

Enhancing Learning and Teaching through Technology in Wales

Gwella Programme Final Report

March 2011

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Executive Summary

The Welsh *Enhancing Learning and Teaching through Technology* Programme was established in 2007 following the publication of a strategy document by the Higher Education Funding Council for Wales (HEFCW). Funding to support the programme was allocated for the period 2007-8 to 2009-10. In March 2008 HEFCW invited the Higher Education Academy to support institutions in the development and implementation of their learning technology enhancement activities based on the strategy. The Academy designed a programme of support running from 2008 to 2011. This final report presents a summary both of the institutional activities and achievements throughout this programme, called *Gwella*, and of the support provided for it. Evidence of the achievement of HEFCW's strategic objectives for technology-enhanced learning (TEL) is provided in respect of the indicators of success.

To help understanding of the background to the HEFCW strategy a summary is given of the HEFCE-funded Benchmarking and Pathfinder programmes and of how the design of the support for Gwella benefited from the Academy's experience of these earlier programmes. The report then describes the roles of the Critical Friends and provides brief summaries of the programme events, the Gwella weblog, the strategic liaisons, the contribution made to sector events, and the nature of the reporting required by the institutions, leading to the final reports and briefing papers submitted in February and March 2011 respectively.

In the main section of the report a summary is made of each institution's activities under the programme. These accounts are based on each institution's reported progress, with particular emphasis on the HEFCW indicators of success. The report uses the institutions' own headline messages to summarise progress on each of the following indicators.

1. Enhancement of learning, teaching and assessment, and of core processes.

TEL development activity following benchmarking was reported by all Gwella institutions. Across the programme there is good evidence of generally enhanced use of institutional VLEs and other tools and technologies for learning, including e-assessment tools for submission and feedback, e-portfolios and PDP, and innovative use of wikis, blogs and podcasting. The activity was generally implemented with the specific aim of transferability and wider roll-out across the institution, resulting in increased staff engagement with TEL and raised awareness of the benefits of using technology, particularly amongst senior managers.

2. An enhanced learning experience

Several Gwella institutions reported embedding of TEL through restructuring or repositioning support services, through placing responsibility for TEL in formal committees, or through changing quality procedures to raise the profile of TEL in course review. There is also a new focus on the student voice and an understanding of the role students play in enhancing their own learning. There is evidence too of the use of technology to improve retention and progression, particularly for first-year students, and of the effective use of online platforms in a range of employment and outreach situations.

3. Increased flexibility and accessibility of provision

The development of a Welsh medium interface for the Blackboard VLE is viewed as an important success for the sector. Gwella has also supported the development of Welsh versions of other key tools and technologies including those for assessment. More generally, institutions have highlighted the use of e-portfolios and PDP to meet the needs of a diverse student body including part-time and work-based learners. There is increased use of audio and video-based media including podcasting and lecture capture software. These technologies not only improve

flexibility in terms of the time and place of course delivery, but also enhance effective use of staff teaching time. A number of institutions have also evidenced the development of online accessibility guides and support materials for staff and learners.

4. Effective collaboration and sharing of current and good practice

In their reports institutions emphasise the development of a sense of collective ownership and deeper understanding of TEL in the Welsh sector. This is reflected in collaborative partnerships and networking within Wales, with other institutions, groups and agencies in the UK HE sector, and globally. Each of the Gwella teams has reported several instances of effective collaboration with other institutions in developing and implementing the use of TEL. This includes active participation – in some instances with a leading role – in various relevant UK-wide Special Interest Groups (SIGs).

5. Institutional engagement

Most institutions have developed plans for reviewing and evaluating TEL developments in a systematic way, building on the outcomes of the initial benchmarking exercise. Increasingly, TEL development has a central role in both learning and teaching strategies and in operational plans. Even more importantly, perhaps, and reflecting a shift in institutional culture, several institutions have described the coming together of academic staff and technology specialists in a newly collaborative way for course development and delivery.

Conclusions

Overall, the report concludes:

- All of the institutions have achieved, and most have exceeded, their plans for TEL
 enhancement activity following benchmarking. The process of benchmarking was itself
 highly valued, establishing links between services, academic structures and individuals.
- As the Gwella initiative has progressed, institutions have reached a degree of maturity in this area which has produced more strategic discussions about the role of TEL.
 However, the greatest impact is being achieved where developments are grounded in academic practice, encouraging discourse about evidence-based pedagogy.
- The support and active engagement of senior management is essential in maximising the potential role that technology can play. In those institutions where senior managers have championed Gwella, TEL enhancement is becoming formally enshrined in quality assurance processes.
- Within the sector in Wales, Gwella has helped to develop a genuine sense of collective momentum for TEL development. An active community of practice has emerged, with a real willingness to share ideas, challenges and resources, and to learn from one another.
- Across the programme there is growing acknowledgement of the need to listen to the student voice and to draw students into a more active role in policy discourse.
- The Academy's overseeing role has encouraged institutions to value the Gwella programme in academic terms.

1 Introduction

This is the final report from the Higher Education Academy on the Enhancing Learning and Teaching through Technology Programme in Wales. This Programme was established in 2007 following the publication by the Higher Education Funding Council for Wales (HEFCW) of Enhancing Learning and Teaching through Technology: a Strategy for Higher Education in Wales.

In December 2007, HEFCW published a circular presenting plans for supporting the implementation of the Strategy, and in March 2008 invited the Higher Education Academy to support institutions in the development and implementation of their technology enhancement activities. The Academy designed a programme of support activities running from 2008 to 2011. Following a brief consultation with the Welsh HE community the Programme was named *Gwella* to express the concept of enhancement in Wales.

Interim reports on Gwella were presented to HEFCW on activities in 2008 and 2009, focusing on institutional progress and achievements, and the Academy's support programme. This final report presents a summary of the institutional activities and achievements throughout Gwella, and the programme of support. It presents evidence of the extent to which Gwella has supported the achievement of HEFCW's strategic objectives for technology-enhanced learning (TEL)¹ in respect of the short and long term strategic indicators of success. The report also raises and discusses the key messages for institutions and funders arising from Gwella.

2 Context

Following the publication in March 2005 of the Higher Education Funding Council for England (HEFCE) ten-year e-Learning Strategy², the Higher Education Academy was invited to lead a benchmarking exercise and related Pathfinder Programme in partnership with the Joint Information Systems Committee (JISC). The benchmarking exercise was intended to help institutions establish where they were in regard to embedding e-learning. The Pathfinder Programme, by contrast, was specifically designed to help selected institutions, from those that had participated in the benchmarking exercise, to identify, implement and evaluate on behalf of the sector different approaches to TEL in ways that result in positive institutional change through the enhancement of learning and teaching. The HEFCE strategy provided the policy background to the programme, with its emphasis on placing the responsibility for, and ownership of, e-learning development clearly with the individual institution. Welsh HEIs were not eligible for Pathfinder funding, but some contributed their time and experience to the ongoing benchmarking exercise.

In December 2007, HEFCW allocated funding to support and encourage Welsh institutions in taking up the opportunities provided by technology and to meet HEFCW's strategic objectives, and invited the HE Academy to support this process³. A specific objective in allocating this funding and engaging the Academy was to enable HEFCW to review progress towards its strategic objectives, outlined in the indicators of success in five broad enhancement themes:

- Enhancement of learning, teaching, assessment, and core processes
- An enhanced student learning experience
- Enhanced flexibility and accessibility of provision

¹ In this report, the acronym TEL (technology-enhanced learning) is also used in relation to the Enhancement of Learning and Teaching through Technology.

http://www.hefce.ac.uk/pubs/hefce/2005/05_12/

http://www.hefcw.ac.uk/documents/publications/circulars/circulars_2007/W0750HE%20circ.pdf

- Effective dissemination and sharing of current and good practice
- Institutional engagement

At the start of the Gwella initiative, seven of the (then) eleven Higher Education Institutions (HEIs) in Wales which had taken part in the Academy's Benchmarking exercise commenced programmes of enhancement activity based on their benchmarking outcomes and action plans. The remaining four institutions undertook benchmarking from March 2008 to January 2009. These four institutions commenced their programmes of enhancement activity in March 2009, based on the submission of a completed proposal document (Annex A to the 2007 HEFCW Strategy).

In February 2009, the Academy's Gwella Support Team produced a summary report on the process and outcomes of the e-Learning Benchmarking exercise for institutions in Wales. This report concluded that the outcomes of the Academy's e-Learning Benchmarking exercise, through all four phases from the Pilot in 2006 to the Gwella phase in 2008, provided a catalyst and a framework for institutions to develop plans for the development of technology-enhanced learning and teaching initiatives. These plans were based on the specific context, organisational culture and development aspirations of each institution, and framed in the context of the 2007 HEFCW Strategy.

3 Support Activities

3.1 The Support Team

In March 2008, the Academy wrote to the Vice Principals of all of the institutions who were participating in Gwella outlining the programme context, proposed support package, the expectations from the institutions themselves in terms of levels of engagement, and anticipated benefits. This letter formed the basis of an informal compact between the Academy and the institutions, supported by HEFCW. It emphasised the opportunity to realise the benefits from participating in a programme informed by a strategy which placed the emphasis on the enhancements that technology should bring to the learning and teaching experience.

Building on the national Benchmarking exercise and the Pathfinder Programme for HEIs in England, the Academy appointed a team of experienced consultants to support Welsh institutions in their enhancement activities as follows:

Professor Terry Mayes	Trinity College Carmarthen (subsequently Trinity Saint David) UWIC
Professor Paul Bacsich	Aberystwyth University University of Glamorgan
Veronica Adamson Dr Jane Plenderleith (Glenaffric Ltd)	Bangor University University of Wales, Lampeter University of Wales, Newport Cardiff University Glyndwr University Swansea Metropolitan University Swansea University

The Support Team was led by Derek Morrison, the Academy's Associate Head of e-Learning. At the outset, a briefing document was provided for the institutions, outlining the support role and anticipated levels of engagement. A key element of the support role was the provision of strategic advice and guidance for projects, offering both mentoring and coaching to project teams. The consultants acted as critical friends to the projects, presenting an external perspective, providing insights and raising awareness of relevant developments and initiatives in the sector while inviting project teams to reflect and review their progress and activities.

The consultants supported their allocated institutions on this basis, each with an approach tailored to the requirements and wishes of the project teams, the development context in the institutions, and emerging relationships with team members and institutional managers. The Support Team was expected to engage in institutional enhancement activities at Steering Group level, attending meetings where possible, and receiving papers relating to the initiative. Consultants were also expected to meet senior managers/PVCs to discuss the project activities. Institutions and their consultants were asked to establish ground rules for ongoing communication, to ensure the most appropriate use of the time available and to maximise the effectiveness of their strategic advice and guidance.

3.2 Project Meetings, Visits and Ongoing Support

Each of the institutions was visited by their consultant(s) at least once in each academic year as agreed in the Academy's initial letter. These visits generally comprised a combination of meetings with the project leaders, round table discussions with project teams, meetings with senior managers, and participation in project board meetings. From the outset, the support team was concerned to establish an open and transparent process for reviewing and reporting on progress against planned activities with the institutional teams and HEFCW. Following the visits, summary reports were produced for the institution, either directly by the consultants or via the institution's internal processes. Generally these visit reports included the main points of discussion, agreed actions, and potential sources of further information or guidance to support project activities.

In practice, most of the institutions received more than one annual visit from their consultants. Additional meetings were arranged in order to review progress in specific areas, to attend project meetings or steering group/project board meetings, and/or to participate in discussions with senior staff regarding Gwella activities and the general developmental context. Often the consultants were able to combine additional visits to the Gwella project teams with participation in other events and activities in Wales. The Support Team encouraged the Gwella teams to establish internal reporting arrangements for Gwella within existing formal academic structures and boards.

The consultants themselves held regular meetings throughout the Gwella programme. These provided a forum for discussing generic issues of interest arising from institutional activities, emerging support needs, and organising support events and programme meetings. The consultants also provided regular bulletins for the Academy on the activities of the Gwella teams in Wales, both to inform strategic support meetings with HEFCW, and general communication with the sector through various media such as Academy (and Academy Wales) newsletters and online bulletins.

3.3 Programme Meetings

Three annual Gwella Programme meetings took place: the first in October 2008 in Cardiff, the second in November 2009 and the third in October 2010, both at Gregynog Hall and Conference Centre near Newtown in Powys.

The theme of the first meeting was **Realising Possibilities**, with a focus on the Enhancement Themes of the HEFCW Enhancing Learning and Teaching through Technology Strategy. The theme of the second meeting in November 2009 was **Making Enhancement Happen**, with a continued focus on the Enhancement Themes of the HEFCW Strategy. The themes of the final internal meeting of the Gwella Programme in October 2010 were **Celebrating Success and Meeting Future Challenges**. Collectively, the objectives of these meetings may be summarised as follows:

- Provide a forum for networking, sharing ideas, challenges and expertise; facilitate the development and consolidation of collaborative relationships
- Provide an overview of activities and achievements through the Gwella programme
- Review progress in terms of the indicators of success in the HEFCW Strategy
- Contribute to the development of strategic thinking and the articulation of revised objectives for technology-enhanced learning, teaching and assessment in Wales
- Provide practical guidance on reporting and disseminating Gwella

The Programme meetings were popular and well attended by the Gwella project teams, providing a forum for informal networking and sharing as well as more formal reporting on project activities and the strategic context. Increasing use was made of informal communication channels including microblogging to engage participants in capturing the key points of the discussions in ways which made sense in institutional and practitioner terms.

3.4 Gwella Weblog

The Academy has maintained a weblog for the Gwella Programme⁴. The main purpose of the weblog was to provide a means of communicating about Gwella both internally and externally. The landing page includes a link to the Gwella websites for each institution, enabling ready access to information about the main focus and activities in the individual institutions. The Support Team used the Gwella weblog as a means of communicating and consulting with the teams. Posts also included information about external events, publications and issues of interest in the sector, and the Gwella weblog was linked to weblogs for other relevant Academy-led initiatives (specifically the Pathfinder Programme and the Enhancement Academy).

3.5 Strategic Liaison (HEFCW, Academy Wales, JISC RSC Wales)

The Academy has participated in regular liaison meetings with HEFCW throughout the duration of the Gwella Programme, during which progress and any issues arising were shared and discussed with HEFCW officers and representatives from RSC Wales. Minutes of these meetings were maintained by the Funding Council.

In the course of the Programme, the Gwella Support Team has had increasing contact with representatives from the JISC Regional Support Centre (RSC) for Wales and the Academy's designated senior officer for Wales. A series of joint telephone meetings provided a forum for briefing the agencies about Gwella activities in the institutions, with a focus on outputs of interest to the sector, and updates on relevant agency initiatives and developments. Representatives from HEFCW, JISC RSC Wales and the Academy Wales office were active participants in the annual Gwella Programme meetings.

The Gwella Support Team was actively involved in the planning group for two sector-level conferences (see 3.6 below for details). The Support Team was also involved in early

⁴ http://elearning.heacademy.ac.uk/weblogs/gwella/

discussions with JISC with a view to maximising potential synergies between institutional Gwella activities and plans for the JISC Building Capacity Programme in Wales⁵.

3.6 Sector Conferences and Events

The Gwella Programme featured prominently in the HEFCW-sponsored *E for Enhancement Conference on Technology-Enhanced Learning and Teaching in Higher Education* which took place at Cardiff University in April 2009. The Academy's Support Team was actively involved in the conference planning, which was led by the JISC RSC Wales. The conference keynote address was delivered by the Academy's Deputy Chief Executive, on the subject 'Gwella: Enhancing Learning and Teaching through Technology in Wales'. There was a strong correlation between the conference themes and HEFCW's strategic enhancement themes which formed the framework for the Gwella Programme, and Gwella teams led workshop and seminar presentations in six of the eight conference themes.

Gwella teams are also making a central contribution to the *Future Directions: Feeding Forward, Enhancing Learning and Teaching through Technology* event taking place at the University of Glamorgan in April 2011. This event is organised as part of the Future Directions programme by JISC RSC Wales, in association with the Higher Education Academy and HEFCW. The aims of the event are to contribute to the dissemination of the Gwella and JISC Building Capacity Wales programmes and to inform strategic planning, particularly in regard to the development of learning and teaching strategies.

3.7 Facilitating Collaboration and Dissemination

One of the development ideas mooted by Gwella teams at the November 2009 Programme Meeting was that it would be beneficial for Gwella institutions to have more face-to-face opportunities to share approaches, ideas, experiences, events, activities and resources. Accordingly, the Academy made some modest funding available to facilitate this process. Institutions were invited to submit a brief statement about the intended collaboration, who was to be involved, and the anticipated outcomes, including a supporting sentence from the relevant critical friend. Example activities included visits to other institutions, contributions to staff development events, joint workshops and seminars. Many of these funded activities were organised on the broad principles of the CAMEL (Collaborative Approaches to the Management of e-Learning) model first articulated in a UK HE context through a project led by the Association for Learning Technology and JISC infoNet⁶. While the Academy administered the funding for these collaborative initiatives, following mediation by the Support Team, the CAMEL events themselves were organised autonomously by the Gwella institution teams.

3.8 Outputs, Reports and Publications

Following the submission of the proposals for enhancement funding (completed Annex A documents), HEFCW's formal requirement to institutions was that Gwella activities be reported through scheduled Annual Monitoring Statements. Throughout the Programme, the Academy's Support Team has adopted a 'light touch' approach to additional reporting, in order to minimise the burden on institutional teams while enabling the Support Team to report on strategic progress to HEFCW in an informed and consistent manner. With this purpose, Gwella institution teams were asked to submit brief interim annual updates using a supplied template, and were encouraged to report and reflect on ongoing Gwella activities through project websites and

http://www.jisc.ac.uk/whatwedo/programmes/bcap.aspx

^{6 &}lt;u>http://www.jiscinfonet.ac.uk/camel/index_html</u>

blogs. The Academy submitted two annual interim reports to HEFCW on Gwella activity in 2008⁷ and 2009⁸.

In order to do justice to the work of the Gwella projects, and to maximise the impact of the Programme in the sector, Gwella teams were asked to provide various final reporting documents and outputs. Again, the reporting burden on the teams was minimised by ensuring that these reports flowed naturally from the development activities, were supported at all stages by the Academy's Support Team and Programme activities (particularly Programme meetings), and were relevant to – and consistent with – internal institutional reporting requirements.

Each institution was asked to produce a short, overarching report of their Gwella activities and experiences in the form of a case study which would 'tell the story' of the institutional initiative in an engaging, interesting and thought-provoking way. To encourage originality and maximise the relevance of these outputs (subtitled *Our Gwella Story*) in their institutional contexts, design constraints were not imposed, but for consistency teams were asked to focus on the following:

- The way we were describe the context and background for the institutional initiative, with particular reference to the relation with the benchmarking exercise
- What were the intended outcomes?
- What has been achieved?
- Where now? What does the institution do differently as a result of Gwella?
- What plans or measures are in place for sustainability?
- Wider context what are the key messages for the sector?

The complete set of case studies (*Our Gwella* stories for each institution) is available on the Gwella weblog⁹.

Additionally, each Gwella team was asked to produce one or more briefing papers focusing on an aspect of the approach to enhancement that was taken, with an intended audience of senior managers and/or practitioners. These briefing papers will be published by the Academy and form a resource for the wider sector.

4 Institutional Enhancement Activities

Institutions presented a summary of their planned activities and intended outcomes from Gwella in their completion of Annex A to the 2007 Strategy. The following summary of institutional activities in respect of these plans is based on progress reports submitted by the institutions in December 2008 and 2009, presentations made by the Gwella teams in Programme meetings (particularly the final Programme meeting of the funded phase in October 2010), and case studies of institutional Gwella activities submitted in January 2011.

4.1 Aberystwyth University

Aberystwyth University participated in Phase 2 of Benchmarking in 2007-08 using the e-Learning Maturity Model (eMM) framework. Based on their benchmarking experience and action plans, and aligned with institutional strategy, Aberystwyth undertook enhancement activity in five priority areas:

- Good Practice develop, collaborate and disseminate good practice in technologyenhanced learning
- e-Assessment support the effective implementation of e-assessment practice

⁷ http://elearning.heacademy.ac.uk/weblogs/gwella/?p=68

http://elearning.heacademy.ac.uk/weblogs/gwella/?p=220

http://elearning.heacademy.ac.uk/weblogs/gwella/?p=320

- Technology-enhanced Learning expand the portfolio of services for staff and students, especially Web 2.0 tools
- Student Feedback carry out a learner experience study focusing on technologyenhanced learning
- Policy and Procedure ensure that institutional policy and procedure supports the effective use of technology for teaching

Through Gwella, the e-learning team at Aberystwyth has been expanded to provide staffing resources to carry out projects in all five areas. These projects have succeeded in establishing a culture of embedded practice in TEL in the institution. Staff development has been provided in using a range of tools and technologies to enhance learning, including the use of wikis and blogs, podcasting, digital media, e-assessment and formative feedback, lecture capture, and promoting student interaction. A system of individual and small group consultations has been implemented to maximise the relevance of TEL training for staff in a range of academic contexts. Funding was made available to support small projects or staff travel to TEL-related conferences. The team has also undertaken a study of learners' experience of TEL as a basis for the further development of services for students.

A cornerstone of Gwella activity at Aberystwyth is the Nexus website for good practice in technology-enhanced learning¹⁰. This brings together a range of strands: case studies at Aberystwyth; good practice guides written by e-learning support staff; annotated resource lists and bookmarks; conference reports from support staff and winners of the e-learning Travel Fund award; and a news blog.

Activities in all five Gwella priority areas demonstrate the integration of TEL into the mainstream of learning and teaching with an emphasis on good practice. Several key policy changes demonstrate the depth of the culture change engendered and supported by Gwella. The institution is currently reviewing the scheme and module approval processes to ensure that appropriate use of technology is considered for all modules. Senate has recently agreed that all modules will be required to make use of the VLE for course administration, reflecting the increasing significance of technology in the institutional culture of learning and teaching. Most significantly, there is now an 'effective mass' of good practice in TEL in the institution.

The key message arising from Gwella at Aberystwyth is that of working together – new relationships have been fostered, and existing ones strengthened. The vital role of senior management support in developing TEL is emphasised. The pedagogical culture of the institution has changed significantly, and the institution faces its future with an increased sense of resilience. Two clear recommendations emerge:

- Begin with a sound pedagogical approach that puts the tools in the service of learning and teaching.
- Integration is crucial. Build on both vertical and horizontal connections within the institution and establish networks with other institutions to support a cultural change.

4.2 Bangor University

Bangor University had also participated along with Aberystwyth in the Phase 2 eMM benchmarking cohort. Subsequently the institution identified three priorities for Gwella, drawing on the outcomes of benchmarking in the light of the University's Learning and Teaching Strategy and the HEFCW Enhancing Learning and Teaching Through Technology strategy:

¹⁰ <u>http://nexus.aber.ac.uk</u>

- Collaboration including collaborative Welsh medium provision Gwella supported the
 collaborative establishment with Aberystwyth University of a joint Initial Teacher
 Education Training (ITET) Centre, recently opened by the Welsh Assembly Government
 First Minister. Collaborative teaching takes place using the VLE, videoconferencing
 facilities, and aspects of blended learning. The team has also been collaborating with the
 Centre for Welsh Medium Higher Education to support developments in the use of
 technology to enhance learning and teaching in the medium of Welsh.
- Assessment feedback/feed forward this was a key enhancement theme for the
 University. Informed by findings from the National Student Survey, the University
 established a four year quality enhancement project on assessment and feedback. The
 Gwella project supported this focus, aiming to stimulate new approaches to assessment
 and student feedback/feed forward working with a range of academic staff.
- Enhanced integration of electronic library resources in the University VLE a student demand-led objective, this recognises the importance of electronic learning resources to the new generation of students, and their levels of course satisfaction. The aim was to reach almost all students by spreading a variety of effective e-learning practice across the majority of modules using the VLE.

One of the main pedagogic outcomes of the Gwella project has been the development of the scope and quality of the staff development training and workshops provided by the Learning Technology Team. Attendance at Gwella related events such as the online assessment CAMEL event held at Glamorgan University has enabled the team to develop a wider picture and be more reflective in their approach to staff development. Staff responses have been very positive and there is early evidence of impact on student learning. Increased use of desktop videoconferencing tools indicates that these technologies are becoming increasingly integrated into the teaching and learning process.

Several case studies have been produced by academic staff, focusing on a range of approaches from small basic technologies to complex online tools. These have proved useful and popular with staff, and further case studies will be developed and made available for disseminating and sharing good practice.

Collaborative online course development has been a strong focus of the Bangor Gwella activity, with particular expertise in using video conferencing for course development and delivery. Building on this experience the establishment of further and stronger partnerships is anticipated.

At a strategic level, Gwella outcomes will be sustained through the development of the University's new Teaching and Learning Strategy, which will continue to blend use of technology with mainstream learning and teaching practice. Activities that were started under Gwella will be continued through a longer term programme of institutional initiatives.

During the period of the Gwella project there have been significant developments with regard to Welsh medium provision both in Bangor and nationally. Bangor University has been actively involved in the development of Y Porth¹¹, the national collaborative e-learning portal for the Welsh medium higher education sector, which makes use of the Welsh Language Pack for Blackboard originally developed at Bangor University. Bangor has also contributed widely to the repository of electronic resources available here. Experiences gained during the Gwella project with regard to collaborative ventures have helped to establish and confirm a basis for further collaborative developments in Welsh-medium provision, and develop an enhanced

¹¹ http://www.porth.ac.uk/cy/

understanding of how best to introduce and utilise new technologies and enhance the experience of all students.

4.3 Cardiff University

The University of Cardiff undertook benchmarking as part of the HEFCW-funded enhancement programme from March 2008, using the bespoke 'ELDDA' version of the Pick&Mix method developed specifically for this cohort of Welsh institutions. Cardiff's initiatives planned for the Gwella phase were based on key outcomes from this benchmarking process:

- Emphasis on the educational dimension of support for technology enhanced learning, integrated with support for learning and teaching in general
- Availability of a greater variety of support for technology enhanced learning and teaching developments
- Development of communication strategies to ensure that Schools, academics and students understand university decision-making processes
- Development and dissemination of formal guidelines on the design of learning materials to ensure accessibility
- Further discussion on the possible need for minimum levels of provision of learning materials to all students, to address comments raised directly from the students
- Development and dissemination of case studies of practice of technology enhanced learning to encourage further academics to incorporate appropriate technologies into their teaching

An important aspect of the Gwella initiative for Cardiff University was a focus on the educational dimension of technology, not tools and technologies in isolation. In a research intensive institution, an informed understanding of the evidence base and pedagogical underpinnings for TEL development was particularly important for staff.

Initial Gwella activities were focused on building an educational community to support staff in the use of technology. A significant element in this process for Cardiff was forging links across various functions and bodies to provide a coherent and comprehensive set of information and support services.

A single website has been developed as a focal point for teaching support¹². The site includes information about initiatives and events, and links to relevant resources. The ongoing development of the website is an iterative process with staff actively engaged in reviewing and commenting on the resources, support materials and tutorials, which can then be adapted to enhance their effectiveness. Case studies illustrating innovative practice in a range of academic contexts have been produced by staff, providing insight and an evidence base into activities in Schools and specific academic disciplines. Accessibility guidelines have been launched. An internal conference on Technology Enhanced Education held in May 2010 proved very popular with staff and the intention is to repeat this event on an annual basis (the next event is scheduled for May 2011).

By the end of 2010, a number of important initiatives have served to develop and consolidate this sense of community, enhancing teaching and learning through communicating and sharing good practice. The Cardiff Gwella team has undertaken a comprehensive user requirements survey to identify staff priorities for the use of technology, and has used this to inform the upgrading of the institution's VLE on the basis of pedagogical principles and practice rather than technological capability. Importantly, TEL is now seen as part of the support for education in

¹² http://www.cardiff.ac.uk/learning/

general in the institution, and not as a standalone area of activity. The use of technology is increasingly understood as a normal part of mainstream provision, processes and practices. Staff in a wide range of academic disciplines are actively engaged in discussions about changing practice, and the momentum is continuing to build.

4.4 University of Glamorgan

The University of Glamorgan was the sole representative from the Welsh HE sector in Phase 1 of the benchmarking exercise in 2007, and joined a cohort using the MIT90s method. Enhancement activities planned for Gwella focused on a number of key development areas that had been identified by the institution through this process and subsequent reviews:

- Embedding the new assessment policy throughout the University by promoting and raising awareness of online assessment
- Developing the use of social networking software to support and strengthen the online learning experience for students
- Enhancing the already established Good Practice Website, providing examples based on new online assessment developments to share good practice across the institution
- Continuing the blended learning seminar series to share good practice in the University with colleagues from the Welsh HE and Further Education sector
- Providing technical support for Welsh Medium Teaching Development Centre (WMTDC) projects to facilitate the collaborative online delivery of Welsh-medium courses across HEIs.

At Glamorgan, Gwella has radically changed the way the institution does its business. Three key enhancements have been identified:

- empowering senior management to promote enhancing learning and teaching through technology
- enhanced student learning and assessment experience
- enhanced staff teaching and assessment experiences

A personalised student portal with enhanced student-focused facilities has been developed. There is evidence that online assessment submission and self-assessment for learning activities have enhanced the learning experience for both home and international students. Richer and prompter assessment feedback is provided to students, and the development of an assessment diary supports the even distribution of assessment workload. All students now have access to a supported e-portfolio as well as networking technologies such as wikis and blogs. Online reading lists with embedded direct links to resources are now available for the majority of modules. Other innovative approaches include the development of an interactive simulation for new student induction, and the University was the first in Wales to use iTunesU to present student work. Much of this work has received external recognition from national and international bodies, and additional funding has been secured from various sources for the further development of some innovations. In addition, more than 2,000 students have participated in training sessions delivered by the TEL team as part of Gwella.

Through various Gwella-supported initiatives, more than 80% of university staff have been supported in TEL, and a number of online educational programmes have been developed. Annual Excellence in Learning and Teaching Awards (ELTA) encourage and boost efforts in the innovative redesign and transformation of pedagogically and technologically-focused teaching, learning and assessment.

The Gwella team has contributed to many national and international conferences and events, and has published several papers, articles and proceedings on TEL developments and innovations. Team members are active participants in a number of TEL-related SIGs in the wider sector. A series of evidence-based 'Good practice' guides has been published. A guide for course teams designing programmes of learning in Wales is available in Welsh and English. In addition as part of Gwella, key input and leadership has supported the development of Y Porth, the Welsh-medium VLE.

The enhancements achieved through Gwella build on more than a decade's experience of supporting learning through technology at Glamorgan. Senior managers have adopted and consistently emphasise messages and policy confirming TEL as integral to the University's learning, teaching and assessment landscape and as a vital adjunct to its face-to-face delivery of learning. Initiatives are now focusing more explicitly on putting assessment at the heart of learning, and developing online assessment as a central aim of future TEL developments. The practical and organisational structures which have been put in place have ensured that TEL remains a well-supported institutional priority.

4.5 University of Wales, Newport

The University of Wales, Newport participated in the 2007-08 Phase 2 Benchmarking exercise using the Pick&Mix method. This helped to identify a number of areas for development which then formed the focus of planned enhancement activity:

- Establish a process to determine the best way to use technology to enhance learning in line with the institutional mission
- Evaluate current practice across the institution and provide effective means of supporting staff in the use of technology
- Enhance core e-learning tools
- Provide accessibility guidelines for e-learning
- Develop a process to evaluate student IT skills and access to resources

A principal focus of Gwella at Newport from the outset was the enhanced use of existing technologies across the institution. Regular application and learning technology training events have been held in order to facilitate and increase the awareness and knowledge in resources, tools and best practices. In common with many institutions, the benchmarking process at Newport identified examples of innovation and good practice in using technology in various departments and faculties, and the potential value of capitalising on these pockets of innovation for mainstream learning and teaching. Benchmarking also highlighted an active interest in TEL on the part of institutional managers, and Gwella confirmed this engagement and support.

The Newport Gwella team highlights the introduction of Moodle within the existing institutional managed learning environment as a principal factor in achieving the recommendations arising from benchmarking. The migration process took just over a year to complete, and is viewed as a significant success in terms of TEL development not just by the technology implementation team, but also by academic users and institutional managers.

An unanticipated outcome of the success of this migration has been the use of Moodle for the delivery of franchised programmes, obviating the previous need for a separate delivery platform. Franchising is a key element in Newport's course delivery profile, and the new VLE has thus had an immediate, positive impact on the quality and consistency of provision. A separate, externally facing version of Moodle has been made available to support the institution's workbased learning agenda.

A number of mini-projects were also supported through Gwella, providing illustrations and exemplars of staff accessing and using technologies through Moodle in a variety of academic and support contexts. The focus of these mini-projects included: online assessment submission and feedback, the use of mobile devices, evaluating student online activity in terms of learning enhancement, and the use of e-readers. The institution has received international recognition for its work on the use of social networking sites to alleviate 'fresher stress' and hence improve first year retention.

The Gwella story from the Newport team highlights many specific outcomes from the programme in terms of changes in practice, attitude and the learning experience. One of the key messages from the process has been an appreciation of the need for, and value of, the support and active engagement of senior management in TEL development.

4.6 Glyndwr University

The opportunity to participate in the benchmarking exercise in March 2008 (using the bespoke Welsh version of Pick&Mix) arrived at a particularly appropriate time for Glyndwr in relation to the preparations for achieving university status. Initial plans for the enhancement phase focused on two key issues identified through benchmarking:

- Under-utilisation of the VLE
- The need for staff development to increase the pedagogic effectiveness of the VLE In the first year of its enhancement activity, Glyndwr University took the strategic decision to change its VLE from Blackboard to Moodle. This decision coincided with a process of organisational restructuring and the introduction of a revised curriculum model. The focus of Gwella therefore became supporting staff and learners through the technology aspects and opportunities presented by these major change processes in the institution.

It was anticipated that the new VLE platform would deliver many benefits to enhance provision, including:

- Provision of 24/7 services and a customisable portal experience while significantly reducing costs
- Creation of a new channel for engagement with the important 14-19 agenda in Wales with the ability to provide tailored modules directly integrated into school and FE college VLEs
- Development and standardisation of a modular framework
- Provision of an integrated portal for staff and students
- Ensuring 24/7 system support for the VLE
- Consolidation and simplification of the technologies staff and students need for effective teaching and learning
- Delivery of enhanced provision in a fiscally challenged environment through the use of innovative tools and technologies

Staff development workshops provided an opportunity for staff to develop practical skills in using various tools available in Moodle. These workshops also provided a forum to discuss pedagogical issues essential to the enhancement of teaching and learning. Events and presentations took place to keep staff informed of progress with the migration, and to consult on potential future applications development (this was a particularly important part of the process in order to both inspire staff with possibilities, while also managing expectations and avoiding

scope creep). One of the unexpected benefits from the migration project has been improved communication and team-working of staff across the University.

The new platform has a lower cost of ownership, which has provided an opportunity to re-invest resources in support and a range of staff development activities. There is now a new understanding of the role that TEL can play as well as an appreciation of gaps in the staff skill base that still need to be addressed. The University is committed to providing additional staff development to enable the continued enhancement of its provision to learners.

4.7 University of Wales Institute, Cardiff

UWIC was the sole Welsh institution to participate in the Academy's original benchmarking pilot programme in 2006, and used a version of the ELTI (Embedding Learning Technologies Institutionally) approach. This exercise revealed, as expected, uneven engagement with TEL across the institution. Through Gwella, the institutional team set out initially to identify and disseminate good practice in TEL.

Subsequently, Gwella activity at UWIC has focused on supporting the development of good practice, capacity and skills for the adoption of TEL across the institution, with a particular focus on embedding TEL in programme design and validation. A series of workshops and technology road-shows have focused on pedagogical approaches, developing staff skills in using various resources and raising awareness of the potential of technology to enhance the effectiveness of teaching and learning. Virtual learning spaces have been created for staff to present, review and discuss resources to inform their use of TEL, which has the double advantage of enhancing staff capability in a range of technologies whilst simultaneously increasing their experience of using virtual learning spaces.

Mainstreaming the consideration of TEL as an integral element in effective teaching and learning was a key element of the UWIC Gwella approach. The principle that programme design (and redesign) requires a range of skills informed the implementation of an innovative approach of 'Programme Design Sabbaticals'. Course leaders or their nominated representatives were allocated time and support to review the use of technology as a formal element in institutional course review and validation processes. One aspect of this was that quality assurance processes for scrutinising programme design and delivery would need to be reviewed to ensure they routinely took account of TEL.

Through Gwella, the institution has initiated a number of process changes relating to the use of technology to enhance learning and teaching, including:

- new regulations for approving flexible and distributed learning incorporating QA issues associated with TEL together with training opportunities for staff
- guidance and procedures for staff to use electronic submission and feedback processes which highlight good practice and ensure that the student experience is central to the systems used
- the requirement for staff with experience of TEL to be involved in all programme validation and review
- increasing collaboration in the development and review of learning designs.

The UWIC team has produced a number of published outputs, including booklets, leaflets, national and international conference presentations, with a particular focus on the development of the role of TEL in institutional quality assurance and quality enhancement processes. Most significantly, the team has highlighted the development of skills and experience in the staff

involved as the key outcome from Gwella, summarised in the following six themes (with an apposite acronym):

- Collaborative Ethos sharing between Welsh universities and the collaboration between academic subject specialists, technicians, and learning developers
- Levels of Engagement importance of championing Gwella and engaging others at all levels of the institution
- Adapting the 'plan' change initiatives, although needing a clear vision of the ultimate goal, must also be prepared to adapt to the other changes that take place around them
- Skills of Learning Developers the experience of implementing Gwella has shown the considerable academic, research, and interpersonal skills demanded of learning developers
- Student input the active engagement of students to both inform and evaluate the
 developments that took place was essential to establishing the effectiveness of
 initiatives; a number of changes stemmed directly from student input
- Actions the changes that have been made to policy, procedures and, above all, learning practices are the result of actions taken to ensure that improvements in TEL continue across the institution.

4.8 Swansea University

Swansea University participated in the bespoke benchmarking exercise for Welsh institutions from March 2008, encouraging positive change in the institution by adopting an approach informed by Appreciative Inquiry¹³. Subsequently, Gwella funding has been used to support six mini-projects, which were selected from bids received following the identification of priority development areas through benchmarking:

- eMark developing an electronic marking management system that captures information about assessment, and uses this to develop systems for managing marking workflows. eMark enhances student support by supporting the availability of useful and timely assessment feedback.
- pVox a web-based resource for health-care workers based on 'talking-head' video clips
 of real patients talking about their experiences, with support materials. pVox has been
 designed so that any lecturer is able to upload a digital story that will be a useful learning
 experience for students. More lecturers will be adding digital stories from other
 disciplines across the University during the coming year.
- Real EAP using video in the VLE to help non-native students integrate more quickly
 and effectively with their academic departments. The project uses videos of lectures that
 students will encounter on their courses, accompanied by a series of language activities
 to support academic language acquisition. Initially devised for non-native speakers of
 English, as the project has developed it has become apparent that this approach could
 also support the transition to university-level study for all students.
- 2-Evaluate creating a series of exemplars exploring the use of podcasts, weblogs, video logs and wikis to encourage the adoption and integration of Web 2.0 technologies for collaborative learning. The project has encouraged collaborative working and a constructivist approach to teaching, and has inspired further research in this area. The technologies and the methodologies of their deployment can be used in other disciplines across the university

¹³ http://appreciativeinguiry.case.edu/

- Peer Support exploring a range of initiatives to encourage students to support one
 another, including technology-based and face-to-face systems, initially focusing on
 mathematics for engineering. The project looked at a variety of tools for peer support
 and many of the lessons learned in this project are being carried forward to the WebPA
 Building Capacities project, where group projects will provide greater need for peer
 support.
- Appreciative Inquiry student interviews using an appreciative inquiry approach, focusing on their experiences of technology in teaching. This project has led to an enhanced understanding of the role that technology can play in supporting excellence in teaching and learning.

Key features of the mini-projects were sustainability and transferability to other academic disciplines and services. Following Gwella, three of the mini-projects are directly informing ongoing development through the JISC Building Capacities Programme at Swansea. The creation of the Swansea Academy of Learning and Teaching (SALT) has provided a structural focus and an impetus for TEL development in the institution with SALT and central e-Learning team now working from the same base. SALT is running seminars and workshops on a wide variety of learning and teaching innovations; systems for rewarding innovative teaching are to be enhanced and expanded. There is increased dialogue across the University on the use of technologies to support teaching and learning. The continued development and roll-out of the outcomes of the mini-projects is supported by the institution. A new module proforma will invite consideration of specific questions relating to the use of technology; more generally, there is an increased awareness of accessibility issues, increased engagement with the student body, and a deeper understanding of how students use technology.

At Swansea, Gwella has shown that a development initiative based on supporting several smaller-scale projects can have wide and lasting impact across the institution. There is a greater understanding of student needs and expectations and using this understanding for enhanced curriculum design. There is now a dynamic and viable community of practice in technology-enhanced learning and teaching in the institution, actively supported by institutional managers and with widespread representation across all academic areas and services.

4.9 Swansea Metropolitan University

Swansea Metropolitan University also participated in the bespoke benchmarking exercise for Welsh institutions in 2008. The process identified a large number of recommendations for action in order to increase the use and effectiveness of TEL through the Gwella enhancement phase, grouped under three broad themes: management, pedagogy and technical. A strategic working group was formed to initiate and oversee a series of initiatives supporting the development of TEL in the institution.

SMU characterises its approach to TEL development through Gwella as one of 'principled opportunism'. The team recognised that the world out of which TEL developed was itself rapidly changing and that any approach that did not recognise the pace of change would quickly become outdated. The most important task was to change a culture in which the use of certain technologies risked becoming fixed and intransigent, paradoxically stultifying the further enhancement of practice.

The SMU experience highlights the importance of effective management at strategic and operational levels in developing, implementing and supporting a successful approach to TEL in the institution. The team has implemented a number of measures to encourage communication,

sharing and discussing issues and challenges as well as examples of good practice in a range of discipline areas.

A key outcome from Gwella has been the development and publication of Pedagogical Guidelines for TEL as an online resource which continues to be refined and enhanced through iterative feedback from staff. This iteration and review takes place through the Collaborative Academic Network (iCAN), a growing online community of enthusiastic academic TEL practitioners and innovators. Gwella also supported a number of small projects enabling staff to take forward innovative ideas, then present and discuss these ideas for wider dissemination and take-up through this network.

A further outcome has been the enhanced use of previously underused areas within the institution to encourage social learning approaches – providing spaces where students can come together to access resources, share, discuss and collaborate on learning tasks without the direct intervention of staff.

For SMU, Gwella has been in fact a journey from an initial conception of TEL as technology-led to the current appreciation that TEL is an integral element in the world of higher education, and most importantly, an element which itself allows deeper understanding of that world and how to make it better.

4.10 University of Wales, Trinity Saint David

Trinity University College Carmarthen had participated in the Academy's benchmarking exercise in Phase 1 using the OBHE method, and the University of Wales, Lampeter in Phase 2 using the same method. For both institutions at that time, benchmarking afforded the opportunity to take stock of current practice in TEL, identifying areas of good practice in addition to areas for development. The establishment of a new HEI in October 2010, incorporating the two former institutions, presented an opportunity for planning and implementing TEL developments in a coordinated way across the new institution, drawing on experience and expertise that benchmarking had helped to highlight.

In the period prior to the formal establishment of University of Wales, Trinity Saint David in October 2010, the two institutions participated as a single team in the Higher Education Academy's Enhancement Academy (EA) Programme. Key themes that had emerged from benchmarking in both former institutions became the focus of shared EA developments:

- student engagement and the learner experience recognising the shared values and strengths of the student experience at a smaller institution
- staff training and awareness-raising, with emphasis on collaboration across campuses.

Through Gwella and the EA, the new institution has made plans for the development of its TEL provision in a number of ways. Collaboration and sharing good practice is a significant element in this process, including not just collaboration between the two campuses and former institutions, but also with other institutions, agencies and groups in the sector. Collaboration through SWWHEP and Bangor University in relation to VLE development has led to increased functionality, upgrading of a system and the development of a bilingual interface. Trinity staff have also hosted and presented at a number of Welsh CAMEL events, which provided an opportunity to showcase initiatives such as the bilingual VLE development. At Lampeter, a single centrally-supported VLE has been developed and implemented through Gwella, an important step towards further student engagement and staff awareness-raising about TEL.

For the new institution, a central priority is the development of a single shared vision that was articulated by the EA team, *the personalisation of the student learning experience*, with a focus on the role that technology can play in supporting personalisation across two campuses. Gwella

and the EA have enabled dialogue across a range of departments and levels. There is now a strategic recognition of the importance of understanding the student experience not just in terms of learning and teaching but across all university services. There is also wider engagement with the student body, with students participating in committees and working groups and playing central roles in development initiatives. A cascading model for staff development and awareness-raising is in place across both campuses. These new central measures put in place during the establishment of Trinity Saint David provide a sustainable foundation for enhancement.

5 HEFCW Indicators of Success

This section presents a synthesis of the evidence provided by the Gwella teams in respect of the indicators of success outlined in the HEFCW Strategy. The teams were invited to consider their Gwella activities in terms of these indicators recursively throughout the Programme.

The following is a summary of the key generic messages derived from a qualitative analysis of the completed evidence documents, based on the key concepts in the indicators of success.

In the course of the Programme Meeting in October 2010, the Gwella institution teams were invited to articulate a series of headline messages which expressed the impact of Gwella in relation to the five themes in the HEFCW Strategy. These headlines, along with some illustrative quotations drawn from the text of the completed indicators documents, are used to introduce and illustrate the key messages from the implementation of the Strategy. The following graphic, and the use of the corresponding headline messages in the text, is intended to provide a snapshot of the evidence of strategic success in anecdotal phrases which have a particular relevance and resonance within the institutions themselves.



5.1 Enhancement of learning, teaching and assessment, and of core processes

Evidence in relation to this strategic theme was analysed in terms of key concepts relating to the use of technology for enhancement, senior management support for TEL development, the completion of benchmarking and activities to take forward the outcomes of this exercise, and evidence of change in institutions.

Pushing at open doors

One of the most prominent sets of evidence provided by institutions in support of this strategic theme relates to the role of senior managers in actively supporting, endorsing and engaging

with developments in TEL. Several institutions provide tangible evidence of the role that Gwella has played in catalysing high-level engagement and support for developments. This includes an active role for institutional managers in chairing groups and sub-committees with responsibility for TEL, the formalisation of procedures for reporting TEL activities through academic boards and committees, and support for the wider roll-out and implementation of Gwella developments across the institution.

There is further evidence of structural support for the enhancement of learning, teaching and assessment through technology in changes to module design and course approval processes, reflecting a growing recognition of the need to consider and review the role of technology for quality enhancement in course design and delivery.

In many instances, this catalysing of strategic support for TEL has been instigated by participating in the Academy's e-Learning Benchmarking exercise. This process provided evidence for the institutions themselves of their own areas of good practice and development needs, with clear outcomes and proposals for further implementation and development.

Some institutions have implemented specific processes for reviewing progress and recording evidence of change in relation to the outcomes of benchmarking. Most have plans for some kind of internal review or repeat benchmarking exercise to provide further evidence of achievement, to encourage cross-institutional communication and collaboration, and to continue the process of catalysing TEL development.

Most institutions also report that formal support for TEL, appropriate structural changes and formal reporting processes will continue beyond the funded Gwella phase – a tangible difference has been made to the role of TEL in institutional core processes. The achievement of an evidence base for TEL, informed by academic research and illustrated with practical examples, has been central to both strategic and practitioner support for TEL developments.

Blackboard - from chalk to mouse

All of the institutions have embarked on specific projects and initiatives to address the outcomes of benchmarking. Many of these projects related to the enhanced use of existing technologies which were available within the institution (making the most of existing resources). There was a particular focus on developing use of the institutional VLE and other tools and technologies for learning, teaching and assessment, including e-assessment tools for submission and feedback, e-portfolios and PDP provision, and technologies such as wikis, blogs and podcasting. The projects were generally conceived and implemented with the specific aim of transferability and wider roll-out to other academic areas and services across the institution. A particular feature of Gwella has been supporting staff in addressing the pedagogic implications of VLE development, be this the implementation of an upgraded version of the existing VLE with additional functionality, or enhanced use of existing functionality, or migration to a new VLE (most particularly migration from Blackboard to Moodle).

This is the age of staff enlightenment

One of the most significant areas of development presented by the institutions relates to increased staff engagement with TEL and raised awareness of the benefits of using technology for learning, teaching and assessment. All of the institutions have embarked on a programme of staff development and awareness-raising, including roadshows, workshops, individual support, forums and discussions, and annual staff conferences featuring TEL initiatives. Many of these events involved collaboration with other institutions. While much of the evidence of success in relation to staff development is qualitative and anecdotal ("we count the smiles") there is

significant evidence that Gwella has had a major impact on staff engagement with technology and an ensuing perceived enhancement of the quality of teaching and learning.

Gwella has radically changed our approach to staff development

Some of the institutions have used Gwella funding to encourage and reward innovative teaching, through various initiatives including releasing staff time to develop the use of technology through design sabbaticals, teaching fellowships and innovation awards.

5.2 An enhanced student learning experience

Evidence in relation to this strategic theme has been analysed according to the stated indicators of success in terms of institutional awareness of technological developments and engagement with research, employer engagement, collaborative working, work-based learning, and the use of new technologies to enhance the student experience.

We have implemented a culture of research-informed change across the institution

As noted above, Gwella has confirmed the active engagement of senior management in TEL developments, with a concomitant raising of institutional awareness about technological developments in general. Some institutions have reported that internal groups and committees receive and discuss briefing papers and sector reports relating to new technologies in order to inform operational decisions about potential institutional innovations.

A further outcome from Gwella relates to activities in several institutions concerned with facilitating enhanced awareness about TEL by consolidating support and dissemination channels for staff. In some instances this has led to a formal restructuring and repositioning of TEL support services within the institution. Most institutions have developed online support provision including good practice websites offering case study examples, discussion forums and access to resources.

Students don't fall asleep any more

A significant set of evidence in respect of an enhanced student experience relates to the extent to which Gwella has supported institutions in implementing means of finding out, and acting upon, what students actually need, want and expect in terms of the use of technology. Throughout the Programme there has been a shift in focus from the need to understand the student experience of technology (this was a key outcome of benchmarking) towards a genuine appreciation of the student voice and an understanding of the role that learners play in enhancing their own learning. Evidence is provided in terms of actions based on the results of student surveys, learner focus groups, and student participation in relevant groups and committees. There are also several instances of feedback from staff and students illustrating the use of technology leading to an enhanced learning experience for students and a better teaching experience for staff. These include evidence of the use of technology to improve retention and progression, particularly for first-year students.

Confident, knowledgeable, discerning learners, contributing to the workplace from day one

Institutions report evidence in terms of feedback from students and staff that technologies supporting active learning have a positive impact on the quality of the student experience and the relevance of university learning for the world of work. Examples include the use of e-portfolios and ePDP to encourage reflective learning, action on feedback, and responsibility for the assembly and presentation of a portfolio of work. There is increasing use of online platforms both for course delivery in a range of employment and outreach situations. In most instances this includes simply making resources and information available online, but some

institutions have also instanced uses of technology for collaborative course development with a range of employers, professional bodies and industry partners.

5.3 Increased flexibility and accessibility of provision

Evidence of success has been reviewed in relation to an increased understanding in institutions of the impact of technology on flexible and accessible delivery, and on supporting equality and diversity. This includes support for students studying in the medium of Welsh and the lifelong learning agenda.

There are many examples across the sector of the development and implementation through Gwella of technologies in support of flexible, personalised provision. Institutions have particularly highlighted the use of e-portfolios and personal development planning to meet the needs of a diverse student body including part-time and work-based learners. There is increased use of audio and video-based media including podcasting and lecture capture software. Evidence in the form of feedback from staff and learners indicates that the implementation of these technologies not only improves flexibility in terms of the time and place of course delivery, but also enhances the learning experience of students, and the effective use of staff teaching time.

A number of institutions have also evidenced the development of online accessibility guides and support materials for staff and learners. The need for compliance with international accessibility standards and learning design standards for online course delivery is recognised.

Learn anytime, anywhere ... and in Welsh!

The development and maintenance of a Welsh language interface for the Blackboard VLE is viewed as an important success for the sector. Gwella has also supported the development of Welsh-language versions of other key tools and technologies including assessment tools. Gwella teams and their institutions have been actively engaged in the Y Porth¹⁴ project supporting a national Welsh-medium e-learning platform for the HE sector, including the strategic development, of the resource, and the active provision of resources for inclusion. Generally there is a high level of synergy between the Gwella teams and representation on various Welsh language and Welsh medium strategic committees and development groups.

5.4 Effective collaboration and sharing of current and good practice

Evidence has been gathered in relation to increased links with collaborative partners to drive the enhancement of learning through technology, increased efficiencies through collaboration, and the development of a sense of collective ownership and understanding in the sector about technology-enhanced learning and teaching. This includes collaborative partnerships and networking within Wales, with other institutions, groups and agencies in the UK HE sector, and globally. Institutions were also asked to demonstrate their use of technology to contribute to the knowledge economy of Wales, and promote enhanced competitiveness for the sector.

Gwella has improved relations between Welsh HEIs

Each of the Gwella teams has reported several instances of effective collaboration with other institutions in developing and implementing the use of TEL. This includes active participation – in some instances with a leading role – in various relevant Special Interest Groups (SIGs). Through the Gwella Programme, for example, there has been a significant rise in the participation of Welsh institutions in the Academy-supported ELESIG¹⁵ (focusing on the learner

¹⁴ http://www.porth.ac.uk/cy/

http://elesig.ning.com/

experience), MELSIG¹⁶ (focusing on media-enhanced learning) and the QA-QE SIG¹⁷ (focusing on quality enhancement and quality assurance). Following broad agreement at the Gwella Programme meeting in October 2010, a consortium of Gwella teams submitted a successful joint funding bid to initiate a Regional Group within ELESIG, with the specific purpose of enabling the further development of the TEL community of practice that has grown out of Gwella. Institutions have also highlighted increased engagement with UK-wide professional bodies such as the Association for Learning Technology (ALT)¹⁸.

As noted above, several of the Gwella teams have also been actively involved in the development of Y Porth, and the Welsh-medium e-Learning Steering Group. The work that has been undertaken through Gwella has also prompted active involvement and a leadership role in Welsh and UK-wide VLE development groups (particularly Blackboard and Moodle Users Groups) and support groups for various tools and technologies. Examples of engagement with other Welsh national and regional collaborative initiatives supporting the effective use of technology include South West Wales HE Partnership¹⁹ (SWWHEP), the QWEST²⁰ project supporting adult and lifelong learning in Gwent, and the development of a common delivery platform for the Universities of the Heads of the Valley Initiative²¹ (UHoVI).

Welsh CAMELs communicate brilliantly

In the course of the Programme, the Academy made available some modest funding to facilitate collaboration and sharing among the Gwella teams. Building on the experiences of the benchmarking exercise and the Academy's Pathfinder Programme, the teams made use of this additional funding to support a series of collaborative meetings organised under the broad principles of CAMEL events. All of the participating institutions have highlighted these events not just as instances of collaboration, but in terms of the genuine benefits derived from the CAMEL events for a wide range of staff.

Collaboration catalyses competition

Institutions attest that Gwella has had a positive impact on relationships between HEIs in Wales in a number of contexts, and that the benefits of collaboration and sharing are increasingly recognised in institutional planning and strategic objectives. The Gwella teams have given many examples of bilateral collaboration in relation to TEL developments, including collaborative online course development and the use of technologies such as videoconferencing for interinstitutional course delivery. There is emerging evidence that these collaborative developments are supporting regional strategic initiatives for shared service provision.

Processes developed following benchmarking help maintain competitiveness and increase the contribution of HE to the knowledge economy

Welsh institutions are making an increasing contribution to the UK and international open educational resources community internationally, through engagement with OER development programmes and the use of technologies such as iTunesU. There is evidence of the use of technology to contribute to the development of skills and knowledge fit for the digital age in engagement with employers and professional development networks.

http://www.ppp.chester.ac.uk/index.php?title=Main_Page

¹⁷ http://www.qe-sig.net/

¹⁸ http://www.alt.ac.uk/

http://www.swwhep.ac.uk/

²⁰ http://www.newport.ac.uk/news/newsstories/Pages/NewskillsboostforBlaenauGwentTorfaenandCaerphilly.aspx

²¹ http://www.uhovi.ac.uk/

5.5 Institutional engagement

Institutions were asked to evidence success in relation to this theme through a clear role for technology in strategies and planning documents, and a strategic commitment to formally reviewing the role of technology in enhancing learning and teaching.

TEL is at the strategic table

All of the Gwella teams have reported an enhanced role for technology in institutional strategic planning processes. There is an emerging norm that the use of technology to enhance provision is included holistically on the agendas of appropriate task groups and planning committees, and clearly articulated in operational plans for module and course development. The inclusion of technology specialists on these groups and boards reflects institutional commitment towards enhancing the role of learning technology at management, academic and support levels. One of the most significant strategic outcomes from Gwella highlighted by several institutions has been the coming together of academic staff and technology specialists in a context of mutual understanding and appreciation which leads to a general improvement in professional communication and overall enhancement of learning, teaching and assessment.

Most institutions have developed specific plans for reviewing and evaluating TEL developments in a systematic way, building on the outcomes of the initial benchmarking exercise and with reference to the HEFCW indicators of success.

6 Conclusions

6.1 The Programme Context

Gwella institution teams have consistently emphasised the value of the initial e-learning benchmarking process for developing technology-enhanced learning in a meaningful way for each institution. Benchmarking not only served to confirm the context for development and set priorities, but also to establish or enhance internal communication channels, forging links between various services, academic structures and individuals. A further benefit in many instances was the confirmation of senior management support, and the highlighting of TEL in institutional strategic development processes. One of the strongest messages from Gwella is that the support and active engagement of senior management is essential for maximising the potential role that technology can play in enhancing learning and teaching, and institutional processes. Some Gwella teams worked particularly hard to secure the interest and support of relevant Heads, Deans and PVCs. However, sustaining the impact of Gwella outcomes depends on securing the formal expression of the role of TEL in institutional policy and strategy, in addition to the personal endorsement of individual managers. Policy enshrinement for TEL is required to ensure that the institution continues to be formally engaged in reviewing the impact of TEL on provision and processes.

The success of the Programme owes much to its strategic underpinning by the 2007 HEFCW Strategy, supported through the operational management provided by the HE Academy. Despite the relatively small amount of funding that was available, institutions took an active interest in Gwella at senior level and senior managers supported the teams in their activities. Having the Academy in an overseeing role also encouraged institutions to value the Programme in academic terms. The Academy's Support Team developed trust relationships with the Gwella teams, and their strategic advice and guidance was generally well received. The Support Team consistently emphasised the role of the HEFCW Strategy in setting the framework for Gwella, and in particular drew attention to the indicators of success. This strategic basis and operational

framework helped institutions to shape their development work, and to report on these activities in terms of their strategic impact for institutions and for the sector.

6.2 Impact on Institutions

All of the institutions have achieved, and most have exceeded, their initial plans for enhancement activity in Gwella. The timing and strategic context for the Programme is significant here. At the start of Gwella, each institution was using a VLE (in some instances multiple VLEs) and was developing the use of technologies to support learning and teaching. Previously there had been a number of strategic initiatives in the sector supporting the development of learning, teaching and assessment policies. Institutions were aware of the need to support an increasingly diverse student body, to collaborate as a sector, to liaise more closely with employers and other sectors, to provide a learning experience relevant to the world of work, to operate efficiently and make best use of available resources. As the Gwella initiative has progressed, institutions have reached a degree of technological maturity which has enabled more strategic discussions about technology to take place involving various groups, individuals, academic departments and services.

At the start of Gwella, and in some instances following the outcomes of benchmarking, many of the institutions were in the process of changing their VLE. The Programme has supported a move in institutions away from relatively simple questions concerning which VLE to purchase and how it should be implemented, towards a richer dialogue about how the VLE might be used to enhance learning and teaching, and which tools for e-assessment, e-portfolio and PDP best suit the pedagogical requirements of the institution.

Following benchmarking, institutions were well placed to make use of the funding to support those TEL developments that were of most significance in their context. Most initiated a series of mini-projects projects to take forward issues of particular interest and relevance. These mini-projects were usually designed to produce a transferable output that was scalable within the institution, with relevance to other members of staff and academic areas. At the very least these outputs usually included a report or case study of the initiative with links to any resources that were developed, often allied to a consolidated website for staff offering an overview of TEL practice and developments in the institution. A number of conclusions can be drawn from this. TEL developments have most impact when they are relevant in their institutional context and emerge from academic practice. Small-scale projects with a specific purpose can have a disproportionately wide and deep impact. Academic staff welcome a forum where they can discuss practice in their own terms and within their own trust community.

At the start of Gwella, many of the teams reported some initial reluctance on the part of academic staff and departments to engage in discussions about changing pedagogic practice. At the end of the Programme, there is evidence of genuine enthusiasm among staff, with conversations and dialogue taking place about the use of technology and practice change, both within and across institutions. Gwella has supported a sea-change in academic practice which has helped to legitimise discourse about evidence-based pedagogical practice among subject experts. Any future review of TEL should consider how the use of technology has encouraged academic experts to re-evaluate their pedagogical practice within subject communities, and to validate learning and teaching development in academic terms.

Within institutions, this momentum can be maintained through relatively small-scale initiatives to support conversations and sharing ideas, for example informal meetings, and the use of intranets and blogs for resource-sharing. Internal staff conferences have proved to be very powerful vehicles for developing and maintaining the momentum of innovation and sharing practice.

A further significant shift has been highlighted in the ways that the quality of the student experience is measured, with an increased focus on critical awareness, learning to learn, problem-solving and higher-level skills. A number of the Gwella teams developed plans based on addressing the outcomes of student surveys (particularly the National Student Survey results of 2008) which highlighted assessment feedback as an area of particular concern. What has emerged through Gwella is a quite sophisticated rethinking of assessment as part of the learning process. Many institutions have reached a point of maturity in their development of TEL where the appropriate use of technology to enhance learning and teaching is formally enshrined in quality assurance processes, with an emphasis on course and module validation and review.

6.3 Implications for the Sector

There is a strong message that Gwella has had a significant positive impact on inter-institutional communication and collaboration. There have been a number of facets to this collaboration, including developments in the use of particular tools and technologies, sharing resources, and collaborative course developments, with a particular focus on Welsh-medium provision. The outcomes of the benchmarking exercise in Wales in general highlighted the potential role that technology could play in developing flexible and accessible provision. Gwella has demonstrated significant progress in this area, including, but not limited to, Welsh-medium provision.

Within the sector in Wales, Gwella has helped to develop a genuine sense of collective momentum for TEL development. An active community of practice has emerged, with a real willingness to share ideas, challenges and resources, and to learn from one another. This community of practice continues to develop on a number of fronts, including the establishment of a regional sub-group of ELESIG, collaborative Welsh-medium developments, and the ongoing population shared online resource sites. The JISC Building Capacity Programme has also presented an opportunity for Gwella teams to continue to meet in a wider TEL development context. Some examples of shared service provision are starting to emerge as institutions continue to identify the competitive economic benefits of collaboration at various levels.

Gwella has also helped to identify and support a shift in focus from a concern with the role that technology could play in enhancing the student experience towards a proactive interest in hearing what students themselves have to say. Following benchmarking, almost all of the institutions recognised the need to listen to the student voice, to talk to the students as consumers about their needs and expectations. There is now an emerging understanding of the need to go further than just listening and reacting to the student voice towards a pedagogical culture of dialogue with students which results in changes on their part as well, in particular that learners become aware of their own active responsibilities for their own learning. All of the Gwella teams have taken steps to involve students in discussions about TEL developments, in most instances engaging the student body at a strategic level.

The focus of attention is shifting from technological implementation and staff concerns towards the provision of relevant and effective services to meet the needs of all users. The value of technology-enhanced learning developments in helping to equip institutions to face the future with confidence is acknowledged: the challenge to institutions, funders and sector support agencies is to maintain and sustain the momentum while consolidating good practice.