HE system. While league tables do not outweigh all other considerations, they are seen as a holistic measure of quality by many.

This issue of brand and the standing of Glyndŵr has to be faced openly because it is a barrier to progress for the university and the region. Glyndŵr's brand does not allow it to compete effectively with universities in NW England. In so far as Wrexham as a town is a barrier, that is something which should be (and is being) looked at jointly by Glyndŵr and the local authority. Universities in well regarded cities do attract students, but some post-92 institutions in less than attractive locations have succeeded. More fundamental perhaps is the university's need to establish a coherent strategy to raise its standing. In our view it is the sine qua non of gaining any strategic support from HEFCW for future expansion.

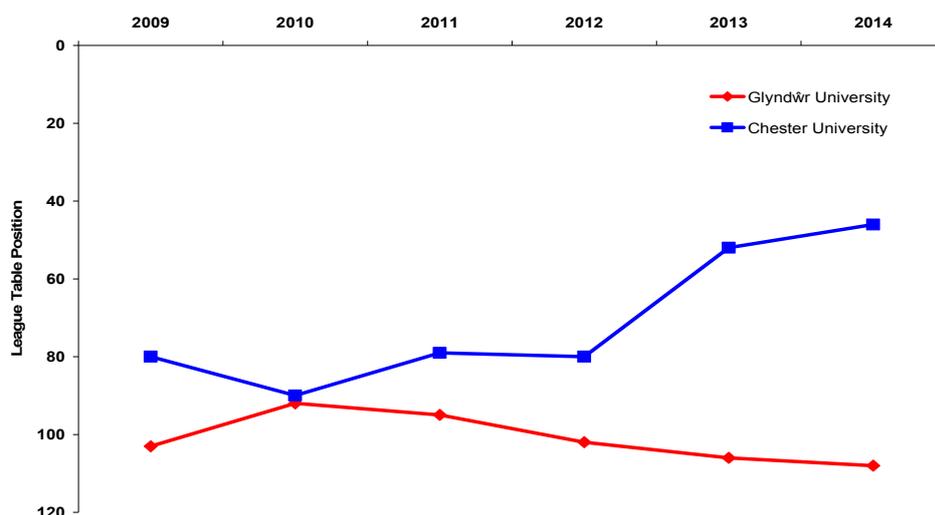
As we have indicated, many stakeholders saw Glyndŵr as lacking a strategy beyond survival and the opportunistic pursuit of ways of becoming larger in budgetary and student number terms. Some specifically highlighted growth through overseas recruitment, especially via a London base, as an example of missing the main goal (of being a university with a strong brand within its region). Others were concerned that there seemed not to be a concerted effort to rise up the published league tables.

Glyndŵr appears at a relatively low position in all UK university league tables with the direction of travel in several being in a downward direction. In contrast, the University of Chester is moving strongly in the opposite direction. In terms of individual components within league tables, we noted that Glyndŵr consistently performed well in terms of graduate employability but less well in terms of research, teaching and, crucially, student satisfaction.

League tables do matter, but absolute position (few newer universities have moved into the upper echelons) is perhaps less important than the perception of an upward trend. The approach adopted by many post-92 institutions from the very beginning was to concentrate on those league table elements that were most within their ability to influence and those leagues, such as the Guardian league table, that most closely reflected their mission. Given this we were surprised and disappointed that we could not discern a clear approach to improving the university's standing.

In the latest Guardian league table, published in June 2013, Glyndŵr's position has gone down again. Figure 20 below shows the relative performance of Glyndŵr University and University of Chester in the Guardian University Guide over recent years.

Figure 20: Guardian University Guide – relative performance of Glyndŵr University and the University of Chester 2009-2014



Some post-92 universities facing this dilemma have responded through strong outreach provision, growing recruitment by working closely with schools and communities. Word of mouth from their growing student cohort has then served to raise standing and brand. For example, Leeds Metropolitan University sought to "become a distinctive and attractive type of university and to distinguish itself from a Russell Group university" by improving access and participation and focussing on "skills development and social and regeneration".⁴⁷ The chosen means of doing so was by creating a large network of FE colleges that included "powerful joint marketing across the region of a branded service". Glyndŵr too has long espoused this philosophy; it is the strong FE network and marketing of a joint brand that has been missing. Glyndŵr cannot link with a large network of FE colleges, but the model remains valid. Glyndŵr is seen to be good at "outreach" provision. There is very clear evidence of its role in the local community, particularly in Wrexham, which is reflected in its recruitment patterns (with nearly half of all undergraduate students from NE Wales who were enrolled at Glyndŵr coming from Wrexham). However, there is much less evidence of long standing and hard-wired collaboration with FE, or of a coherent strategy to market a strong brand jointly.

A strong brand and a reputation for high quality provision are intimately linked. The last QAA assessment of Glyndŵr was positive, but it dates back to 2007. We believe that the most recent assessment will be strongly positive too. But QAA assessments may be somewhat arcane as far as students are concerned. A different measure is

⁴⁷ Case Studies of Governance Arrangements in the FE Sector (UK, Australia, Spain and USA) - January 2011, Learning and Skills Improvement Service (LSIS), Jo Mathews, Mike Snell & Reg Chapman.

provided by the findings of the national surveys of student opinion. In this regard Glyndŵr fell below national benchmarks for overall student satisfaction in 2012 (77 against a benchmark of 82).

Student employment data are perhaps even more convincing than student opinion; they are a measure of quality derived directly from the labour market. On this basis Glyndŵr has an outstanding story to tell. The university consistently performs well in terms of graduate employability across UK league tables despite its relatively low position overall. Data provided by Glyndŵr also suggest that its graduates enter employment with starting salaries some £2,000 above the Welsh average.⁴⁸

Yet the most significant quality dimension when it comes to student recruitment is public perception. That derives from the measures noted above, but it is also more subjective. Universities have to "sell" their claims to high quality in a highly competitive market; which takes us back to the example of Leeds Metropolitan University (and other similar post-92 institutions). A strong, collaborative network embracing the FE sector that jointly markets a readily understood and coherent range of programmes is a more effective approach than going it alone – and, as we noted in Chapter 4, Glyndŵr has high quality FE colleges with which to work.

Although Glyndŵr is a relatively new university it has put a number of the key building blocks in place (partly perhaps because it was previously part of the University of Wales system). In the eyes of so many of the stakeholders (and it is perceptions that count) what is lacking is that crucial core which binds disparate elements together – a well understood, well marketed and consistent strategy. Such a strategy would have to address the coherence of the offering, the need gradually to re-balance that offering, and the need to grow undergraduate and postgraduate work. However, in order to address those things, the strategy would also have to tackle issues of brand, standing and perceived quality within a far more collaborative mode of working with institutions in NE and NW Wales. Without this, HEFCW might understandably be unwilling to support future growth as it itself gradually moves from a purely funding to a more planning oriented style of operation.

⁴⁸ Delivering Economic Prosperity and Social Justice – Glyndwr University's Written Submission to the Review of HE Provision in North East Wales.

Strengths

Glyndŵr's sub-degree activity is driven by and responsive to employer demand.

Key aspects of quality, such as QAA assessments and employment data, are positive or highly positive.

Shortcomings

Sub-degree work in the region is more heavily concentrated in the university and less in FE than in other regions, with a large proportion of the university's student population studying at sub-degree level.

The university's offering is seen to impair its standing by placing it somewhere between that of HE and FE.

Glyndŵr's strategy is seen by many as one of survival, which is pursued opportunistically.

Its brand and standing are not strong, which affects its attractiveness to students, especially high achievers.

Glyndŵr's position is relatively weak in university league tables and has become weaker. It also falls below national benchmarks for student satisfaction.

Outcome 6 – Responsiveness to the needs of the North East Wales economy

A strategic approach to meeting employer needs must be responsive not only to the areas of expertise needed by employers but also to the patterns and styles of learning that best suit employers and their employees. Provision would need to be part-time as well as full-time; it must be innovative and must include "bite size" tailored learning as well as more traditional programmes. It needs to meet the needs of all current and future sectors such that the region's economy will be sustainable and grow. Advanced manufacturing is a particular strength, but by no means the only source of current and future jobs.

HE provision in the region is vocationally focussed with emphasis on specific industries such as aerospace. Enrolment data for 2011/12 showed that around half of all enrolments in NE Wales were concentrated in three subject areas: Subjects and Professions Allied to Medicine, Engineering and Technology, and Education. There was a similar picture at Glyndŵr.

In terms of mode of study, 41 per cent of enrolments in NE Wales were full-time and 59 per cent part-time. There was a more even split between modes at Glyndŵr. For full-time, around 80 per cent were at undergraduate first degree level both at Glyndŵr and across the region as a whole. More than two thirds of part-time enrolments in NE Wales were at sub-degree level. The proportion was around three quarters at Glyndŵr. We noted from HEFCW's provisional HE Participation data that part-time

participation in HE was relatively low in NE Wales when compared with other regions.

In terms of how well current arrangements meet the needs of the region's economy, two contrasting bodies of opinion emerged, especially amongst business and industry stakeholders.

As we observed in Chapter 5, the first saw Glyndŵr as being very much in touch with and responsive to the needs of business and industry in the region and an institution that produced graduates that are highly employable. The employability of Glyndŵr's graduates is also supported across a range of university league tables and in the starting salaries of its graduates.

The view expressed by the second group was that current arrangements are not meeting the current, nor are they likely to meet the future, HE needs of business and industry. Many businesses, especially those in the advanced manufacturing sector, but in other sectors too, are already looking outside the region for teaching and learning and research and development support. It is acknowledged that there is ample HE provision across the border in NW England, but this is not seen as strengthening regional competitive advantage in the way local provision would. We were repeatedly told by employers of difficulties in recruiting employees with higher level technical and professional skills from the local labour market and by economic development professionals and others of a feeling of competitive vulnerability, particularly given that so few of the large manufacturing sector employers have their head offices within the region and are "footloose". In part these concerns seem to reflect the lack of scale, subject range, balance and strong brand that we have discussed before. However, many of these employers also told us that they felt more closely aligned with FE in the region than HE; their current needs would not be met by direct recruitment into HE as opposed to progression for up skilling on a part-time basis.

While the manufacturing sector is a prominent and vitally important feature of the N Wales economic landscape, it is not the only important sector. A number of business and industry stakeholders made clear that HE must respond to the needs of other sectors particularly social care, tourism and the emerging energy sectors and that this needed to be done in a way that suites both learners and employers. The need for HE to meet the need of all current and future sectors of economic importance to the region was underlined. For employers, the HE system has to be market led and well and rapidly informed about changing needs – and have the capacity to respond to these changing needs.

Small business representatives expressed the view that HE did not currently fully engage or support the needs of the wider SME sector despite there being an apparent willingness to do so. In this regard we noted the appointment of new head of business school at Glyndŵr during the period of the review and a campaign to engage more actively with small businesses in the region.

We have discussed earlier the need for a clear and coherent strategy to address the skills needs of NE Wales Our stakeholder engagement exercise also identified a need for this strategic approach to be responsive to the needs of employers in terms

of the patterns and styles of learning as well as subject breadth. We were told that this must include both part-time and full-time learning opportunities, and more tailored/bespoke and on-line learning, to meet the up-skilling needs of the region's employers

The need for increased use of technology in the learning environment is a significant theme within the Welsh Government's *Policy Statement for Higher Education*. In its written submission to us, Glyndŵr highlighted that *"the vast majority of HE provision in the UK is still carried out in a traditional way and that courses in the future would need to provide the student with real freedom to study at his or her own convenience and pace"*. The university underlined the need for *"greater use of technology aided learning, bite size learning and matching of delivery with work and life patterns"*.⁴⁹ We agree and emphasise the merits of collaboration with the OU on these issues.

Strengths

Provision in NE Wales has a highly vocational focus.

Current arrangements demonstrate strengths in terms of employer engagement, particularly in terms of partnerships with some major employers in the region.

Some stakeholders express a view that Glyndŵr engage very well with employers and are responsive to their needs.

The appointment of a new Head of Business School at Glyndŵr is a positive development in increasing engagement with SMEs.

Shortcomings

Provision in NE Wales is focussed on a relatively narrow range of subject areas.

Business and industry stakeholders indicated that current arrangements do not meet their needs, that there are difficulties in recruiting appropriately skilled staff at higher levels and a need to look outside the region for HE support.

The current and future requirements of all sectors in the region, particularly the social care, tourism and the emerging energy sectors need to be met.

There appears to be a shortage of more flexible part-time provision in the region, particularly at undergraduate level and more bespoke and flexible learning is sought by employers, especially SMEs.

Outcome 7 – The promotion of manufacturing and STEM

Advanced manufacturing is an important and in Welsh terms a unique feature of the North East Wales economy. We were told that employers need to go well beyond the region, and indeed the UK, to source many of the skills that they need, especially at the highest level. There is a perceived shortage of skills in the STEM subjects and a perceived failure to recognise and promote manufacturing as an attractive career

⁴⁹ Delivering Economic Prosperity and Social Justice – Glyndwr University's Written Submission to the Review of HE Provision in North East Wales.

prospect; as such what is required is a systematic promotion of manufacturing and vocational routes as career options and STEM as an academic option.

Despite the vocational focus of current provision and the existence of prominent outreach centres, there were concerns that the region lacked some of the key high level technical skills required to support both current needs and future growth in advanced manufacturing. Stakeholders highlighted a lack of well planned, bespoke training, together with a need for more apprenticeships. Many employers indicated a preference to recruit via the apprenticeships route, but at the same time emphasised the need for stronger progression pathways to HE in respect of higher level skills.

Underlying these concerns was a widely held view that the pool of people attracted to the manufacturing sector was not large enough and that in order to address this there was a need to raise the profile of advanced manufacturing as an attractive career path.

The same was true of the flow of students into STEM subjects, which are critical to this sector. STEM provision in the region was seen to be limited. Analysis of current subject coverage does highlight a shortfall in mathematical, physical science and general engineering provision, as we noted under Outcome 3 and Chapter 4 Recruitment information provided by Glyndŵr highlights that baseline student numbers for STEM subjects at the university are low in the current academic year (2012/13) and have fallen on the previous year across all levels (at undergraduate first degree level recruitment fell from 677 in 2011/12 to 536 in 2012/13). Glyndŵr indicated that this is, in part, a result of the university's strategy of recruiting from the home and international market rather than the EU market.

We were made aware of a developing and very welcome relationship with Staffordshire University in respect of chemistry provision and polymer research. Glyndŵr recognises that this type of collaborative approach is necessary as the University cannot generate sufficient demand for a stand-alone programme.

In terms of the promotion of STEM provision, we also note the imaginative Techniquest Glyndŵr development. This is a wholly owned subsidiary of the University and seeks to play a *"leading role in coordinating STEM education"*. According to Glyndŵr's written submission to the panel, the centre has received more than 280,000 visitors in the last 5 years.⁵⁰ It is an excellent step on the road which employers advocate: a strategic cross educational sector approach to promote STEM as an academic option.

We were also told by Glyndŵr of the significant investment that it has made in creating Knowledge Industry Corridor. The corridor is centred around the university's four sites in NE Wales and is focussed on regional economic priorities and has been developed around Glyndŵr's applied research and skills training.

⁵⁰ Delivering Economic Prosperity and Social Justice – Glyndwr University's Written Submission to the Review of HE Provision in North East Wales.

HE cannot be held accountable for the relatively low interest in STEM subjects in the UK, nor for the unattractiveness to many of manufacturing as a career route. HE is largely driven by student demand and the UK, unlike some countries, has not engaged in focussed manpower planning or managed subject intakes in universities. It is not part of our role to change national policy, but educational providers do need to be alert to emerging gaps between the supply and demand for skills in a fast changing economy – and this does not apply exclusively to STEM or manufacturing. Moreover, HE and FE in concert with others can to a degree help to modify disparities between employer and student demand by broadcasting information about career opportunities. It is a role that many employers in the region wish for in its HE and FE providers.

Strengths

Glyndŵr has a strong vocational focus with provision aligned to economic priorities in NE Wales, including outreach provision with key employers in the region.

Glyndŵr has invested heavily in the development of a Knowledge Industry Corridor.

There are some developing relationships with other HEIs which should help address gaps in STEM provision.

Techniquest Glyndŵr is focussed on the promotion and coordination of STEM education in the region and provides a platform for further presentation of science and engineering to the general public.

Shortcomings

Provision is focused on specific sectors such as aerospace.

Stakeholder evidence highlighted significant difficulties in recruiting employees with appropriate higher technical skills, often resulting in recruitment from well beyond the region.

The pool of people available and attracted to the manufacturing sector is seen to be too small, despite current efforts.

There is limited STEM provision in the region (though ample provision in NW England) with gaps identified in a number of subject areas.

STEM recruitment is low.

Outcome 8 – Research and development and knowledge transfer

Research and development (R&D) and knowledge transfer must fully support the current and future economic needs of the region.

Current R&D and knowledge transfer activity in NE Wales is centred on Glyndŵr University. The university is highly focussed on applied research and work at the "D" end of R&D with examples of high end work in optics/photovoltaics and composite materials. We were impressed by the undoubtedly high quality work that the university is undertaking on precision mirrors for the European Extra Large Telescope project, which has attracted a range of collaborative partners. The

university is also involved in high profile collaborative research partnerships such as the Low Carbon Research Institute and High Performance Computing Wales.

Despite these areas of strength, the overriding opinion from stakeholders is that current research and development in the region lacks scope, scale and prestige. There is a perceived need to enhance capacity and capability to meet the needs of the region going forward. This is a view shared by Glyndŵr, who told us of its strategy to grow the research base through partnership with other research intensive universities.

With regard to research at the most academic end as measured in traditional HE terms, Glyndŵr has not performed strongly. In the 2008 Research Assessment Exercise (RAE)⁵¹ Glyndŵr returned one of the lowest numbers of staff of any institution in Wales. Of those staff returned, just 2 per cent (0.5 people) were assessed as undertaking 4* research (*"quality that is world-leading in terms of originality, significance and rigour"*). This was the lowest percentage of any institution in Wales. Furthermore, Glyndŵr had the highest proportion of staff assessed as undertaking 1* (*"quality that is recognised nationally in terms of originality, significance and rigour"*) or unclassified (*"quality that falls below the standard of nationally recognised work. Or work which does not meet the published definition of research for the purposes of this assessment"*) research. This weak research quality profile coupled with the low research volume means that the university receives no Quality Research (QR) and Postgraduate Research (PGR) funding from HEFCW. Glyndŵr is the only institution in Wales not to receive allocations under these funding streams, and this will impact on the university's ability to invest in the research environment in the future. We were told of an opportunity for Glyndŵr to submit its research alongside that of another institution such that it would have gained at least some funding. Moreover, we were told that the composites work is not linked closely into the network of centres of excellence, which limits its potential for both academic impact and growth (UK research policy places great emphasis on such networks and it is essential to be closely integrated into them if high quality research is to be sustained).

However the university has been successful in terms of securing research income from other sources. According to HESA data, Glyndŵr generated research income of over £1.7m in 2011/12 and performed well against a number of similar post-92 institutions in Wales and the UK - though a significant proportion of this relates to EU Convergence funding which is not available to many comparator institutions.

There was general acceptance that current arrangements could not meet the needs of the regional economy now and into the future. Glyndŵr's research portfolio has a number of strengths but is too narrow and lacks the appropriate scale to meet most needs or to act as a stand alone base for intensive networking/brokerage. Several ways forward were mooted:

- secure a major input from a Russell Group university;
- build collaborative arrangements with research led universities, with Glyndŵr and/or another university as the hub;

⁵¹ <http://www.rae.ac.uk/results/> .

- do nothing and let employers source R&D from far and wide;
- facilitate this sourcing process by developing systematic networking/brokerage based around a hub located in the region.

Strengths

Glyndŵr's strength is in highly focussed applied research, some of international standing, that relates directly to advanced manufacturing.

There are some good examples of involvement in high profile collaborative partnerships.

Glyndŵr has been successful in securing research income other than from HEFCW.

Shortcomings

Research and development in NE Wales is limited in scope, scale and prestige and is focused on a narrow range of areas.

In strictly traditional academic terms the research profile is low compared to other HEIs in Wales; as a result, Glyndŵr does not receive HEFCW research funding.

Few stakeholders are content with what exists; several ways mooted alternative ways forward.

6.2 Characteristics of the Provider System

The key characteristics of the provider system were outlined in the previous chapter. How does the system measure up against these characteristics?

Characteristic 1 – An aspirational HE system based in North East Wales in which the region can take pride

We have seen that the region is currently characterised by a mixture of hope based on the recent acquisition of a university and an uncertainty about its future which engenders defensiveness in a bid for survival. Immense civic pride was generated by the existence of the university. Indeed, we have heard that the university has been a crucial factor in raising the self esteem of NE Wales region and the Flintshire and Wrexham areas in particular.

For many stakeholders the issue was how to enhance and develop the university; and a more secure and self confident university was seen as essential to a more coherent system that strategically addresses regional needs. However, as we identified in discussing the eight desired outcomes, many stakeholders believe there is still a long way to go to meet their notion of a system that is truly aspirational in and of itself and that raises learner aspirations across the region.

Characteristic 2 – A HE system which is sustainable

There was an almost universal acceptance that a financially secure university must be at the core of the desired HE system. Glyndŵr assured us that it is currently sound financially, with retained surpluses and no debt. None the less, there was widespread concern among stakeholders in respect of the long term sustainability of the university. Glyndŵr is relatively small in terms of income and turnover – below the minimum level set by the Welsh Government. It has a lower turnover than most UK comparator universities in similar sized cities and towns.

We would argue (in the next chapter) that size should be seen as more about efficiency and investment capability than mere survival, but it is conceivable that survival as a meaningful university could become an issue for Glyndŵr in the future. The Welsh Government's policy is that HEFCW's approach should be less formulaic and more strategic in the future, focused through HEFCW's Public Investment Fund (PIF). PIF will be used to support strategic priorities such as the delivery of expensive and priority subjects. The bulk of teaching income will now come from student fee income: a combination of the fees set and the students recruited. Glyndŵr's current average fee (£6,643) is low and has resulted in a funding reduction of 20 per cent in 2012/13. There was also a significant under recruitment.

The institution is heavily reliant on overseas students. According to 2011/12 HESA data, 35 per cent of all enrolments at Glyndŵr University's campuses in NE Wales (excluding franchised provision) were domiciled outside the UK. Overall, the university had 4,055 overseas students in 2011/12 (at all campuses and including franchised provision), accounting for around 43 per cent of its total student population. This included 1,275 overseas students at its London campus. The overseas student market is volatile and susceptible to changes in policies overseas and visa regulations in the UK. Furthermore, unless overseas students are of a high quality they are likely to generate higher support costs.

Glyndŵr does not currently receive HEFCW research funding due to the very small staff numbers submitted in the last RAE. Nor did it receive any Estates and Infrastructure Capital Funding from HEFCW in 2013. Allocations under this funding stream are aligned with the Council's strategic priorities of reconfiguration and collaboration and research.

None of this means Glyndŵr will face a survival crisis; but it is not indicative of security, let alone the strong growth advocated by some stakeholders. In reviewing the eight desired outcomes, we have noted the low application rate and the brand issues that Glyndŵr will have to overcome if it is to be more secure. We will comment more fully on this in Chapter 8.

Characteristic 3 – A HE system which is well balanced

Stakeholders expressed strongly the need for a well balanced HE system in NE Wales both in terms of the level of provision offered in the region and its distribution across the provider network. We have discussed this in some detail under outcome 4. The system does not presently reflect stakeholder expectations and it needs gradually to change in an orderly way lest it change through somewhat disorderly competition and duplication.

Characteristic 4 – A HE system which is systematically strategic, addresses the needs of North East Wales, and does so in a highly collaborative way

The HE system required in NE Wales would be one underpinned by a coherent strategic approach and strong and productive collaborative relationships. There would also be synergy and alignment with the emerging strategic work of bodies such as the Deeside Enterprise Zone Board, the North Wales Economic Ambitions Board.

There can be no doubt that effective collaboration often hinges on key players and inter personal relationships. However, some stakeholders also pointed to a more structured explanation. They felt the long period of uncertainty about Glyndŵr's future, and its vulnerability, resulted in a defensiveness that inhibited good relationships with bodies that could be seen as competition or threat. They argued that Glyndŵr's vulnerability resulted in a single minded strategy of survival by any means and that this led to an opportunistic approach to developments and relationships that would increase the university's critical mass or enhance its prestige. They did not see this opportunistic style – a "grasshopper approach" – as likely to deliver a strategic and sufficiently collaborative response to regional needs. They urged us to find a way forward that would reduce this vulnerability and create the structural conditions for more collaborative, less defensive relationships and a more strategic approach to meeting the region's needs through partnership.

No stakeholder told us that Glyndŵr had a coherent strategy for its own development or for meeting the region's needs. As we have noted, many commented on the understandable pre-occupation with survival and on opportunistic activity to that end. A number questioned such things as the emphasis placed on overseas student recruitment, especially via the London outpost and a few questioned the purchase of the football ground as a priority.

There was more sharply divergent opinion about current levels of collaboration than about almost any other topic. It was almost universally felt that to meet the region's needs, there needed to be a much higher level of collaboration. What was less clear was the role of Glyndŵr in promoting or limiting effective collaboration. A number of business stakeholders strongly praised Glyndŵr for its approach and the same was true of some educational institutions outside the region. One HEI outside of Wales saw Glyndŵr as being *"particularly proactive in seeking cross collaboration developments"* pointing to its Memorandum of Understanding with Glyndŵr to explore collaborative ventures in this regard.

Other stakeholders argued that Glyndŵr had been a barrier to effective collaboration within the region, especially with other HEIs and FEIs. A number expressed a very strong belief that collaboration had to be much more effective and voiced concerns about what they saw as the non-collaborative stance of Glyndŵr. We were told of a history of difficult relationships which needed to be overcome if stronger and more strategic relationships were to be forged. We were told of several missed opportunities for Glyndŵr to collaborate with other HEIs to explore potential synergies and economies of scale; in respect of RAE/REF bids and inclusion in wider HE partnerships. One HE sector stakeholder also indicated that there had been "*no real cooperation until the reconfiguration agenda raised its head*". Conversely, HEIs from outside the region informed us of existing and developing links with FE providers and businesses in NE Wales - these links were by way of by-passing Glyndŵr to work directly with FE and business in the region.

Some stakeholders argued that the history of poor collaboration was about self confidence and leadership. Their view, in essence, was that the university has been very good at collaborating with more distant bodies and those that are not seen as a threat or source of competition, but that concerns about competition and threat had greatly limited collaboration within the region.

Self confidence and leadership are undoubtedly crucial to effective collaboration; we believe our recommendations in Chapter 8 will secure Glyndŵr's future and meet this particular precondition of effective collaboration. The rest will certainly be up to far sighted and effective leadership and governance at Glyndŵr, but also in all institutions within the region.

Characteristic 5 – Leadership and governance across the provider system that ensures a strategic approach to skills in North East Wales

Everything that stakeholders want of HE depends to a large extent on effective leadership and governance. Like collaboration, the matter of leadership divided opinion quite sharply.

We are aware of the recent positive review of governance at Glyndŵr and of important changes to personnel.⁵² It must be hoped that the leadership and governance of the university will now deliver the strategic approach and improvements that stakeholders seek. However, it was emphasised that collaborative relationships *between* governing bodies in the region also need to be carefully guided and strengthened. The significant body of stakeholder opinion is that the provider system has fallen short on issues of leadership and governance and that the status quo will not serve the future well. We agree.

⁵² During the course of the review, the Review Panel received from Glyndŵr University a copy of the "*Report to the Board of Governors of Glyndŵr University – Effectiveness Review of the Governing Body July 2013*" together with details of recent governing body appointments.

7. Important Considerations

Stakeholders did not offer a clear solution to the demand for a strategic and collaborative system apart from strong, right minded leadership. Even this was overshadowed by somewhat fatalistic references to historic tensions. However, a larger, more self confident HE provider, less preoccupied with survival, was seen to be a fundamental pre-condition of a more strategic and collaborative approach. For many, the assumed route to this was considerable and quite rapid expansion of Glyndŵr University, specifically by a growth in student numbers in the first instance. However, is this vision of growth and future scale realistic?

There would be little merit in ignoring the significant challenges and the difficult operating environment facing HE in general and in the region in particular. The starting point has to be the Welsh Government/HEFCW pursuit of universities that are bigger than those which have typified Wales until recently. It was this imperative that drove much of the case for mergers.

Glyndŵr University undoubtedly faces an unfortunate historic disadvantage; a problem of timing. The age of rapid HE growth and relatively abundant resources had already begun to ebb as it became a university. That timing issue aside, the region has a small population base on which to build a sizeable university and is surrounded by an abundance of established competitors - which in part explains one of Glyndŵr's undoubted weaknesses, its low application and acceptance rates. Given such a context, a university would need to acquire a very strong brand very quickly if it was to win substantial market share – even if student demand was continuing to grow. We have noted the widespread perception that Glyndŵr University has not yet gained the standing that would allow a rapid increase in local student recruitment – especially of high achievers. What we have only noted in passing (Chapter 4) is that the typical student age cohort is shrinking for the foreseeable future. Demography will ensure that competition intensifies not reduces. To this must be added the unknowable impact on total student demand of cost and the present national dip in graduate employment. We therefore do not believe it is possible for Glyndŵr University on its own simply to grow quickly to ensure a strong and secure future as many of the earlier post '92 universities appear to have done (though even some large post-92 HEIs are now nervous about their future as stand alone institutions).

So does the size of a university actually matter as much as policy in Wales implies? Could Glyndŵr University happily continue at something like its present size, or even survive shrinkage as competition grows? This breaks down into two questions: does size determine survival; or is there something else about the size of a university that should enter the equation? Mere survival is related to size in unknown ways. There must be a critical minimum, but small universities continue to exist at present and will presumably continue to do so for some time to come.

Understood correctly the issue is not one of institutions being too small to survive, or having to achieve an apparently arbitrary minimum size (greater than the current Glyndŵr University). By emphasising the need for stronger Welsh universities, the HEFCW corporate strategy reflects rather than invents a challenge that pervades HE. To take one example, the entire UK approach to research funding is based on critical mass and is leading even large and prestigious universities to merge or gain the

benefits of merger by other means – and one benefit stakeholders want from a local university is R&D. But it does not go to the heart of the Glyndŵr dilemma. To take a different example, the University of Chester has become strong enough to take the expensive decision to establish an Engineering Faculty from scratch. This is the real issue: the ability to invest heavily in development and change. And Glyndŵr has, and to meet the needs of the region it must have, a concentration of students in expensive disciplines – science and engineering. The Welsh Government/HEFCW policy has always stressed that universities need to be large enough to be strong; size has not been an end in itself. The ability to invest – in new courses, better trained staff, learning facilities, new learning and supporting technologies - is about better meeting the many needs and expectations of stakeholders; but it is also about "future proofing", being able to tackle challenges head on rather than struggling to keep up.

The key to being able to invest, especially in a small university, is efficiency. Efficiency is not just about the best use of public, and institutional, resources, it is about the capacity to change and adapt. Of course, it may be argued that there are diseconomies of scale and that a small university may be more efficient than a large one. However, there is international research literature on this topic, to which we had access. The evidence is incontrovertible: size is directly correlated with efficiency, at least within the parameters of interest to us. The efficiency threshold is higher, not lower, than the threshold for independent universities actually chosen by the Welsh government.⁵³ This does not mean that Glyndŵr University cannot be efficient enough to invest, merely that it would be likely to invest more, proportionately and absolutely, if it were significantly larger. And the ability to invest heavily does matter if the rapidly changing needs of learners and employers – and the growing challenge of competition and rapidly changing demands on university systems – are to be met; in short, if the region is to be best served.

We can already glimpse some of the challenges and opportunities the future is likely to bring. There has been a fall in recruitment with many unfilled places across England and Wales in 2012/13. This raises significant concerns for a stand alone institution such as Glyndŵr University. It is unclear whether the recruitment patterns seen in 2012/13 represent a short term blip or are the start of a longer term trend. Either way, it highlights the competitive HE environment. If current application trends do continue, some universities in Wales and NW England are very likely to lower their intake offer and thereby exacerbate the competitive pressures on Glyndŵr University.

The pattern of provision for sub-degree provision in NE Wales is not typical of other regions in Wales, with much more being delivered in HE. It is likely that future

⁵³ Costs and efficiency of higher education institutions in England: a DEA analysis - E Thanassoulis, M Kortelainen, G Johnes and J Johnes - *Journal of the Operational Research Society* (2011); Economies of scale and mergers in HE, Colin Green and Geraint Johnes, *The Routledge International Handbook of Higher Education*, 2009; Costs and industrial structure in contemporary British HE, Geraint Johnes, *The Economic Journal* (1997); The determinants of cost and efficiencies where producers are heterogeneous: the case of Spanish universities, Geraint Johnes and Manuel Salas-Velasco, *Economic Bulletin* (2007); An analysis of costs in institutions of higher education, Geraint Johnes, Jill Johnes and Emmanuel Thanassoulis, *Studies in Higher Education* (2008); Higher Education institutions' costs and efficiency: taking the decomposition a further step, Geraint Johnes, Jill Johnes, *Economics of Education Review* (2009); Stochastic frontier estimation of a CES cost function: the case of higher education in Britain, Hooshang Izadi, Geraint Johnes, Reza Oskrochi, Robert Crouchley, *Economics of Education Review* (2001).

freedoms and deregulation will provide greater opportunity for the FE sector. Some FE institutions may seek to obtain Foundation Degree Awarding Powers (FDAPs), which could potentially impact on Glyndŵr University's position. Even without such a development, the natural ambition of a large FE institution and any willingness on the part of other HEIs to move into the area, will lead to a different pattern of sub-degree provision and precipitate change within Glyndŵr University.

This in turn has to be viewed against the financial backdrop of medium term austerity and continuing long term pressure on public expenditure from demographic trends. Funding to the HE sector is unlikely to increase in the foreseeable future, making it difficult for a more powerful HE institution to emerge in NE Wales. Any reduction in the net flow of students into Wales will place further strain on the Welsh funding model. Furthermore, the new funding model, in which funding follows the student, provides the Welsh Government and HEFCW with less opportunity to assist a university in difficulty. Research funding will have to be protected; the funding of teaching will bear the brunt of financial stringency.

But the above examples are exceedingly parochial in view of the global changes that are beginning to impact on HE. The implications are nowhere better encapsulated than in the title of the recent Institute for Public Policy Research (IPPR) report: *An Avalanche is Coming: Higher Education and the Revolution Ahead*.⁵⁴ One does not have to agree with the entire premise to recognise an unbundling of the traditional model of a university by the emergence of non-university providers and new methods of providing some of the core university products. This includes the emergence of MOOCs – Massive Open Online Courses – and ITC enabled learning more generally. A response will increasingly be required and "the obvious strategy – steady as she goes – is doomed to fail; the one thing you don't do in the path of an avalanche is stand still".⁵⁵ That avalanche is about opportunities as well as threats. For example, on-line materials from internationally prestigious individuals and institutions are increasingly available and could be used to enrich learning and win new customers (not least businesses), but only if a strategic approach is taken to redesigning the very model of learning and teaching.

This does not necessarily mean that the traditional, large, multi-function and multi-subject university is best placed to weather the storm. A small university focussing on a narrower range of subjects and geared to serving a local community may be well placed to thrive in the longer term, but only if it is highly adaptable and recognises that it has to be but one element in a network of institutions and providers of the diverse range of products needed in the region. And such an institution would need to be able to invest quite heavily in constant change.

If HE in NE Wales is to measure up, the core requirements are:

- strategic capability;
- a gradual and focussed expansion of degree and post-graduate students within collaborative systems of provision;
- the ability to invest in change and, therefore, institutional efficiency.

⁵⁴ Barber, M, Donnelly, K, Rizvi, S; IPPR, March 2013.

⁵⁵ Ibid, p2.

If NE Wales is to have the HE it has made plain it wants, our job is to find ways of building on Glyndŵr such that these core requirements can be met.

8. Options and Recommendations

8.1 Our Vision

As our evaluation in Chapter 6 shows, there is much that is good about current HE provision in NE Wales, but it nonetheless falls well short of the criteria for future success derived from stakeholders and from our own analysis. Any solution we propose for the here and now is unlikely to be a permanent one in a HE world that is changing rapidly in response to strong international as well as UK forces. Our job is that of proposing an immediate way forward which enables rather than precludes future change and development.

As a panel, our view of HE provision in NE Wales has to be an entirely disinterested one. It has to be about an appropriate and successful meeting of the region's needs and has to rest on the nature of the region itself - not on sentiment or vested interests. The standard we must set is that level of performance that will enable the region to realise its fullest potential and that of its citizens.

We will return to the needs of learners, but the need to set a high standard is obvious when considering the economy of the region. Wales needs high value added businesses and expanding job opportunities and in this respect the region is an undoubted Welsh success story; so far. It is home to a high concentration of manufacturing industry and manufacturing exports, by UK not just Welsh, standards – including much advanced manufacturing. Flintshire is more economically dependent on manufacturing than any other local authority in the UK.

One criterion for successful HE provision must be that which will fully meet the needs of this manufacturing cluster now and into the future. It will not be enough, in ten or twenty years time, to say that HE in the region has done well, or done its best, if that best falls short of what is needed for substantial growth of this sector by means of further internal and inward investment. As many of our stakeholders underlined, this is a region blessed with powerful anchor companies; but they are companies with distant headquarters. In a globalised economy they owe no allegiance to Wales. Far from offering a self confident message of future growth, stakeholders highlighted the potential vulnerability of even that which the region now has; their vision is one of huge and growing competitive challenges from other regions in and far beyond the UK. Indeed, one knowledgeable commentator stated what others implied: that in Wales manufacturing and the infra-structure on which it depends (including relationships with HE) lags behind the UK in key respects and needs to achieve at least the level of innovation to be found elsewhere.

For many business stakeholders, a corner stone of regional competitive advantage on the national and global level is the presence of high profile HE providers widely known and respected for their ability to meet the changing skills and knowledge requirements of advanced manufacturing. In the case of skills, a truly competitive region has also to be one characterised by a high order of seamless, well coordinated provision across HE and FE, and indeed post 16 educational as a whole. That need is not bound by the economically arbitrary boundaries of NE Wales. In the case of manufacturing the economic region is the Mersey Dee area and beyond; it

needs a system of educational provision that is innocent of boundaries – national, regional and institutional – a system based on collaborative enterprise that transcends sectional interests. Viewed in these terms, current HE (and post 16) provision has a way to go if it is to underpin economic sustainability and growth into the future.

But the economy of NE Wales is not just about Deeside, anchor companies, or advanced manufacturing companies. It is a diverse economy and needs to become more so. At the high value end there is capability and potential in the energy sector, especially in renewable energy, as well as in advanced manufacturing. This capability exists in several parts of N Wales, not just the NE (indeed, NE Wales is the pivotal link between NW Wales and NW England in the energy sector). The same is true of agriculture and land based activities, including tourism and hospitality. The strength of advanced manufacturing can easily make NE Wales seem a unique economy unto itself; yet the variation in the three counties of the NE reflects commonalities that span much of North and also Mid Wales. One such is the imperative to grow jobs, which must not be overshadowed by the appeal of high value added manufacturing. For example, in developed economies with ageing populations, health and social care are an engine of jobs growth now and into the future, as are other forms of personal service. The North Wales Economic Ambitions Board is a pan North Wales response to just this reality of a diverse economy that knows no obvious political boundaries.

What is required therefore is imaginative, dynamic, joined-up educational provision – across all age and ability groups – capable of underpinning economic performance as a whole, not merely in one sector or sub-region, and capable of driving and supporting change and growth, not struggling to keep pace with it.

Learners, too, need no less. Many stakeholders emphasised what they see as a culture of low aspiration and attainment in NE Wales. The data we noted in Chapter 4 do not bear this out for full-time study, but the comparison should be with the best international examples of high aspiration and attainment rather than with other parts of Wales or the UK – especially in a region with an advanced manufacturing cluster that must be internationally competitive. Set against such examples, Wales as a whole falls short; but that should not limit what is desired, or achieved, in NE Wales. The vision offered by so many stakeholders, employers as well as educationists and politicians, was a model of a truly joined-up, "end-to-end" fostering of ambition, educational performance and progression – culminating in far more people attaining qualifications and skills at Levels 3, 4, 5 and beyond. They also saw a need for a significantly wider range of HE provision within, or accessed from, NE Wales if the least confident, least mobile – and part-time – learners are to be well served.

For them such an end-to-end approach did not mean a mere absence of barriers to progression, or avoidance of nugatory competition. Their vision and ours is that of a systematic, collaborative and strategic approach to raising performance at all levels. Once again, it is not good enough to argue that institutions currently try to work together, or try to take a comprehensive and strategic approach. Numerous stakeholders said that regardless of current efforts and best intentions, what exists falls far short of what is required. They posed an ambitious standard which will only

be reached if there is significant change and improvement. We see no reason why we should be less ambitious than they are for the region's future.

8.2 Achieving our Vision

In an ideal world, this ambition would be matched by a truly radical, perhaps unique, structural approach: an integrated post-16 system spanning the whole of N Wales comprised of independent but highly collaborative institutions capable of meeting, even expanding, the potential of the region. It would be a genuine system, not a mere collection of autonomous entities collaborating when it meets their self interests; it would be "hard-wired" for collaborative endeavour at both the strategic and operational levels. It would make a coherent, integrated offer available to learners and employers across the whole of North (and at least parts of Mid) Wales. It would be an ambitious manifestation of the developing regional approach to post 16 education signalled by the Minister.⁵⁶

If such idealistic thoughts transcend our remit, they do at least highlight the challenge and opportunity in NE Wales. The needs of the region are too extensive and diverse to be met by any one institution. To meet the challenge there must be much closer working between HE and FE, and strong relationships between HEIs across N Wales as a whole, the rest of Wales and into England and beyond. Some of these relationships will be subject and issue specific, designed to meet particular gaps in learning opportunities, skills development and R&D; some will be more broadly based - but they will all have to be sufficiently robust to deliver more, not less, than the words on paper promise.

Given recent history, however, there is a need to move forward gradually and in ways that inspire new levels of confidence. The region is currently characterised by a mixture of hope based on the recent acquisition of a university and an uncertainty about its future which engenders defensiveness. What so many stakeholders argued was that to develop tentacles reaching out to the wider national and international HE system there must first be a core of sustainable HE provision "owned" by the North East which has the quiet self confidence needed to foster these relationships. Most stakeholders went on to argue that this core must be based on Glyndŵr – partly for "small p" political reasons, partly for purely practical reasons. We agree, but with profound caveats noted later.

8.3 Potential Models

In considering how to achieve sustainable HE provision that will meet the present and future needs of the region we identified and evaluated the following possible ways forward:

- Maintain the Status Quo
- No University in NE Wales

⁵⁶ Policy Statement on Higher Education – Welsh Government – June 2013

- Merge Glyndŵr University with another HE institution (Chester, Bangor or Aberystwyth University)
- A HE/FE Merger (Merge Glyndŵr University with Coleg Cambria)
- The Glyndŵr Federal Model (model proposed in "*Glyndŵr University's submission to the Review of Higher Education Provision on NE Wales*")
- Strategic Alliances
- North Wales Universities HEI/HEI Federal Model (Glyndŵr and Bangor Universities – plus strategic alliances for specific purposes)
- NE Wales HEI/FEI Federal Model (Glyndŵr University and Coleg Cambria – plus strategic alliances for specific purposes)
- North Wales wide HEI/FEI (Federal/Confederal) Structure.

The Status Quo

We rapidly dismissed this as a way forward. The status quo is not an option. This was the view on which stakeholders overwhelmingly agreed. They were clear that it is not currently delivering all that the region needs and cannot meet the future needs of a region that must develop and progress. It will not deliver the critical mass, efficiencies, seamless progression or strategic leadership the region needs. Similarly, in the face of rapid and tumultuous change in HE systems world wide (for example, the impact of on-screen and on-line learning are only beginning to emerge) it will not deliver long term sustainability.

No University in NE Wales

We dismissed this as a way forward. As indicated in Chapter 3 we concluded that a local HE presence is vital in meeting the needs of non-mobile and less confident students. The current economic environment is also giving rise to a growing trend to study closer to home. A HE presence is beneficial to the skills profile and economic competitiveness of the region, and there is and will continue to be a growing need to up-skill the existing workforce. This will require good quality part-time provision at all levels, in relevant subject categories and within reasonable travel times. In addition, the powerful industrial base present in NE Wales needs to be supported by a strong R&D and knowledge transfer base.

Mergers with other HEIs

We quickly rejected the possibility of a merger between Glyndŵr University and its nearest neighbour, the University of Chester, even though this would seem to offer great synergies and be the most logical in theory. The differences in political and policy contexts between England and Wales have grown since devolution and are likely to become greater still over time. The origins and character of the University of Chester add to these differences, but even if these problems could be overcome Chester would not favour a full merger.

However, we believe a strong working relationship between such geographically close institutions with complementary strengths and specialisms would be in the best

interests of learners, the local economies and the institutions themselves (to a significant extent the same is also true of Glyndŵr University and other universities in NW England). In the absence of such an approach, competition could grow and opportunities would certainly be lost. We are aware of some valuable areas of joint activity and joint course innovation, but we were disappointed to hear that the exploration of a potentially strong strategic alliance stalled. We see the need for joint provision and teaching across campuses in a number of areas so as to broaden the range of disciplines available to students by drawing on the strengths of each institution. We make a recommendation to this effect later in this chapter.

We also rejected a merger between Glyndŵr University and one or more of the other Welsh universities. This was partly because of the overwhelming strength of feeling among many stakeholders that there must be an independent university serving the NE region, but primarily for a number of other reasons.

For example, some of the R&D strengths that the region needs are to be found in such universities as Cardiff and Swansea, but there is no obvious case for thinking about merger in those cases. Closer to home, there can be no doubt that learners, and the economy of NE Wales, would benefit from some of the strengths to be found in Bangor and Aberystwyth universities (for example, land based disciplines in the case of Aberystwyth and electronic engineering and psychology in the case of Bangor). In particular, Bangor has strengths (e.g. in electronics) for which it needs industrial partners and the NE Wales engineering cluster (and the health and social care system) has R&D and higher level skills needs which Bangor could help to meet. The HEFCW proposal that Glyndŵr should become, in effect, a branch campus of Bangor and Aberystwyth recognised a self evident truth: that there is a need to align the strengths of three universities that could jointly serve a region that needs all the strength it can muster in the face of large challenges and long term change.

However, full merger between Glyndŵr and Bangor, or Aberystwyth, would always be seen as a threat to the interests of NE Wales and it is not, in any case, a practical possibility. Quite apart from other considerations, Bangor and Aberystwyth simply do not want such a merger. Their respective missions and standing are too divergent: universities are understandably protective of their positions in league tables and the gap between Glyndŵr and these more established universities is too great, and will remain so in the foreseeable future.

Once again, however, genuinely strong strategic alliances that produced seamless progression for students, a greater breadth of opportunity for learners throughout N Wales and R&D collaboration would be highly desirable. Some of the synergies could be and probably will be gained in the future by direct relationships between Bangor and Aberystwyth universities and Coleg Cambria, but a more structured approach would be desirable. Without it there will be a less comprehensive and clear offering to learners and employers, the potential for nugatory competition, and a loss of opportunity to share strengths to the advantage of NE Wales, and indeed N Wales as a whole. We include a recommendation on this issue later in the chapter.

A HE/FE Merger

In principle, a merger between Glyndŵr University and Coleg Cambria could be a very attractive proposition. It could: ensure the very close integration of FE and HE that nearly every stakeholder urged upon us; deliver seamless progression; provide a base for developing a genuinely strategic approach to skills needs and the end-to-end promotion of higher levels of aspiration, attainment and participation (not least by extending HE/FE outreach to schools across the whole of the region). It would also create a large institution with genuine critical mass and the opportunity to achieve overhead efficiencies and to invest in innovation and change. Such mergers are a growing feature of the educational landscape in Wales. Yet we dismissed the idea that Glyndŵr University and Coleg Cambria should merge.

Existing FE/HE mergers in Wales subsume FE into an HE institution or HE led group. They have raised real concerns about "mission drift": the distortion of the identity and vocational mission of FE in a grouping dominated by an HE culture and governance structures. The current contribution of FE in NE Wales – described by one stakeholder as the "jewel in the crown", but also by many others in comparable terms - is too important to be put at risk. However, even if desirable, the newly merged FE colleges that comprise Coleg Cambria are jointly too substantial to merge into the smaller entity of Glyndŵr; but to merge Glyndŵr University into Coleg Cambria could possibly lead to the loss of its degree awarding powers and university title – the very opposite of what most stakeholders seek. We concluded that merging Glyndŵr and Coleg Cambria is not an immediate option.

The Glyndŵr "Federal" Model

Glyndŵr University's own proposal of a "federal" system recognises the need for closer working between universities and between HE and FE. On examining this model, however, we felt compelled to reject it in its current form. We did not see it as a sufficient departure from the status quo that most stakeholders saw as unacceptable. In essence it rests on a set of proposed core and more peripheral strategic alliances similar to those that already exist. Some of these appeared very quickly after our review was announced, others are more long standing. In no case, however, do they offer the kind of strong relationships between institutions that we and stakeholders see as necessary. It is not in truth a federal model, but a recipe for multiple alliances of varying kinds. We were told on a number of occasions that any arrangement that fell short of actual merger should none the less "have teeth". Purely voluntaristic alliances were not seen as sufficient.

We agree that purely voluntary alliances would not deliver the scale of ambitious change people in the region want, even in principle. What they might yield in practice has to be judged against the view from many stakeholders that "tensions" and failures to collaborate have been endemic for many years. Some stakeholders, were utterly dismissive of the idea that paper alliances would alone deliver real change. When talking of the pressing need to attract new and retain existing anchor companies, one entirely neutral commentator of standing described the current position in the region as falling far short of the levels of close collaboration being achieved in competitor regions in the UK and internationally.

However, there remains the option of building on the federal idea advanced by Glyndŵr University. We concluded that what is needed for the sake of learners and the social and economic development of the region is "hard wired" joint working that falls short of merger but that will deliver far more, not less, than is promised in a strategic alliance document.

Strategic Alliances

We dismissed this as a way forward. We did not see this as a sufficient departure from the status quo. We agreed that purely voluntary alliances of this type would not deliver the scale of ambitious change people in the region want.

A "Reserved Powers Federal Model"

We considered a number of "federal" model permutations.

Most stakeholders argued for a quantum leap forward in collaboration between HE and FE in order to meet the aspiration/participation and skills outcomes. A number went on to advocate some kind of "federal" model.

To use the term "federal" in the context of Welsh HE is to evoke comparisons with the University of Wales. In this instance, we would rather use the analogy of Welsh devolution. We envisage a hard wired federation based on the "reserved powers" version of devolution proposed by the Welsh Government to the second phase of the Silk Commission's work⁵⁷. The organisations involved would remain independent institutions and yet the relationship would be "hard-wired" by virtue of the powers reserved to a strategic body drawn from those institutions: the separate institutions would retain all their powers except those specifically entrusted to the over-arching body. The federation would be more powerful than the institutions taken separately and with imagination and collaborative good will would be significantly more effective and efficient than the sum of the parts by virtue of economies of scale on shared services and shared teaching and learning philosophies, strategies, platforms and progression routes. Such an approach could provide the solid, sustainable and self confident core or hub around which to build the wider network of strategic alliances and issue-specific joint working that everyone saw as necessary. We therefore assessed the following possibilities:

- a federal model comprising Glyndŵr University and Bangor University
- and one comprising Glyndŵr University and Coleg Cambria.

That Bangor and Glyndŵr universities could come together in a federal arrangement that retained their legal and brand identities while ensuring a very high level of joint working was raised with us in evidence. This is an attractive possibility. It would avoid the worst fears of "take-over", "asset stripping" and mission drift away from the needs of the NE that were raised when the HEFCW "merger" proposals were mooted. A

⁵⁷ Evidence submitted by the Welsh Government to the Commission on Devolution in Wales, February 2013

large degree of independent decision making and operational freedom could be combined with shared services and a common academic framework for delivering a broader range of subjects available to students of both institutions and – most especially – a stronger postgraduate and R&D offer in NE Wales. It could provide an increasingly powerful magnet for other prestigious universities to enter collaborative research arrangements, to the benefit of N Wales as a whole. Such a critical mass of HE provision could meet most of the higher skills needs and many of the R&D needs of a developing region.

We anticipate, and already see signs of, large scale changes in HE provision in the UK. Much larger HEIs than Glyndŵr University spoke to us of their need to at least consider mergers or hard wired alliances with other HEIs. We believe much closer relationships between Glyndŵr University and other Welsh HEIs will be inevitable in the not too distant future. The needs of the region will change and the institutions serving the region will need to be on a trajectory that corresponds to those changing needs. It is pointless to think in terms of a static picture, but the way forward for now must focus on meeting the most pressing current issues.

In this context we are not sure that a federal relationship between Glyndŵr University and Bangor University would be the quickest way to drive the much closer joint working of FE and HE in the NE Wales region that was universally identified as a crucial – and first - priority. High level skills will become of increasing importance, but at the heart of the skills agenda for now – and the aspiration/participation objective - is the need to ensure far more people achieve level 3 skills and that more of them then push on to levels 4, 5 and above. This FE/HE nexus is central to the future wellbeing of the region and it places the spotlight on the relationship between Coleg Cambria and Glyndŵr University.

We therefore concluded that our clear preference would be for a federal model between Glyndŵr University and Coleg Cambria, but with the coming together of Bangor University and Glyndŵr University in a similar federal relationship as a necessary and still highly desirable backstop if the first proved to be impossible, for whatever reason. This latter option would categorically include a mandate to link strongly and strategically with the FEIs across N Wales. Either way, we see the development of additional strategic and single purpose alliances with other HE and FE institutions as essential. The first need is to create a strong hub, but a hub is just that, it is not in itself all that is required if the needs of the region are to be met.

We believe a federal relationship between Glyndŵr University and Coleg Cambria would help deliver on the aspiration/participation and skills objectives and the broadening of Glyndŵr's contribution to the whole of the NE Wales region, while also removing the long standing uncertainty about the future of the university. It would enhance sustainability and self confidence as well as facilitate delivery against the other success criteria identified in Chapters 5 and 7 (notably improved efficiency and the capacity to invest in change). The University of Chester made available to us the calculations they developed in 2011 in discussions with Glyndŵr University which were not progressed. They identified a net overall gain of more than £2.5m/ annum from shared provision of a range of central services. Around a quarter of these savings came from shared library services and would not be available at that level in

the relationship with Coleg Cambria, but more integrated academic provision (e.g. shared workshops and laboratories) would add to the sum.

A strong federal relationship between Glyndŵr University and Coleg Cambria would deliver efficiency gains for both parties, but it would also avoid the potential for nugatory competition between HE and FE while opening up exciting areas of joint or collaborative provision. An example of the first, avoidance of nugatory competition, would be a gradual and orderly re-focussing and expansion of Glyndŵr University provision towards the more traditional HE model of producing graduates and post-graduates (which stakeholders, skills projections and HEFCW support), with an orderly migration over time of some sub-degree work to FE. To this end, we see it as providing a solid base around which the Welsh Government and HEFCW could develop a long term strategic approach to the kind of steady improvement in provision needed by the region.

Examples of the second would be the development with FE of courses in construction (suggested by Yale two years ago, we believe, and appropriate in view of projected economic growth sectors in the region), or - with other universities - of joint platforms for IT assisted learning programmes and the use of these in relation to both home and overseas students. It is perfectly legitimate for institutions to develop provision for overseas students if the rewards include surpluses that can be re-invested locally and if quality and costs can be well managed – and the overseas market includes significant opportunities for FE as well as HE. Given the vagaries of immigration policy, one route is to deliver provision overseas (concrete and virtual), but this requires critical mass and substantial management resources in the home institution. Together, Glyndŵr and Coleg Cambria could develop such markets, preferably with others (such as the University of Staffordshire and the OU), and could offer seamless provision to meet skills needs that span HE and FE.

As the second largest provider of HE in the region, we certainly believe that the role of the Open University in NE Wales should be fully recognised and incorporated within a strategic approach to future development, not only as a vehicle for IT facilitated learning. However, the OU is a UK institution and its operations in Wales are tied into that constitutional structure, but the OU in Wales does see the need and opportunity for enhanced strategic collaboration. We believe it can and should be an associate member of the federal model we advocate.

We are entirely clear that we are *not* contemplating the creation of an extra layer of bureaucracy. What we envisage is an overarching strategic framework that would deliver the kind of partnership working, integrated joint planning and action that two such neighbouring institutions will have in any case to deliver. It would use existing personnel and resources, but would ultimately use both more effectively and efficiently.

In outline, our model of a federal relationship is as follows:

1. Glyndŵr and Coleg Cambria to retain their separate legal identities and powers;

2. A Strategy Board to be established, comprising: the Chairs and one member of each of the respective governing bodies, the Principal and Vice Chancellor, an independent chair of the board and a representative of the interests of businesses and the regional economy – and one representative of the OU as an associate partner;

The **Strategy Board** to be given the following functions (subsequent enhancement, but not reduction, of its role to be possible, but only with a majority of support in both governing bodies):

- The development and constant renewal of a strategic, outward looking response to the needs of the region - beginning with those we have identified.
- The initiation, approval and maintenance, in consultation with others, of an HE/FE strategy to meet the learning and skills needs of NE Wales.
- The initiation and maintenance in conjunction with local authorities and others of an end-to-end strategic approach to the raising of aspirations, attainment and participation in the region.
- The initiation and approval of a common academic framework (including well integrated curricula) for the promotion of seamless progression.
- The development and constant refreshing of an overarching, joint "progression brand" and associated marketing that would foreground the opportunities for and merits of a vocational route through to HE.
- The pursuit in conjunction with others of an end-to-end strategic approach to raising the profile, at all levels, including postgraduate, of manufacturing as a career.
- The initiation with others of a strategic approach to raising awareness of, and attainment and progression in disciplines that are key to the regional economy but which are in short supply (beginning with STEM disciplines, especially Math).
- The initiation, approval and maintenance of a strategy for shared services across and beyond the two institutions so as to achieve economies of scale in central and support activities and thereby to increase investment in change and innovation designed to strengthen their responses to the needs of the region and the challenges of rapid change in the social, economic and educational environments.
- The *strategic* allocation across the two institutions of all public funds accruing from Welsh Government/HEFCW.

We recognise that this is but an initial outline of a unique approach that will need further input by Welsh Government and HEFCW, not least in relation to legal, funding and accountability issues. That it is an entirely fanciful vision is given the lie by the Wisconsin Model in the USA: a system of 13 full universities and a further

13 "community colleges" with more than 180,000 students. The universities and colleges span a variety of different missions and operate at different levels (and are therefore not dissimilar to an HE/FE system in UK terms). A Board of Regents is drawn from the constituent institutions and it has some of the powers and responsibilities – including strategic funding decisions – which we advocate above. Collectively, this system has worked as a strong federation for many years and spans an area that is six times larger than and at least as diverse as Wales. We believe something far more modest but no less imaginative in principle could reap major benefits in itself, but would also generate self confidence and thereby enable a broader pattern of collaborative working.

We have underlined the need for a change trajectory that recognises future needs and opportunities, rather than a one-off solution to immediate problems. At the beginning of this chapter we noted that the ideal approach into the future would probably be a coming together of a highly collaborative post-16 system across the whole of N Wales and preferably extending into Mid Wales (and even NW England). The HEFCW proposal that Glyndŵr University become in effect a branch campus of Bangor and Aberystwyth Universities was based on the need to broaden the range of disciplines available to be studied in NE Wales, re-balance provision and increase the scale of undergraduate and postgraduate output, and significantly extend the R&D offering to the regional economy. Our work has confirmed the need and the desire to see all of these come to pass. But the HEFCW structural proposals raised powerful fears that the NE would lose out, rather than gain. We believe our proposal of a strong federal model embracing Glyndŵr and Coleg Cambria would create the secure, sustainable entity "owned" by the region that we see as a pre-condition of the wider collaboration that economic and educational changes will surely necessitate.

In addition to the HE/FE (Glyndŵr University and Coleg Cambria) federal model, therefore, we would advocate over time a voluntary, but structured, coming together of all HE and FE institutions across the whole of N Wales – agreed and supported by HEFCW - as a step along a trajectory of change. This would also respond to aspects of the Welsh Government's June 2013 HE Policy Statement, in particular, regional coherence – and the need for a more holistic and regional view of post 16 education, supported by stronger regional planning. It could presumably not happen immediately; only so much change can be managed at a time. However there is no reason why it should prove impossible or too demanding. It is not as if there are no precedents, in this case within the UK. What we have in mind is active joint working similar to the collaboration between institutions in the South West of England under the banner of Combined Universities of Cornwall (CUC)⁵⁸ – a network of regional universities and colleges across Devon and Cornwall for the benefit of an area – Cornwall – that altogether lacked a university and seemed destined to export its brightest and best to other parts of the UK.

Such a confederation would enhance learner opportunities at the undergraduate and post-graduate levels - including by shared virtual learning platforms - but would also provide a strong base for collaborative R&D related to economic and business needs. We would urge that as part of its regionalisation strategy and in developing its strategic planning role, HEFCW give early consideration to moving in this direction

⁵⁸ Case Studies of Governance Arrangements in the FE Sector (UK, Australia, Spain and USA) - January 2011, Learning and Skills Improvement Service (LSIS), Jo Mathews, Mike Snell & Reg Chapman

and enter discussion with institutions across the wider region as soon as there is the capacity to manage this further development.

Taken together, these two - federal and confederal - developments would place the learners, the economies and the HE/FE institutions of the whole of N Wales in a much stronger position to meet the challenges that undoubtedly lie ahead.

We have concluded that the status quo is not an option and significant improvement, facilitated by the Welsh Government and HEFCW, is a matter of real urgency for the sake of the regional economy.

Accordingly, **we recommend that:**

1. A reserved powers federal model (with the structure and distribution of powers outlined on page 119), to be formally inaugurated between Glyndŵr University and Coleg Cambria (our preferred model) within eighteen months from acceptance of our report.
2. In the interim but with immediate effect the two institutions, with the active involvement of the OU and the support of HEFCW, should begin to work informally but systematically and collaboratively to deliver the strategic objectives outlined in the remit we have suggested for the Strategy Board.
3. Both Glyndŵr University and Coleg Cambria, separately and jointly, should develop relationships with institutions further afield that will strengthen the overall provision across HE and FE in the region.
4. Glyndŵr University and the University of Chester, assisted in so far as it is possible by HEFCW and HEFCE (Higher Education Funding Council England), should develop a stronger, more strategic relationship leading to joint provision across the two institutions based on their respective strengths – including shared teaching facilities and staff appointments – so as to broaden the offering to learners, strengthen the competitiveness of a vibrant economy that spans borders and maximise opportunities for joint bids for R&D and other resources.
5. Welsh Government/HEFCW should seek to avoid competitive re-alignment by fostering a gradual and planned re-balancing of sub-degree provision, combined with a long term strategy for the growth and improvement in provision that is required in NE Wales if future learner and employer needs are to be met (to include a gradual expansion of first degree and postgraduate output in the region).
6. Welsh Government/HEFCW should pursue, on the same timescale, our alternative proposal of a reserved powers federal model between Glyndŵr and Bangor universities if for any reason our preferred option should prove unworkable. Within this model consideration could be given to awarding Foundation Degree Awarding Powers (FDAPS) to Coleg Cambria, supported by direct funding.

7. Welsh Government/HEFCW should, within a manageable timescale, consider and explore with all parties the need for and delivery of an informal, but structured, confederal network of all the universities and colleges in North Wales (for example, along the lines of the Combined Universities of Cornwall CUC).
8. Welsh Government/HEFCW should also facilitate strategic thinking and action regarding relationships between HE and FE provision across NE Wales, and NW England.

8.4 Research and Development and the Regional Economy

Our proposals to date have focussed on the learning, teaching and skills agenda. Improving research, development and the application of knowledge within the regional economy raises different issues.

We simply do not know how much R&D support is being provided to businesses in the region, or from where. Organisations are free to go where they will to commission research or acquire applicable knowledge and there is no "map" of current relationships between universities, UK and world-wide, with the regional economy. Nor do we know what the research needs are or are likely to be. Few if any organisations in the region have their R&D headquartered in the region and this led some stakeholders to argue that there is no real gap between supply and demand: the big players look elsewhere for their R&D. To an extent that applies to the larger public bodies (e.g. health authorities, local government) as well as large companies. But it does not mean that there is no unmet need in the region. There are some kinds of work at the development end of R&D that are inherently local in character; for example, Airbus raised with us the need to link some of their most experienced skilled workers with a local university in order to explore ways of speeding up production processes. This kind of development work may also be important to local firms within the supply chains of the larger companies. But current unmet need is not the only concern; strong fundamental as well as applied research capability is seen to be one of the key factors in encouraging the location of more knowledge based work and investment in the region. It is a matter of the future attractiveness of the region not just its present needs.

Glyndŵr University is engaged in undoubtedly high level work in the optics field that is in effect a nascent bid to be engaged in the manufacture of large telescopes and other precision instruments. It is an example of how R&D could bring investment and new strengths into the regional economy. However the issue is one of scale, breadth of coverage and prestige. Glyndŵr University can do no more than focus on some specialist areas of work and the scale of its higher quality work simply cannot win for it and the region the prestige and standing that comes from being a large research led university. The UK policy of concentrating R&D resources has made it increasingly difficult for newer or smaller universities to make their mark. Indeed, the small scale of Glyndŵr's R&D groups meant that it gained limited prestige and no funding from the last round of the UK research assessment process – and the next round will be even more focused and demanding.

Recognising these issues of scale and prestige, some employers saw a need to entice a Russell Group university into the region. It remains to be seen whether this can be achieved to some extent within the Deeside Enterprise Zone. However, three other possibilities emerged:

- that a strong relationship between Glyndŵr and Bangor universities could provide the region with an enhanced research presence;
- that a more systematic approach to networking and "brokerage" could make a significant difference;
- that an Advanced Manufacturing Centre could be a focus for research, training and networking/brokerage.

The first of these begins by recognising what we have already noted: Bangor University has R&D strengths which the region needs and it in turn needs relationships with companies interested in working with it. These relationships will grow in any case, but if that happened within a strong collaborative approach to R&D between Bangor and Glyndŵr it could amount to more than the sum of the parts. Taken together, the two universities can offer a greater breadth of research capability, some increase in scale, but a substantial increase in the prestige of the package on offer. It could be an integral part of our confederation proposal that a strong HE/FE collaboration be developed across the universities and colleges of N (and Mid) Wales along the lines of the CUC. Such a collaborative approach was seen as a possible "HE magnet" for greater internal and inward investment in the high value added industrial base. Some stakeholders went further and argued that a strong R&D relationship between Bangor and Glyndŵr universities would be a good base on which to build wider research networks that linked into the most prestigious research led universities.

The networking/brokerage argument recognises that while many companies are perfectly capable of going out and finding the research centres and groups that can meet their needs, this is not easy for smaller companies and may be a hit and miss experience even for the bigger organisations. Brokerage is essentially about professionalising the networking process: creating roles, networks or organisations that specialise in understanding what companies need or research groups may be able to offer and bringing the parties together. It is one expression of the recognition that linking organisations often requires the expertise of "reticulists" – people who specialise in operating at the "skin" of two or more organisations, the better to understand the needs of both. Larger companies and many universities do this to an extent, but there is no obvious focal point in NE Wales for networking on R&D needs and opportunities. One possible way forward would be for Welsh Government/HEFCW to help fund and create a small unit specialising in bringing research needs, skills and opportunities together in a more systematic way. It would enable the region to offer a more extensive and attractive R&D package than any one local university could possibly generate on its own. Ideally, the "home" for such a specialist networking function would be a joint Bangor/Glyndŵr initiative.

The idea of creating an Advanced Manufacturing Centre was mooted for the Deeside Enterprise Zone (DEZ). The proposal is to create a focus for training but also R&D activities (especially geared to the needs of supply chain companies). While Glyndŵr is cited as a partner, an integral part of the DEZ approach is a search for prestigious

research led university partners in and beyond NW England; but this seems to be seen more as a one off than a continuing brokerage/networking activity.

It seems to us that there would be great merit in bringing these three propositions together: a new Advanced Manufacturing Centre in the Deeside Enterprise Zone in which Bangor and Glyndŵr Universities participated as members of a strategic R&D partnership designed to provide direct R&D support to existing companies, but also to act as host to a small specialist group whose job was to source R&D support not available locally from universities well beyond the region. We see the development of R&D relationships between Bangor and Glyndŵr as one, possibly the first, element in the "confederal" model of collaboration between the universities and colleges of N Wales that we advocated above.

Ultimately the need is for an R&D presence that extends well beyond advanced manufacturing and such an initiative could act as a pilot for wider collaboration and brokerage in due course. The White Rose and Scottish Single Enterprise Unit were advocated by some stakeholders as the kind of approach to which NE Wales should aspire, others cited German models. For now, however, it is the region's advanced manufacturing cluster that both faces stiff national and international competition and that, conversely, offers opportunities for greater investment and growth if the region's offer is a sufficiently attractive one. If the Mersey Dee Alliance is given relevant powers and funding as proposed in the report on city-regions,⁵⁹ this could provide an impetus for the development we envisage. However, the creation of the Advanced Manufacturing Centre and a team of specialists in R&D brokerage would also require the involvement of Welsh Government in the shape of both DfES (Department for Education and Skills) and DfEST (Department for Economy Science and Transport).

We therefore **recommend** that relevant Welsh Government departments should:

- Examine the merits of developing an Advanced Manufacturing Centre or similar entity in the Deeside Enterprise Zone as a base for an R&D (and advanced skills) partnership comprising Bangor, Glyndŵr (and possibly other universities) that would directly provide R&D support to the advanced manufacturing sector;
- Explore the potential of this partnership to act as a base for a specialist brokerage activity designed to link current – and potential future – manufacturing companies in the regional economy with R&D expertise from research led universities across and beyond the UK;
- Evaluate such an initiative as a model for extending the provision of R&D support to the wider regional economy (beyond advanced manufacturing) with a view to at least equalling the kind of R&D collaboration to be found in similar networks in the UK.

⁵⁹ The Dee Region Cross-Border Economy: Next Steps, Report for the Minister for Business, Enterprise, Technology and Science, Dr Elizabeth Haywood, March 2013.

Summary of Recommendations

From stakeholder views and our own analysis we determined that the status quo was not an option and that significant improvement, facilitated by the Welsh Government and HEFCW, is a matter of urgency for the sake of learners and the regional economy.

Accordingly we **recommend**:

1. A reserved powers federal model, as outlined in Chapter 8, to be formally inaugurated between Glyndŵr University and Coleg Cambria (our preferred model). We envisage a "hard-wired" federation based on the "reserved powers" version of devolution proposed by the Welsh Government in its response to the second phase of the Silk Commission's work. The two institutions would remain independent, but the relationship would be hard-wired by virtue of the powers reserved to a Strategy Board drawn from those institutions (as outlined on page 119). This board would be tasked with the development and constant renewal of a strategic, outward looking response to the outcomes and system characteristics required to meet the needs of the region – beginning with those we have identified. This federal model to be achieved within eighteen months from acceptance of our report.
2. In the interim but with immediate effect the two institutions, with the active involvement of the OU and the support of HEFCW, should begin to work informally but systematically and collaboratively to deliver the strategic objectives outlined in the remit we have suggested for the Strategy Board.
3. Both Glyndŵr University and Coleg Cambria, separately and jointly, should develop relationships with institutions further afield that will strengthen the overall provision across HE and FE in the region.
4. Glyndŵr University and the University of Chester, assisted in so far as it is possible by HEFCW and HEFCE (Higher Education Funding Council England), should develop a stronger, more strategic relationship leading to joint provision across the two institutions based on their respective strengths – including shared teaching facilities and staff appointments – so as to broaden the offering to learners, strengthen the competitiveness of a vibrant economy that spans borders and maximise opportunities for joint bids for R&D and other resources.
5. Welsh Government/HEFCW should seek to avoid competitive re-alignment by fostering a gradual and planned re-balancing of sub-degree provision, combined with a long term strategy for the growth and improvement in provision that is required in NE Wales if future learner and employer needs are to be met (to include a gradual expansion of first degree and postgraduate output in the region).
6. Welsh Government/HEFCW should pursue, on the same timescale, our alternative proposal of a reserved powers federal model between Glyndŵr and Bangor universities if for any reason our preferred option should prove unworkable. Within this model consideration could be given to awarding

Foundation Degree Awarding Powers (FDAPS) to Coleg Cambria, supported by direct funding.

7. Welsh Government/HEFCW should, within a manageable timescale, consider and explore with all parties the need for and delivery of an informal, but structured, confederal network of all the universities and colleges in North Wales (for example, along the lines of the Combined Universities of Cornwall CUC).
8. Welsh Government/HEFCW should also facilitate strategic thinking and action regarding relationships between HE and FE provision across NE Wales, and NW England.
9. Relevant Welsh Government departments should:
 - Examine the merits of developing an Advanced Manufacturing Centre or similar entity in the Deeside Enterprise Zone as a base for an R&D (and advanced skills) partnership comprising Bangor, Glyndŵr (and possibly other universities), that would directly provide R&D support to the advanced manufacturing sector.
 - Explore the potential of this partnership to act as a base for a specialist brokerage activity designed to link current – and potential future – manufacturing companies in the regional economy with R&D expertise from research led universities across and beyond the UK.
 - Evaluate such an initiative as a model for expanding the provision of R&D support (beyond advanced manufacturing) to the wider regional economy with a view to at least equalling the kind of R&D collaboration to be found in similar networks in the UK.

Annex A

Details of Review Panel Members

Professor Sir Adrian Webb / Chair. (Former Vice Chancellor University of Glamorgan and Deputy Vice Chancellor at Loughborough University; led a five star research facility at Loughborough; Chair of the Wales Employment and Skills Board; and has also undertaken a wide range of high profile public service roles in Wales and Whitehall. Chair of the Independent Review of the Mission and Purpose of Further Education in Wales known as the "Webb Review" and member of the "Beecham Review" of the machinery of government in Wales; Fellow Learned Society of Wales).

Professor Mari Lloyd Williams (Professor and Director Academic Palliative and Supportive Care Studies and Honorary Consultant in Palliative Medicine, University of Liverpool; Chair of Tenovus Psychosocial Advisory Committee; HEFCW Council member (January 2007- December 31st 2012) ; member McCormick Review of Higher Education (HE) Governance; Past Member of General Medical Council Fitness to Practise Committee; Fellow Learned Society of Wales).

Professor Geraint Johnes (Dean of Graduate Studies and Professor of Economics at the University of Lancaster; leading academic conducts research into labour economics and has a particular interest and expertise in the economics of education; also founding editor of the journal Education Economics).

John Stephenson (Former Principal of Coleg Powys; former Director and Chair of Fforwm; former Board Member of Mid Wales [Economic Development] Partnership and former Director and Chair of the Welsh European Programme Executive; current Board Director of Mid Wales Opera and of Builth Wells Community Support).

Rt Hon Lord Jones PC (MP for Alyn and Deeside and East Flint 1970 – 2001; former President Glyndŵr University; numerous Parliamentary roles including Parliamentary Under Secretary of State for Wales 1974-79; Shadow Secretary of State for Wales 1983-92; member of House of Commons Chairman's Panel; prior to becoming an MP was Head of English at Deeside Secondary School). **Lord Jones was a member of the Review Panel until December 2012.**

Gary Griffiths (Airbus UK Head of Apprenticeship Programmes; member of the "Webb Review" Panel; sits on a number of advisory bodies including the Aerospace Sector Skills Strategy Group, Airbus Strategic International Project for Skills, UK Higher Engineering Apprenticeship Group, and SEMTA's 4 Nations Group and Credit Qualifications Framework Group).

Rachel Clacher (Co-founder and Director of Wrexham based "Money Penny" the largest outsourced telephone answering service in UK and recipient of the Queens Award for Enterprise; regular speaker at business and industry events on business culture, growth and skills requirements).

Gill Atkinson (Chartered Accountant and Partner/Director of Wrexham based Accountants Coxey's; actively mentors local businesses; helped launch Wrexham Business Professional Group. Coxey's were the first accountants in Wales to achieve the Investors in People at the gold standard for its commitment to staff development and the business community).

Annex B

Stakeholder Engagement List

More than 160 representatives from the following stakeholder groups contributed to the review process.

Higher Education Sector

- Glyndŵr University
- Former Glyndwr University and North East Wales Institute (NEWI) Chairs of Governors
- Bangor University
- University of Chester
- Aberystwyth University
- Higher Education Funding Council Wales
- Higher Education Wales (HEW)
- Cardiff University
- Staffordshire University
- The Open University

Further Education Sector

- Deeside College
- Yale College
- Coleg Cambria
- Grŵp Llandrillo Menai
- Coleg Powys
- Colegau Cymru
- High Schools (English medium and Welsh medium school with sixth form provision)

Staff and Student Representatives

- University and College Union (UCU) representatives at Glyndwr University; Yale College and Deeside College
- Association of Teachers and Lecturers (ATL) Yale College
- National Union of Teachers (NUT) Yale College
- UNISON, Glyndŵr University and Yale College
- Association of Managers in Education (AMiE) Yale College and Deeside College
- National Union of Students (NUS) Cymru
- Glyndŵr University Students Guild

Local Authorities

- Wrexham County Borough Council
- Denbighshire County Council
- Flintshire County Council
- North Wales Economic Ambitions Board
- Welsh Local Government Association (WLGA)

Industry and Business

- Institute of Directors Wales
- Federation of Small Business (FSB) North Wales
- Federation of Small Business member company contributions (14)
- West Cheshire and North Wales Chamber of Commerce
- Betsi Cadwaladr University Health Board
- Comtek Network Systems UK Ltd
- Deeside Industrial Park Partnership
- Airbus UK
- Tata Steel
- Toyota Manufacturing UK
- Welsh Opto-Electronics Forum
- RWE Renewable N Power
- UPM Shotton Paper Mill
- Pendine Park Care Home
- KK Fine Foods PLC
- North Wales Tourism
- Tourism Partnership North Wales
- Advanced Materials and Manufacturing Panel
- SEMTA North Wales Regional Council

Political Stakeholders

- Assembly Members
- Members of Parliament

Other Organisations / Groups

- Mersey Dee Alliance
- North Wales Economic Forum
- Deeside Enterprise Zone Board
- City Regions Task and Finish Group
- National Leadership and Innovation Agency for Healthcare (NLIAH)
- Association of Voluntary Organisations in Wrexham (AVOW)

Independent Contributions

- The panel received additional contributions from 5 individuals/interested observers.

Welsh Government

- Group Director Skills Higher Education and Lifelong Learning, Department for Education and Skills (DfES)
- Deputy Director Higher Education Division, DfES
- Deputy Director Transformation Programme Management Division, DfES
- Deputy Director Further Education Division, DfES
- Chief Economist, Data and Analytical Services
- Deputy Director External Partnerships North Wales, Department for Local Government and Communities
- Head of Branch, Youth Support and Guidance (including Labour Market Intelligence Project) DfES
- Labour Market Analyst, (Labour Market Intelligence Project), DfES

Additional Evidence List

Policy and Background

- For our Future – The 21st Century Higher Education Strategy and Plan for Wales, Welsh Government.
- HEFCW Corporate Strategy 2010-11 to 2012-13.
- Future Structure of Universities in Wales, HEFCW.
- Future Structure of Universities in Wales - Written Representations from Stakeholders.
- Welsh Government Statement on Reconfiguration in the HE Sector – November 2011.
- Welsh Government Statement on the Review of HE Provision in NE Wales – February 2012.
- Achievement and Accountability – Report of the Independent Review of Higher Education Governance in Wales, Independent Review of HE Governance in Wales.
- Minister for Education and Skills Speech to the Leadership Foundation in HE Conference – December 2011, Welsh Government.
- Minister for Education and Skills Speech to the Leadership Foundation in HE Conference – December 2012, Welsh Government.
- Minister for Education and Skills Speech *"Education and the Welsh Public Sphere"* – 14 May 2012, Welsh Government.
- Further and Higher Education Bill White Paper (2 July 2012) and Written Statement (2 July 2012), Welsh Government.
- Welsh Government Statement on Higher Education Reconfiguration in SE Wales – 6 November 2012, Welsh Government.
- HE Policy Statement, June 2013, Welsh Government.
- Securing a Sustainable Future for Higher Education - An Independent Review of Higher Education Funding & Student Finance - 12 October 2010.

Higher Education

- HESA⁶⁰, including datasets relating to:
 - Student FTEs by subject category 2010/11 and 2011/12;
 - Total student numbers 2003/04 to 2011/12;
 - Student numbers at Glyndŵr University London campus 2011/12;
 - Total undergraduate student numbers 2003/04 to 2011/12;
 - Total staff numbers 2007/08 to 2011/12;
 - Total academic staff numbers 2007/08 to 2011/12;
 - Research grants and contracts income by source 2010/11 and 2011/12;
 - Student retention rates 2009/10;
 - Student destinations and employability 2009/10;
 - Full-time undergraduate student flow for NE Wales, SE Wales and SW Wales 2010/11 and 2011/12;
 - Full-time undergraduate student flow for LPN students for NE Wales, SE Wales and SW Wales 2010/11 and 2011/12;
 - Sub-degree student flow for NE Wales, SE Wales and SW Wales;
 - Student numbers from LPN 2009/10 to 2011/12;
 - Widening participation PIs 2011/12;

⁶⁰ Includes data from the HESA Student Record and HESA Finance Record.

- Glyndŵr enrolments from NE Wales by local authority 2010/11 and 2011/12;
- Overseas student numbers 2010/11 and 2011/12;
- Income from overseas students 2010/11;
- Franchised provision in NE Wales 2009/10 (later years included in the mapping of provision in NE Wales -see below);
- Progression from sub-degree to first degree at Glyndŵr University 2007/08 to 2009/10);
- Mapping of provision in NE Wales 2010/11 and 2011/12;
- Qualification levels on entry at Glyndŵr University 2010/11; and
- Institutional turnover 2010/11 and 2011/12.

- Research Assessment Exercise 2008 Results: Wales.
- Quality assessment outcomes for institutions in Mid Wales, North Wales and NW England, Quality Assessment Agency (QAA).
- Institutional Review of the University of Wales, Bangor - April 2007, QAA.
- Institutional Review of the NEWI (Glyndŵr University) - March 2007, QAA.
- Recognising the Quality of Research at Universities in Wales, The Learned Society of Wales, Professor Robin Williams CBE FInstP FLSW FRS.

- Information on knowledge transfer brokerages, including:
 - The Skills Centre - <http://skillscentre.bangor.ac.uk/about.php.en?menu=1&catid=8065&subid=0>;
 - Strategic Insight Programme <http://www.siprogramme.org.uk/en/>; and
 - Fraunhofer Institutes <http://www.fraunhofer.de/en/about-fraunhofer.html>.

- Higher Education Business and Community Interaction Survey (HEBCIS) 2009/10 and 2010/11.
- University application and acceptance rates 2008-2012, UCAS.
- Application and admission trends 2009/10 – 2011/12, Glyndŵr University (Supported by UCAS Data).
- 2012/13 enrolment, application and acceptance data, UCAS (analysis by HEFCW).
- Overview of recruitment and application data 2011-12 – 2013-14, Glyndŵr University.
- Higher Education Provision in North East Wales – The Case for Change, HEFCW
- Mapping of HE Provision from the Regional Strategy for North and Mid Wales, HEFCW.
- Analysis of subject coverage for institutions in Mid Wales, N Wales and UK comparator institutions (including the University of Chester), from institutional prospectuses, HEFCW.
- CADARN Higher Education Regional Strategy for North and Mid Wales – March 2012, North and Mid Wales Regional Partnership HE Planning Group.
- Summary of collaborative research and knowledge transfer developments that involve Glyndŵr University, HEFCW.
- Information on partnerships relating to EELT research project, Glyndŵr University.
- Approach to protecting and exploiting intellectual property, Glyndŵr University.
- Vision 2020, Glyndŵr University's presentation to the Panel.
- Options appraisal for purchase of the Wrexham FC football ground, Glyndŵr University.
- Activities undertaken at the Optic Centre, St Asaph; The Airbus Composite Centre, Hawarden; and the Welsh College of Horticulture at Northop, Glyndŵr University
- Trend data on postgraduate students by Welsh, UK and overseas students, Glyndŵr University.
- 2012/13 student number estimates, Glyndŵr University.
- FE- HE progression in N Wales 2012/13, Glyndŵr University.

- Information on the delivery of part-time foundation degrees, Glyndŵr University.
- Widening access activity undertaken by Glyndŵr University, Glyndŵr University.
- Widening Access Strategy, Glyndŵr University.
- Information on Glyndŵr University engagement with schools, Glyndŵr University.
- Summary of HEFCW funding in N Wales, HEFCW.
- Research funding as a proportion of institutional income 2007/08 to 2011/12, HESA and HEFCW.
- New fees and funding regime in Wales, HEFCW.
- Average fee levels for full-time undergraduate and PGCE provision in Wales 2012/13 and 2013/14, HEFCW.
- Value of sub-degree provision at Glyndŵr University 2011/12, HEFCW.
- Redistribution of funding from sub-degree to other undergraduate provision, HEFCW.
- 2010-11 financial statements from Glyndŵr, Aberystwyth, Bangor and Chester, HEFCW.
- W12/08HE - Analysis of Financial Position of Welsh Universities 2010/11, HEFCW.
- W13/07HE: Estates and Infrastructure Capital Funding, HEFCW.
- Glyndŵr view on 2012/13 HEFCW grant funding, Glyndŵr University.
- W11/07HE Changes to the Funding System for Higher Education in Wales, HEFCW.
- W12/10HE HEFCW's Funding Allocation 2012/13, HEFCW.
- W13/09HE: HEFCW's Funding Allocations 2013/14, HEFCW.
- Costs and Efficiency of Higher Education Institutions in England: a DEA Analysis – E Thanassoulis, M Kortelainen, G Johnes and J Johnes - Journal of the Operational Research Society (2011).
- Economies of Scale and Mergers in HE, Colin Green and Geraint Johnes, The Routledge International Handbook of Higher Education, 2009.
- Costs and Industrial Structure in Contemporary British HE, Geraint Johnes, The Economic Journal (1997).
- The Determinants of Cost and Efficiencies where Producers are Heterogeneous: the Case of Spanish Universities, Geraint Johnes and Manuel Salas-Velasco, Economic Bulletin (2007).
- An Analysis of Costs in Institutions of Higher Education, Geraint Johnes, Jill Johnes and Emmanuel Thanassoulis, Studies in Higher Education (2008).
- Higher Education Institutions' Costs and Efficiency: Taking the Decomposition a Further Step, Geraint Johnes, Jill Johnes, Economics of Education Review (2009).
- Stochastic Frontier Estimation of a CES Cost Function: the Case of Higher Education in Britain, Hooshang Izadi, Geraint Johnes, Reza Oskrochi, Robert Crouchleyy, Economics of Education Review (2001).
- Bangor University Strategic Plan 2010-2015, Bangor University.
- Defining the Future: Corporate Plan, Chester University.
- Aberystwyth University Strategic Plan 2009-2013, Aberystwyth University.
- Aberystwyth University Strategic Plan 2012-2017, Aberystwyth University.
- Institutional Responses to Financial Reductions in the University Sector, Professor John Sizer, Department of Education and Science (1987).
- Efficiency and Scholarship: Uncomfortable or Compatible Bedfellows? John Sizer, Higher Education Review (1986).
- Competitive Funding Models, Resource Management and Quality Assessment, John Sizer.
- Pricing and Optimum Size in a Non-profit Institution: the University, Hans H Jenny, The American Economic Review (1968).
- Efficiency and University Size: Discipline-wise Evidence from European Universities, Andrea Bonaccorsi, Cinzia Daraio, Tarmo Raty and Leopold Simar, Government Institute for Economic Research (2007).
- Better the Dirigiste Devils We Know? John Sizer.

- Summary of university league table rankings for Glyndŵr University and comparator institutions (including the Times Good University Guide 2013, the Guardian University Guide 2013 and the Sunday Times Good University Guide 2012), prepared by HEFCW.
- Complete University Guide 2013 and 2014.
- Guardian University Guide 2013 and 2014.
- Sunday Times University Guide 2013.
- Strategic Alliance between Glyndŵr University and Deeside College, Glyndŵr University and Deeside College.
- Strategic Alliance between Glyndŵr University and Yale College, Glyndŵr University and Yale College.
- Buzz - Glyndŵr staff newspaper – Autumn 2012, Glyndŵr University.
- Landex HE Update – November 2012
- What do HE Students at College Do Next? – January 2013, HEFCE
- Case Studies of Governance Arrangements in the FE Sector (UK, Australia, Spain and USA) - January 2011, Learning and Skills Improvement Service (LSIS), Jo Mathews, Mike Snell & Reg Chapman.
- Collaborations, Alliances and Mergers in Higher Education – Lessons Learned and Guidance for Institutions – September 2012, HEFCE.
- Review of Non Medical Healthcare Education Provision in Wales: Report to the National Leadership and Innovation Agency for Healthcare – April 2011, PWC
- Standard HE Participation Rates 2007/08 to 2009/10 (provisional), HEFCW.
- Pupil Destinations Survey 2011 and 2012, Careers Wales.
- National Student Survey 2012.
- Year in which taught degree awarding powers (TDAPS) and university title were conferred, HEFCW.
- Information on the Wisconsin model - <http://www.wisconsin.edu/about/>
- Evidence submitted by the Welsh Government to the Commission on Devolution in Wales, February 2013
- Research Brief: The Determinants of University Selection - April 2013, London Economics.
- Report to the Board of Governors of Glyndŵr University – Effectiveness Review of the Governing Body July 2013
- An Avalanche is Coming: Higher Education and the Revolution Ahead, Barber, M, Donnelly, K, Rizvi, S; IPPR, March 2013

Further Education

- Our Plan for Excellence: The 2011-16 Strategy, Deeside College.
- Celebrating Excellence 2011 Annual Report, Deeside College.
- Deeside/Yale Merger Consultation Document, Deeside College/Yale College.
- Deeside College presentation to the Review Panel, Deeside College.
- Yale College presentation to the Review Panel, Yale College.
- Background paper on Grŵp Llandrillo Menai, Grŵp Llandrillo Menai.
- Grŵp Llandrillo Menai Undergraduate Guide 2012/13, Grŵp Llandrillo Menai.
- Transformation programme and FE perspective, Welsh Government.
- Llandrillo Menai FE and HE enrolments from Denbighshire – 2011/12, Grŵp Llandrillo Menai
- Understanding Higher Education in Further Education Institutions – BIS Research Paper Number 69 – June 2012, BIS

- Key outcomes and recommendations from the Estyn Review of Standards and Quality of Provision for Engineering in Further Education Colleges and Work-based Learning Providers in Wales - January 2013, Estyn.
- Deeside College HE Partnership Agreements – Memoranda of Understanding: Glyndŵr University; the University of Chester; Aberystwyth University; and Bangor University.
- Total HE numbers at Llandrillo Menai, HEFCW End of Year Monitoring Survey 2011/12.

Business, Economy and Labour Market

- NE Wales Economic and Labour Market Profile - March 2012 (updated in February 2013) - including data from Jobcentre Plus , ONS Labour Force Survey, ONS Annual Population Survey, Department of Work and Pensions, ONS Regional Accounts, ONS Annual Survey of Hours and Earnings, Annual Business Enquiry and Welsh Agricultural Census, ONS Business Demography, Size Analysis of Welsh Business
- NE Wales Qualifications and Commuting Profile 2011 and 2012 – Annual Population Survey
- Promoting Growth in All Regions, March 2012, OECD.
- Deeside Enterprise Zone Product Development and Marketing Proposal, Deeside Enterprise Zone Board.
- Note of Visit to Sheffield Advanced Manufacturing Park on 2 August 2012, Flintshire County Council.
- Deeside Growth Zone – Deeside Enterprise Development and Infrastructure Framework Document – January 2012, Flintshire County Council.
- North Wales Ambition Board: Economic Ambition – a Strategy for Change, North Wales Local Authorities.
- Employer Skills Survey 2011 (Wales National Report and regional comparator analysis), UKCES/Welsh Government.
- Working Futures 2010-2020 (Wales National Report and regional comparator analysis), UKCES/Welsh Government.
- UK Skills Levels and International Competitiveness Survey Summary Report, UKCES/Welsh Government.
- Correspondence from West Cheshire and North Wales Chamber of Commerce on skills gaps in West Cheshire and North Wales, West Cheshire and North Wales Chamber of Commerce.
- Sector Reports for N Wales; Mersey Dee Alliance; and Cheshire and Warrington – July 2012 – Mickledore.
- Sector Profiles for Anglesey; Cheshire East; Cheshire and Chester; Conwy; Denbighshire; Flintshire; Gwynedd; Warrington; Wirral; and Wrexham – February 2012, Mickledore.
- City Regions Final Report, Welsh Government, Dr Elizabeth Haywood.
- City Regions in Wales: The Case for North East Wales/North West Cheshire - Response by the North Wales Economic Forum – 18 April 2012, North Wales Economic Forum.
- The Dee Region Cross-Border Economy: Next Steps, Report for the Minister for Business, Enterprise, Technology and Science, Dr Elizabeth Haywood, March 2013.
- Wrexham Economic Prosperity Strategy 2012-2016, Wrexham County Borough Council.
- Denbighshire Economic and Community Ambition 2012-2020, Denbighshire County Council.
- Flintshire Regeneration Strategy 2009-2020, Flintshire County Council.
- Survey on Skills Gaps, SEMTA.
- Airbus presentation and data on apprenticeships, Airbus.

- Sustainable Social Services for Wales – A Framework for Action 2011, Welsh Government.
- Voice of Small Business – Member Survey – Wales 2012, Federation of Small Business.
- Dee Region Cross Border Economy: Next Steps. Report for the Minister for Business, Enterprise, Technology and Science, Elizabeth Haywood March 2013.
- A Concept Proposal for the Development and Promotion of the M56/A55 Industrial Innovation Corridor (M56 IIC), Prepared for Mersey Dee Alliance by Nick Smillie, Associate Director, AED International GmbH, January 2013.
- Integrated Skills Training Centre, Northern Gateway, Deeside, AEW Architects.

Population and Demographic

- Population projections for NE Wales local authority areas and Cheshire, Welsh Government.
- Population density – Wales by local authority areas - 2010.
- 2011 mid year population estimates for Wrexham, Flintshire and Denbighshire.
- 2011 Census population data for Wrexham, Flintshire and Denbighshire.
- Local Area Summary Statistics for Wrexham – October 2012, Welsh Government
- Local Area Summary Statistics for Flintshire – October 2012, Welsh Government
- Local Area Summary Statistics for Denbighshire – October 2012, Welsh Government.
- Deprivation profile for NE Wales, Welsh Index of Multiple Deprivation 2011, Welsh Government.

Press Articles

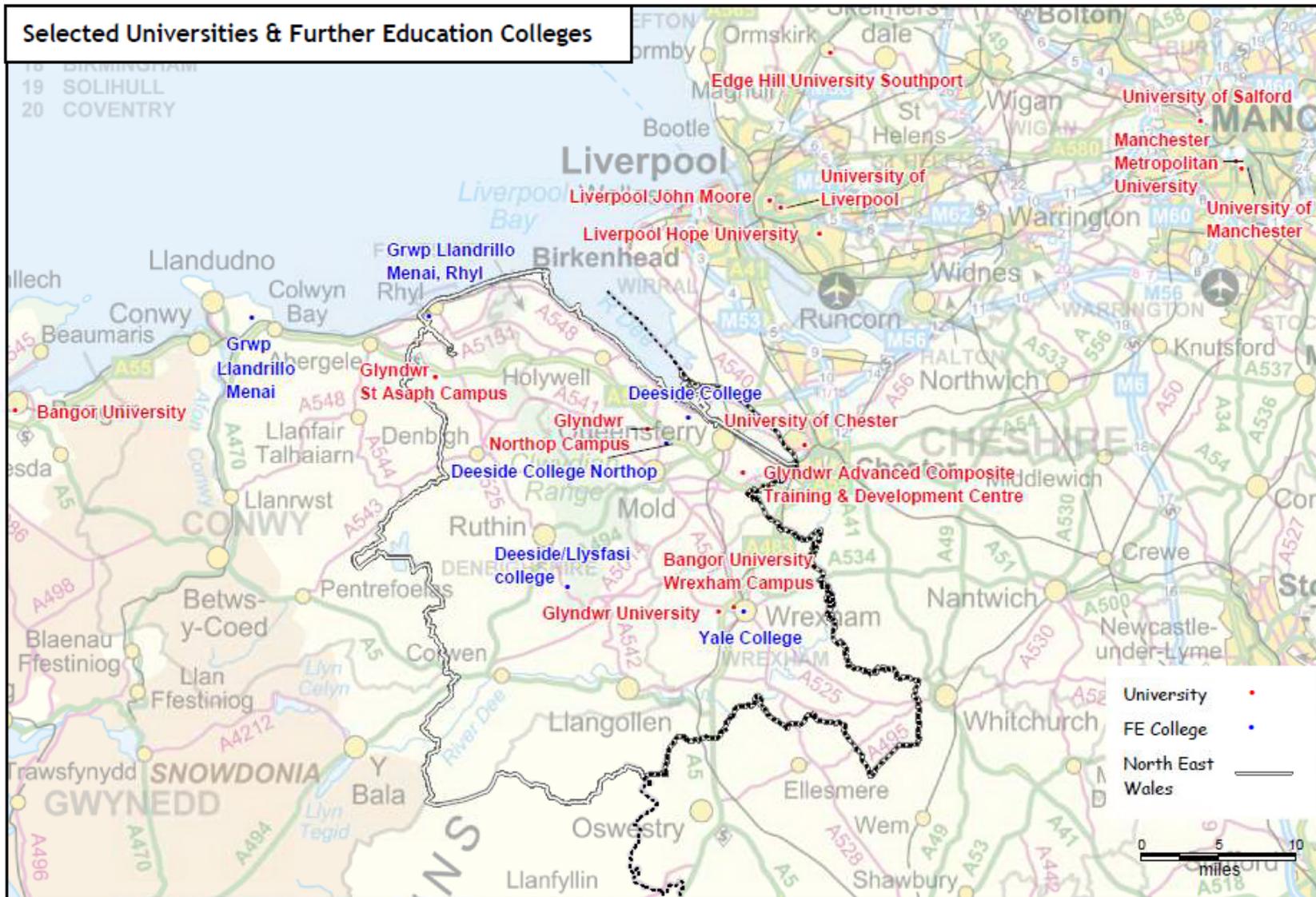
- Funding body grouping plan for North Wales, Western Mail.
- Cardiff Met reprieved on SE Wales Merger, Western Mail
- We will give a helping hand to small firms, Daily Post
- UCAS reveals a drop on Welsh students applying to university, Wales Online
- Estyn praises engineering provision in Welsh colleges, Wales Online
- Warning over international student drop in numbers, BBC News
- Businesses have their say on higher education, Flintshire Evening Leader
- University head warns downgrade plan could damage North Wales
- Universities in Wales could go bust if student numbers fall, Wales Online
- Nurse Training in North Wales – Bangor University Webpage, Bangor University.
- UK invests £88m in world's largest ever optical telescope, DBIS
- We're out of this world, Daily Post
- Education and industry to unite at new university site, Chester University
- UK universities face online threat, BBC News
- Universities cash in, Western Telegraph
- Business-leaders of the future to set up firm at university, Western Mail
- We will give a helping hand to small firms – Daily Post.
- Glyndŵr University students have best chance in Wales of landing graduate-level job, Daily Post.
- Student visa 'chaos' claim by Public Accounts Committee, BBC News.
- London Metropolitan University starts visa legal action, BBC News.
- Deportation fears after university visa licence revoked, BBC News.
- Uni's gem of an idea will unite firms, Daily Post.
- University's name to go on council signs in Wrexham.
- Universities and business to build local growth opportunities, Inside Government: Department for Business and Industry – Review led by Sir Andrew Witty.

- London Met wins back foreign student licence.
- Doors open at merged university for South Wales.
- Local councils in Wales could be cut after review.
- Universities in Wales provide massive boost to our economy, says new research.
- Universities 'face financial challenges ahead', BBC News.
- North Wales universities drop places in league tables.
- Expectations are high as colleges prepare for merger, Wrexham Evening Leader.
- Student numbers fall after tuition fees rise, The Daily Telegraph.
- Cardiff stays at top and Swansea enjoys biggest jump in university guide, Western Mail.
- Universities generate £3.6bn – Higher Education Wales.

Written Submissions and Representations

- Delivering Economic Prosperity and Social Justice, Glyndŵr University's Written Submission to the Review of HE Provision in North East Wales, Glyndŵr University
- "International Strategy for Higher Education Institutions" – Presentation from Graham Jackson, KK Fine Foods.
- Various documents relating to joint business breakfast activity Glyndwr University and the University of Chester, and investment/qualifications linked to food engineering – Graham Jackson, KK Fine Foods
- Correspondence from Professor Michael Gunn, VC and CEO of Staffordshire University on MoU with Glyndŵr.
- Correspondence from Mark Dixon, Denbighshire County Council – views of Council's Partnerships Scrutiny Committee
- Correspondence on Glyndŵr University's research partnerships, Glyndŵr University.
- Correspondence on UK Border Agency inspection of Glyndŵr University, Glyndŵr University.
- GuildHE Submission to the Webb Review of HE and FE Provision in North East Wales.
- The Universities and Colleges Unions (UCU) written submission to the Review of Higher Education Provision in North East Wales.

Universities and Further Education Colleges Location Map



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Annex E

Additional Profile Data – North East Wales

Table A: Enrolments in NE Wales by institution and level – 2011/12

	Full-time			Part-time			Total				% of Total
	Sub-degree	First Degree	PG	Sub-degree	First Degree	PG	Sub-degree	First Degree	PG	Total	
Glyndŵr University	274	3034	463	2847	426	534	3121	3460	997	7578	79.3%
Bangor University	0	115	0	32	0	0	32	115	0	147	1.5%
OU/Other Distance Learning	0	0	0	442	723	186	442	723	186	1351	14.1%
Llandrillo Menai	0	0	0	203	12	23	203	12	23	238	2.5%
Deeside College (inc Llysfasi College site)	0	10	0	132	0	0	132	10	0	142	1.5%
Yale College	0	0	0	95	0	0	95	0	0	95	1.0%
Total	274	3159	463	3751	1161	743	4025	4320	1206	9551	100.0%
% of Total	2.9%	33.1%	4.8%	39.3%	12.2%	7.8%	42.1%	45.2%	12.6%		

Source: HESA

Table B: Enrolments at institutions in NE Wales by subject area and mode – 2011/12

	Enrolments			% of Total Enrolments
	Full-time	Part-time	Total	
Medicine & Dentistry	0	16	16	0.2%
Sub-degree	0	0	0	
First Degree	0	0	0	
PG	0	16	16	
Subjects & Professions Allied to Medicine	815	1048	1863	19.5%
Sub-degree	*	+	681	
First Degree	792	182	974	
PG	+	+	208	
Science	425	223	648	6.8%
Sub-degree	68	53	121	
First Degree	340	118	458	
PG	17	52	69	
Engineering & Technology	600	772	1372	14.4%
Sub-degree	37	620	657	
First Degree	502	116	618	
PG	61	36	97	
Built Environment	100	100	200	2.1%
Sub-degree	0	54	54	
First Degree	100	39	139	
PG	0	7	7	
Mathematical Sciences, IT & Computing	294	242	536	5.6%
Sub-degree	52	126	178	
First Degree	203	75	278	
PG	39	41	80	
Business and Management	618	328	946	9.9%
Sub-degree	84	166	250	
First Degree	256	78	334	
PG	278	84	362	
Social Sciences	15	100	115	1.2%
Sub-degree	0	8	8	
First Degree	5	64	69	
PG	10	28	38	
Humanities	223	1443	1666	17.4%
Sub-degree	0	1216	1216	
First Degree	+	+	390	
PG	*	+	60	
Art, Design & Performing Arts	488	76	564	5.9%
Sub-degree	*	+	41	
First Degree	449	6	455	
PG	+	+	68	
Education ITT (Qualified Status)	+	*	71	0.7%
Sub-degree	0	*	*	
First Degree	+	0	+	
PG	0	0	0	
Education (Non qualified Status)	251	1308	1559	16.3%
Sub-degree	+	+	816	
First Degree	224	315	539	
PG	*	+	204	
Total	3897	5659	9556	100.0%

*For data disclosure reasons, values less than 5 have been expressed as *, and some values greater than 4 have been expressed as + in order to prevent recalculation. Due to the methodology of calculating enrolments by subject area, totals may not match those shown in other tables.*

Source: HESA

Table C: Enrolments at Glyndŵr University by subject area and mode – 2011/12

	Enrolments			% of Total Enrolments
	Full-time	Part-time	Total	
Medicine & Dentistry	0	0	0	0.0%
Sub-degree	0	0	0	
First Degree	0	0	0	
PG	0	0	0	
Subjects & Professions Allied to Medicine	700	865	1565	20.6%
Sub-degree	*	+	579	
First Degree	677	137	814	
PG	+	+	172	
Science	425	56	481	6.3%
Sub-degree	68	15	83	
First Degree	340	8	348	
PG	17	33	50	
Engineering & Technology	600	591	1191	15.7%
Sub-degree	37	491	528	
First Degree	502	79	581	
PG	61	21	82	
Built Environment	100	68	168	2.2%
Sub-degree	0	29	29	
First Degree	100	39	139	
PG	0	0	0	
Mathematical Sciences, IT & Computing	294	140	434	5.7%
Sub-degree	52	95	147	
First Degree	203	11	214	
PG	39	34	73	
Business and Management	618	208	826	10.9%
Sub-degree	84	126	210	
First Degree	256	28	284	
PG	278	54	332	
Social Sciences	15	17	32	0.4%
Sub-degree	0	0	0	
First Degree	+	*	7	
PG	+	+	25	
Humanities	223	1310	1533	20.2%
Sub-degree	0	1201	1201	
First Degree	+	+	292	
PG	*	+	40	
Art, Design & Performing Arts	478	71	549	7.2%
Sub-degree	*	+	41	
First Degree	+	*	441	
PG	+	+	67	
Education ITT (Qualified Status)	68	0	68	0.9%
Sub-degree	0	0	0	
First Degree	68	0	68	
PG	0	0	0	
Education (Non qualified Status)	251	481	732	9.7%
Sub-degree	+	+	303	
First Degree	224	49	273	
PG	*	+	156	
Total	3772	3807	7579	100.0%

For data disclosure reasons, values less than 5 have been expressed as *, and some values greater than 4 have been expressed as + in order to prevent recalculation. Due to the methodology of calculating enrolments by subject area, totals may not match those shown in other tables.

Source: HESA

Figure A: Mapping of HE Provision from the Regional Strategy for North and Mid Wales

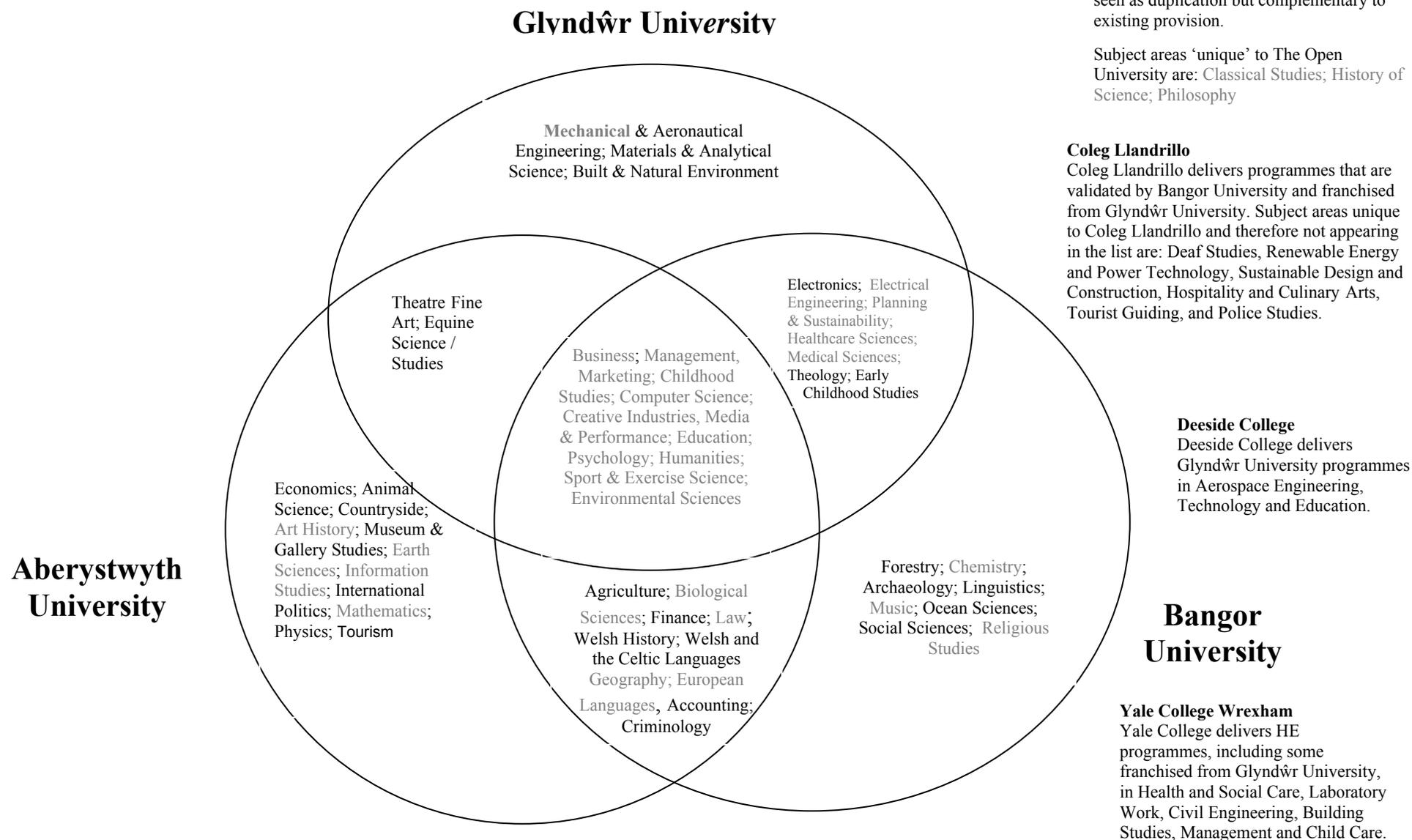


Figure B: Subject Coverage at Undergraduate Level – Comparison of Glyndŵr University and the University of Chester

