Cylchlythyr Circular

Enhancing Learning and Teaching through Technology: a Strategy for Higher Education in Wales

Date:	7 April 2008
Reference:	W08/12HE
To:	Heads of higher education institutions in Wales
	Principals of directly-funded further education colleges in Wales
Response by:	No response required
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This circular provides a ten year strategy for the enhancement of learning and teaching through technology for higher education (HE) in Wales from 2007/08 to 2016/17.   It aims to accelerate the mainstreaming of technology-enhanced learning and teaching provision, processes and practice. It seeks to support Welsh higher education institutions in embracing new technologies and identifying how their application can enhance learning, teaching and the overall student experience.

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Foreword

The aim of this strategy is to accelerate the mainstreaming of technology-enhanced learning and teaching provision, processes and practice in Higher Education in Wales. In the ten year period covered by the strategy there will be developments that are as yet unthought-of. This has made the development of this strategy a real challenge. We will review the strategy regularly to take account of these new developments and to ensure that it remains relevant to higher education in Wales.

This strategy could not have been developed without help from many individuals and organisations. I would particularly like to thank our E-learning sub-group, chaired by Professor Robert Pearce. I would also like to thank our Learning and Teaching Committee, Higher Education Wales, the Higher Education Academy and the Joint Information Systems Committee Regional Support Centre Wales for their help. I am also grateful to all those institutions, organisations and individuals who responded to the consultation on the strategy and on the statement of position of e-learning in higher education in Wales. Their contributions have been invaluable in the development of this document.

Philip Gummett
Chief Executive

1   Introduction

1.1   This document outlines a ten year strategy for the enhancement of learning and teaching through technology for higher education (HE) in Wales from 2007/08 to 2016/17. It will be reviewed at regular intervals throughout its lifespan. It is of necessity at a high level to provide an overarching framework within which institutions may work flexibly.

1.2   Rather than refer to e-learning, we have emphasised the enhancement of learning and teaching facilitated and supported by the use of information and communications technology (ICT). We will refer to this as *technology-enhanced learning*.

1.3   This strategy aims to accelerate the mainstreaming of technology-enhanced learning and teaching provision, processes and practice. It therefore seeks to support Welsh higher education institutions (HEIs) in embracing new technologies and identifying how their application can enhance learning, teaching and the overall student experience. It will also impact on the provision of HE in further education institutions.

1.4   It is impossible to imagine all the ways in which technology will impact on learning and teaching over the coming decade. This strategy therefore encourages institutions to consider how they can plan for change in the lifetime of this strategy.

2   Background

2.1   In January 2007 we consulted on a Statement of the Position of E-Learning in Higher Education in Wales[1]. This was developed in consultation with our E-learning subgroup (ELSG), membership of which is available at **Annex A**. That consultation provided us with a broad perspective on issues facing the HE sector in Wales regarding enhancement of learning through use of technology.

2.2   We then published a draft Technology-Enhanced Learning Strategy for consultation, with the help of the ELSG[2]. We also held a consultation conference in association with the Joint Information Systems Committee Regional Support Centre Wales (JISC RSC Wales) and the Higher Education Academy (HE Academy), in November 2007. The outcomes of the consultation are available at **Annex B**.

3   Vision

3.1   Our vision is that enhancing learning and teaching through the use of technology should be considered a normal part of mainstream

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[1] Circular W07/03HE, 'Statement of the Position of E-Learning in Higher Education in Wales'

[2] Circular W07/42HE, 'Enhancing Learning and Teaching through Technology: a Strategy for Higher Education in Wales'

provision, processes and practices. This means institutions should seek to normalise the use of technology within learning, teaching and assessment, and core processes. We recognise that normalisation is a process requiring investment and time, rather than solely a policy outcome.

3.2   We anticipate that institutions will engage with this strategy and collaborate to share current and good practice for the benefit of the whole sector.

3.3   We expect your development of technology-enhanced learning will be informed by the learning and teaching strategy of your institution and will be subject to mainstream quality assurance procedures.

3.4   Most potential students are already accustomed to using technology extensively in their everyday lives. We expect that the experience of students in higher education will be enhanced over the duration of this strategy through the harnessing of these technologies where possible. This will include increased flexibility and accessibility of provision to meet the needs of individual learners within an increasingly diverse student body.

3.5   In the ten year period covered by the strategy there will be developments that are as yet unthought-of. Technology will therefore alter the 'shape' of learning and teaching substantially over the period of this strategy, including learner demands and expectations. For this reason the strategy will be an organic document and will be reviewed at regular intervals over its lifespan.

4   Objectives of the strategy

4.1   Through this strategy we aim to accelerate the shift from 'pockets of innovation' to the mainstreaming of technology-enhanced learning and teaching, process and practice. We also aim to support institutions at the forefront of such innovation in maintaining their momentum, so that Wales may help drive the agenda to enhance learning and teaching through the use of technology.

4.2   This strategy therefore supports and encourages institutions in taking up and normalising the opportunities provided by technology and helps create the conditions for achieving the following objectives:

- the enhancement of learning, teaching and assessment, and of core processes;

- an enhanced student learning experience based on robust technology, including encouraging developments at the forefront of this provision;

- increased flexibility and accessibility of provision, including facilitating Welsh medium education and taking full account of equality and diversity;

- effective collaboration and sharing of current and good practice within Wales, the UK, Europe and globally, and at all levels, to:
  - drive Wales ahead in the enhancement of learning;
  - increase the competitiveness of Welsh institutions;
  - maximise the contribution of Welsh HEIs to the knowledge economy; and

- engagement of the sector with the strategy.

5   Definition and Scope

5.1   This strategy emphasises enhancement and mainstreaming and we believe these concepts are sustainable over its ten-year span, even given the rapid pace of development of technology and its applications.

5.2   Our focus has been informed by extending the Joint Information Systems Committee (JISC) definition of e-learning to read '*learning facilitated, supported <u>and enhanced</u> through the use of information and communications technology (ICT)*'[3] which places emphasis on supporting and enhancing learning rather than on technology. It also avoids the word 'deliver', which might lead to perceptions that the strategy refers only to distance learning. We recognise that you may wish to use other definitions, or no definition, to fit your mission and application of technology-enhanced learning.

5.3   Through this strategy we encompass blended, mobile and distance learning, in addition to the wide range of learning and teaching activities. We also include enhancements to learning which use technology in its wider sense, including new technologies which are not yet known, and not limited to ICT.

6   Role of HEFCW

6.1   We recognise that ownership of and responsibility for learning and teaching rest with institutions. HEFCW will therefore only intervene where we add value, particularly when the 'public good' benefit of a 'centralised' intervention offers greater benefit than distributed action by individual institutions. We recognise the drivers for and barriers to technology-enhanced learning that you experience, and that these impact on the mainstreaming of technology-enhanced learning.

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[3] http://www.jisc.ac.uk/whatwedo/themes/elearning.aspx

6.2   We recognise the resource required to support technology-enhanced learning. We provide capital funding, core teaching grant and also fund learning and teaching strategies. Given the role technology can play in supporting and enhancing the learning and teaching experience, we anticipate that you may wish to use some of this funding to support technology-enhanced learning. Funding is also potentially available for large developments, particularly collaborative work, through our Strategic Development Fund and our Reconfiguration and Collaboration Fund.

6.3   We have provided an additional one-off allocation of £1 million for the initial three year period of the strategy in recognition of its importance. This will enable you to build on and take forward the outcomes of the UK-wide benchmarking process run by the Higher Education Academy and JISC (see para 6.4). We will consider allocating further specific support for the implementation of the strategy when possible and appropriate. Through this funding we aim to support institutions in increasing capacity and capability to support and enhance learning and teaching using technology. Details of the allocation and use of the funding are provided in Circular W07/50HE[4]. You should view this funding as a catalyst for longer-term institutional initiatives.

6.4   We support, influence and draw on the expertise of external agencies to serve the needs of higher education in Wales. These currently include:

- **the JISC**[5] - The JISC's aim is to provide world-class leadership in the innovative use of ICT to support education and research. It provides: the Joint Academic NETwork (JANET); TechDis, an educational advisory service, working across the UK in the fields of accessibility and inclusion; access to electronic resources; new environments for learning, teaching and research; guidance on institutional change; advisory and consultancy services; funding for development projects; and Regional Support Centres (RSCs), including RSC Wales[6];

- **the HE Academy**[7] - The HE Academy's mission is to help institutions, discipline groups and all staff to provide the best possible learning experience for students. It plays a key role in researching the use of technology and supporting its application to learning in HE, including through the leadership of a UK-wide benchmarking exercise of e-learning practice, provision and processes, in partnership with JISC. Its Subject Centres play a role in the application of technology in specific disciplines, and the Change Academy helps institutions to develop knowledge,

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[4] Circular W07/50HE: Funding to Support Circular W07/42HE, Enhancing Learning and Teaching through Technology: a Strategy for Higher Education in Wales
[5] www.jisc.ac.uk
[6] www.rsc-wales.ac.uk
[7] www.heacademy.ac.uk

capacity and enthusiasm for achieving complex institutional change, including technology-enhanced learning initiatives. It developed the UK Professional Standards Framework on behalf of Universities UK (UUK), GuildHE and the funding councils, through which staff can gain recognition and reward for excellent teaching, including through the use of technology;

- the **Welsh Video Network (WVN)**[8], which distributes and supports videoconferencing studios and other video facilities to all Further Education and Higher Education Institutions throughout Wales.

We encourage you to analyse the use you are making of HEFCW-funded resources and to maximise your utilisation of them. We will keep support of external agencies under review to ensure the most effective, value for money support.

6.5 You will need to consider links to other parts of the education sector, including schools, the FE sector, adult and community learning, work-based learning and teacher training, to facilitate the development of a 'joined up' approach, as highlighted in the Beecham Review[9] and the Webb Review[10]. You will also wish to consider links with other relevant strategies of your institution, and Wales and UK-wide as they emerge, including Welsh Assembly strategies and those for other parts of the education sector.

6.6 We expect that you will take account of your statutory responsibilities in the area of equalities and diversity, including making appropriate links with your equality and diversity policies and action plans. This would incorporate equality impact assessment, including consultation and involvement.

6.7 We will encourage you to share current and good practice and to mainstream this within learning, teaching and assessment. We will also encourage you to work collaboratively to identify further effective learning and teaching practices. We have addressed this to date through promoting your participation in the UK e-learning benchmarking exercise (para 6.4) and we will also develop an implementation plan for this strategy which will include this support.

6.8 We will provide opportunities to share good practice and build on the outcomes of the benchmarking project to advance the normalisation of technology-enhanced learning, as identified in Circular W07/50HE.

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[8] www.wvn.ac.uk

[9] Welsh Assembly Government. 2006. Beyond Boundaries: Citizen Centred Local Services for Wales. http://new.wales.gov.uk/docrepos/40382/403823121/40382213/528962 /English_Report.pdf?lang=en. [Accessed 31 January 2008].

[10] Welsh Assembly Government. 2007. Promise and Performance. The Report of the Independent Review of the Mission and Purpose of Further Education in Wales in the context of the Learning Country: Vision into Action http://wales.gov.uk/docrepos/40382/4038232/403829/News/1285962/1853355/promise-performance-rev2-e.pdf?lang=en [Accessed 31 January 2008].

This will also help institutions to identify how they may enhance the learning experience of their students.

6.9   We will encourage you to work with existing groups and networks as appropriate to share information and drive the use of technology to enhance learning. We will also work with you progressively to improve the student learning experience through the use of technology.

6.10   We will exploit the benefits of SuperJANET5, the all-Wales broadband network and emerging technologies to meet the evolving needs for learning and teaching in Wales.

7 The Strategy

7.1 We aim to support and enable you to enhance learning through the use of technology, and to facilitate change, including creating conditions in which technology-enhanced learning is considered a normal part of mainstream provision, processes and practices. In order to achieve this the strategy comprises the following:

Enhancement of Learning, Teaching and Assessment, and of Core Processes

7.2 Emphasising learning rather than technology

This strategy focuses on how technology can enhance learning, teaching and the overall student experience. It acknowledges changing patterns of technology usage and the need to consider the diversity of students' experience of technology when designing learning activities. It identifies that use of technology must be pedagogically appropriate and that changes are taking place regarding how students learn, which may require new approaches to staff and student support. The strategy acknowledges the role technology plays in the management of student learning via, for example, Virtual Learning Environments (VLEs), e-assessment and personal development planning.

7.3 Mainstreaming the role of technology in enhancing learning, teaching and assessment

We will support you in enhancing learning and teaching experiences by helping you to build the capacity and capability of your institution to a point where informed use and application of technology to provide a high quality experience has become the norm. We recognise that this will need the support of senior and middle management. We encourage you to use the funding we provide, including that provided specifically to support technology-enhanced learning, and the expertise which we fund to help you achieve these objectives (see paras 6.2 to 6.4).

7.4 Staff development

We encourage you to run evidence-based staff development programmes to maintain the currency of knowledge and skills of your academic and support staff. It is essential that staff are aware of how technology should most effectively be used to enable adoption of new attitudes and ways of working. We also encourage you to enable staff to adapt to new roles and adopt new team structures to cope with change, to maximise the effectiveness of your investment in

technology across your institution.

7.5   Normalising the role of technology within other core processes

We wish to support you in achieving a position where it is unremarkable to enhance core processes such as student selection, enrolment, and assessment through the use of technology. We realise that this may require collaboration between traditionally separate functions and roles and may also impact on the form and function of learning spaces.

An Enhanced Student Learning Experience

7.6   Enhancing the student learning experience

We support the use of technology to enhance the student learning experience, regardless of location of delivery, but designed with delivery location in mind, including campus, home and the workplace. We recognise the diversity of the HE sector and that each institution will wish to adopt an approach which supports its individual mission and markets. We also recognise the diversity of the student and staff populations and that the use of technology can enhance their learning and teaching experiences.

7.7   Employer engagement

We encourage increased employer engagement with HE to achieve greater recognition of non-traditional learners, work-based learning and involvement of staff and learners. This is of increasing importance in the context of the Leitch review[11], which highlights the need to train people already in employment. Technology can help to enhance the learner experience for work-based learners, including through increasing flexibility and accessibility.

7.8   Research

We encourage you to carry out, utilise and share outcomes of research to identify how the student experience may be enhanced. This includes evaluating the importance of technology in enhancing learning and teaching, informing the development of technologies to support diverse learning styles and pedagogies and providing evidence for informing decisions and developments. We encourage you to collaborate in this to maximise benefit, avoid duplication and facilitate dissemination.

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[11] Leitch Review of Skills. 2006. Prosperity for all in the global economy - world class skills, Her Majesty's Stationery Office, Norwich.   http://www.hm-treasury.gov.uk/independent_reviews/leitch_review/review_leitch_index.cfm [Accessed 12 March 2008].

7.9 Benchmarking provision

We believe it is important to analyse your institution's capacity and capability to determine the effectiveness with which technology is supporting and enhancing learning provision, process and practice for the benefit of students. We have provided support for you to engage in this via benchmarking, and take forward the outcomes to achieve the objectives of this strategy (see para 6.3). We believe insights from participating in, or periodically repeating, this exercise, will help your institution to maintain its competitiveness and facilitate the ongoing evaluation of technology-enhanced provision.

Increased flexibility and accessibility of provision

7.10 Increased flexibility and accessibility

We acknowledge that the use of technology can increase accessibility and flexibility of learning and support resources, address equality and diversity issues, and foster lifelong learning. We encourage you to use technology to address this agenda, including facilitating different learning styles and formats of materials, normalising bilingual (Welsh and English) and adaptive technologies, and ensuring quality materials are provided for all learners. This will support the lifelong learning agenda and the principles cited in the Leitch Review. We encourage awareness of developments such as assessment of bilingual software and analysis of emerging technologies and practices to identify their implications for accessibility, and responsiveness to outcomes, to enhance the learning experience for the diverse student body. This includes awareness of equality of students' access to technology.

Effective Collaboration and Sharing of Current and Good Practice

7.11 Collaboration

We encourage you to collaborate at all levels, including individual, inter-institutional, inter- and cross-subject and discipline levels, and with existing groups and networks and other sectors, to engage in and share innovation, best practice and research, to drive technology-enhanced learning forward in Wales. We also encourage strategic collaboration between institutions where it can add value, including sharing learning resources if appropriate, eg in areas such as Welsh language or bilingual materials. You may wish to use HEFCW-funded resources, such as the WVN, and funding provided by us via JISC capital projects, to facilitate collaboration. We also encourage the use of opportunities provided by funded services such as JISC (including RSC Wales) and the HE Academy as a means of sharing good practice, expertise and guidance.

7.12 Maintaining competitiveness

We recognise the role technology-enhanced learning may play in ensuring that HEIs in Wales maintain competitiveness in the global marketplace and contribute to the knowledge economy. We encourage you to use technology to support and enhance your institution's mission and remain competitive. We advocate collaboration and networking at local, European, and international levels to maintain awareness of developments in technology, facilitate their application where appropriate, and provide an enhanced learning experience for students.

Institutional engagement

7.13 Institutional engagement with the strategy

The final objective is to encourage institutions to engage with this strategy to drive the mainstreaming of the use and application of technology to enhance learning and teaching. We will maintain strong links between the e-learning subgroup of the Welsh Medium Higher Education Sector Group, and across the sector, to inform the strategy as it evolves. We do not require the development of separate strategies for e-learning or technology-enhanced learning, although you may wish to consider how you may best raise the internal profile of the use of technology to enhance learning and teaching.

8 Holistic Approach

8.1 We anticipate that you will wish to consider the use of technology in a holistic manner to facilitate understanding of the strategic interconnections between classroom activity and management requirements. You will wish to make connections with institutional strategic planning and other internal strategies, particularly your Learning and Teaching Strategy (see para 9.2). We encourage you to embed the objectives of this strategy into other institutional strategies, such as your Widening Access Strategy, Third Mission Strategy, Welsh Medium Strategy and equality and diversity policies and action plans. We will embed the objectives of this strategy into related circulars.

8.2 You may also wish to consider the role of technology in relation to other issues, including:
- Accessibility and Flexibility
- Work-based learning
- HE-FE links
- Education for Sustainable Development and Global Citizenship
- Research priorities
- Internationalisation

- Other cross-cutting themes, such as personal development planning and employability.

9   How will we know when we have achieved our goal?

9.1   Through consultation we have identified indicators of success which we will use to determine whether the stated objectives have been achieved.

9.2   We have invited you to identify targets for inclusion in the Annual Monitoring Statement for your Learning and Teaching Strategy for 2008/09 and 2009/10[12]. We will ask you to report on your use of technology-enhanced learning in future Learning and Teaching Strategies.

9.3   We anticipate that you will achieve the indicators of success through use of the range of funding we provide, including that provided specifically to support technology-enhanced learning (see paras 6.2 and 6.3).

9.4   We anticipate that institutions will achieve the short and long term indicators of success by 2010/11 and 2016/17 respectively, as illustrated in the table below. We anticipate that you will take an evidence-based approach, informed by the indicators of success, to derive appropriate quantitative and/or qualitative evidence for the achievement of these indicators.

Short term indicators (2010/11)	**Longer term indicators (2016/17)**
Enhancement of learning, teaching and assessment, and of core processes	
• Senior management support for the use of technology to enhance the learning and teaching experience is evident;	• Ongoing evaluation of technology-enhanced learning and teaching results in evidence of change being recorded;
• All institutions have carried out benchmarking to analyse their capacity and capability to support and enhance learning and teaching using technology;	• Use of technology is viewed by staff at all levels and by learners as relevant and beneficial while being integral to effective operation of the institution;
• All institutions have completed projects to take forward the outcomes of benchmarking;	

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[12] Circular W07/50HE: Funding to Support Circular W07/42HE, Enhancing Learning and Teaching through Technology: a Strategy for Higher Education in Wales

An enhanced student learning experience	
• Institutions are aware of technological developments and outcomes of research which will enhance the experience of their students;	• Research is being carried out on technology-enhanced learning, particularly where it supports institutions' individual missions, including on what comprises an enhanced learning experience and engagement with work-based learners;
• Institutions and employers engage as appropriate to provide a flexible, accessible and enhanced student experience for work-based learners;	• Institutions are working collaboratively and sharing results of research to identify how the student experience may be enhanced;
• The experience of students has been enhanced through the harnessing of new technologies where appropriate;	• Capacity and capability to support and enhance learning and teaching using technology has been re-analysed periodically through benchmarking;
	• Institutions have built their capacity and capability to a point where they have been able to enhance their delivery of a quality learning experience to students;
Increased flexibility and accessibility of provision	
• Technology has been used to increase flexibility and accessibility of provision, including for students studying through the Welsh language and the diverse student body;	• There is greater understanding of the impact of technology on flexibility and accessible delivery of learning in the context of equality and diversity;
	• Technology is used appropriately to strengthen and enhance the Welsh medium, bilingual and lifelong learning agendas;
	• There is early provision of bilingual and adaptive technologies with quality materials provided for all learners;

Effective collaboration and sharing of current and good practice	
• Increased links with collaborative partners are evident on a range of levels, including with existing and new networks and organisations, to drive the enhancement of learning through use of technology;	• Increased efficiencies and other benefits are identified through collaborative activity, and other impact measurement of collaboration, including collective ownership and understanding;
	• Increased collaboration has been noted within and between institutions in Wales, the UK and globally, resulting in added value for students and/or institutions, including sharing and promoting good practices and learning resources as appropriate;
	• Technology is used to maintain competitiveness and increase the contribution of HE to the knowledge economy;
Institutional engagement	
• Institutional strategies and strategic planning are considered holistically and include the use and application of technology where relevant.	• Institutions have contributed to interim reviews of the strategy to ensure it takes accounts of new developments.

10   Reviewing the Strategy

10.1   Technological change is rapid. We will therefore review this strategy in 2010/11. We will consult broadly, including with institutions, as part of this review, which will also be informed by the annual monitoring statements for learning and teaching strategies. In addition, we will align the timetable of future learning and teaching strategies with the review of this strategy to facilitate its full integration into your institutional processes.

11   Further information

11.1   For further information, contact Dr Cliona O'Neill (tel 029 2068 2283; email cliona.oneill@hefcw.ac.uk).

Annex A

Membership of the E-Learning Subgroup of HEFCW's Learning and Teaching Committee

Members

Professor Robert Pearce (Chair)	Higher Education Wales
Lawrence Hamburg/Derek Morrison	Higher Education Academy (HE Academy)
Frances Good	Higher Education Funding Council for Wales (HEFCW)
Karen Jones	Higher Education Wales
Paul Bailey/David Kernohan/	Joint Information Systems Committee (JISC)
Laura Pachkowski	
Peter Scott/Lis Parcell	JISC Regional Support Centre (RSC) Wales
Mike Cole	National Leadership and Innovations Agency for Healthcare (NLIAH)
Professor Paul Clarke/ Professor Denise Kirkpatrick	Open University
Janet Peters	Wales Higher Education Libraries Forum (WHELF)
Christine Major	Welsh Assembly Government

In Attendance

Celia Hunt	Head of Learning and Teaching, HEFCW
Dr Cliona O'Neill (Secretary)	Senior Learning and Teaching Manager, HEFCW

Annex B. Summary of feedback on Circular W07/42HE 'Enhancing Learning and Teaching through Technology: a Strategy for Higher Education in Wales.'

1   Introduction

1.1   Circular W07/42HE provided a consultation on the draft document 'Enhancing Learning and Teaching Through Technology: a Strategy for Higher Education in Wales (Circular W07/42HE).

1.2   We received 17 responses to this consultation, of which 15 were from organisations and two from individuals. The list of respondents is attached at Annex C. The composition of responses was as follows:
- 11 Higher Education Institutions;
- 3 specialist bodies;
- 2 individuals;
- 1 Further Education Institution.

2   Summary

2.1   All respondents broadly agreed with the contents of the consultation document. The principal concern raised was regarding the high level of the strategy. Respondents welcomed the emphasis of the strategy.

2.2   Respondents broadly agreed with the objectives of the strategy. Some responses identified difficulties regarding ownership and resources.

2.3   Collaboration was the only potential additional objective identified by respondents.

2.4   Respondents identified that HEFCW could play an additional role through provision of funding and supporting collaboration, including in the context of the Welsh medium agenda.

2.5   Respondents identified that employer engagement was a further element which should be included within the strategy.

2.6   There was no consensus regarding additional indicators which could be included.

2.7   Respondents cited the importance of the consultation process in obtaining ownership of the strategy by the sector. They also identified collaboration as a means by which institutions could gain ownership.

3   Agreement with the stated strategy

3.1   All 17 respondents broadly agreed with the contents of the document. Delegates at the consultation conference also supported the strategy. However, a number of points and caveats were raised and are detailed below, together with the number of respondents identifying each issue. Feedback from the consultation conference indicated that the strategy was perceived to be sufficiently flexible, the strategy embraced mainstream developments, and the focus on flexibility and the learning experience were helpful.

3.2   High level of the strategy (8): Respondents and delegates identified that the strategy was at a very high level. Three respondents queried whether it should be called a strategy, given the high level of the document. Some identified that it was necessarily high in order to provide an overarching framework, and enabled institutions to embed it within their own learning and teaching strategies and develop details individually. Others identified a need for greater specification of objectives within the strategy. Respondents also identified that the high level of the strategy might make it difficult to implement into real thinking and practice, and that the level of the strategy meant that it focused less on the learner and more on the institution.

3.3   Emphasis of the strategy (5): Respondents and conference delegates welcomed the emphasis of the strategy on enhancement of learning and teaching and mainstreaming of technology.

3.4   Change of terminology (4). Four respondents welcomed the change in terminology from 'e-learning' to 'technology-enhanced learning. It was noted that this helped to avoid potential confusion arising from use of various terms such as e-learning, m-learning and blended learning, each with a different meaning in different institutions. It was also reported that the change in terminology should help to avoid some of the connotations which 'e-learning' had gained.

3.5   Vision (3): respondents and conference delegates identified vision as a topic to be considered. One welcomed the vision that technology should be designed to develop, support and enhance learning and the student experience. Others identified that a greater vision was required to help facilitate wider staff engagement with the vision, alongside an acknowledgement that the key drivers to achieving such enhancement will require collaboration and resources to ensure the sharing of best practice, and also to take account of the fact that much of the detail of the strategy is in progress, albeit in pockets. This included acknowledgement that technological change will impact on learners' expectations and experiences, which has implications for institutions in maintaining appropriate platforms to facilitate learning effectively, including through mobile platforms and technologies. Respondents felt that the targets should be ambitious and challenging in order to make a real difference to learners. Conference delegates noted that

'normalising' technology into learning was visionary in itself. They also reported that the strategy was insufficiently proactive in driving Wales ahead.

3.6 Timespan (3). Respondents noted concerns that the strategy would date rapidly as technology continues to advance. It was recommended that the strategy should therefore be written as an evolving document which could be updated and amended as appropriate. It was suggested that the strategy could be reviewed in line with the development of learning and teaching strategies to operate from 2010/11.

4 Agreement with the stated objectives

4.1 Sixteen of the 17 respondents cited broad agreement with the objectives. There was a consensus that the objectives were sufficiently broad to enable institutions to engage with the strategy in line with their own missions, aims and objectives, and respondents welcomed the fact that the strategy was not prescriptive. Further comments from respondents are detailed below:

4.2 Ownership (3): some respondents cited difficulties with this objective. One commented that this objective could be expanded to strengthen the way in which it is presented as an objective. Another reported that this would be better replaced with a target for institutional engagement with the strategy, with the strategy being owned by HEFCW.

4.3 Resources (3): Respondents noted that substantial resources were required for areas such as staff development, maintaining competitiveness, and research into technology-enhanced learning.

5 Additional objectives

5.1 Twelve responses were received to this question. However, with the exception of collaboration, no particular themes arose from this question.

5.2 Collaboration: (3). Respondents identified the desirability of a more explicit objective regarding collaborative developments, eg the Welsh Blackboard, Moodle and QuestionMark Perception user groups and the Wales eTraining Network. They also identified the desirability of emphasising support for academic inter-institutional collaboration rather than just at institutional level. Two respondents identified a desire for funding and/or incentives for collaboration. The importance of collaboration at individual level as well as at other levels was identified.

6 Any other role for HEFCW

6.1 Seventeen responses were received to this question, in addition to the consultation conference responses. Two principal themes were identified: funding and collaboration.

6.2 Funding (10); Respondents welcomed the provision of funding to support the strategy. They reported the desirability of provision of further funding, with success of the strategy being reliant on determination of additional funding.

6.3 Collaboration (9): Respondents welcomed the emphasis on collaboration and identified that HEFCW could play a role in getting institutions to share good practice, through websites, conferences/events and gathering views of staff and students. They also identified the following issues:
- the desirability of working with existing groups and networks including the Higher Education Wales Information Technology Forum (HEWIT) and the Wales Higher Education Libraries Forum (WHELF);
- utilising grant letters and funding of bodies such as JISC and the Academy to serve the needs of Wales;
- A programme of events for practitioners to share and disseminate good practice
- Formally extending the mentoring support offered during the benchmarking exercise to support collaborative working and encourage the transferability of good practice;
- Holding a quality technology-enhanced learning and teaching conference in Wales to highlight the work of Wales and include international expertise, to benefit Welsh HEIs;
- Encouraging collaboration for the purposes of research into effective learning & teaching;
- Including FEIs in the benchmarking process.

6.4 Collaboration in the context of the Welsh medium agenda (3): Respondents identified the importance of encouraging the development and sharing of learning resources, especially in areas such as Welsh language materials, and of collaboration and sharing to advance other aspects of the welsh medium and bilingual agendas eg Welsh language version of Blackboard. They also noted that comparability across the sector in Wales would be crucial to ensuring effective support for bilingual technology and Welsh Medium learning and teaching.

6.5 Other issues identified included the following:
- The development of a coordinated support plan by HEFCW, the Academy and JISC to facilitate the implementation of the strategy and the mainstreaming of technology-enhanced learning;
- Removal of the barriers and accentuating the positives raised by intellectual property rights, copyright and accessibility issues;

- Encouraging recognition for academics using technology to support and enhance learning.

7   Other elements which should be included within the strategy

7.1   Employer engagement (4): this issue was also identified by conference delegates. Respondents noted that greater recognition of the non-traditional learner, work-based learning and engagement of staff, learners and employers were required. They identified that a clearer recognition of the impact of the Leitch review and the need for appropriate learning technologies to engage workbased learners would help to steer HEIs to consider this element of provision within their development planning, including the need for on-demand provision and its implications for effective delivery and learning support. The role of employers, particularly with regards to foundation degrees, was cited and one respondent noted that their future engagement was therefore vital.

7.2   High level of strategy (3): Respondents noted that the strategy was written at a high level, which facilitated the anticipation of new developments. One identified that addition of information on existing technologies to reflect more recent developments might cause the strategy to be outdated quickly. In terms of themes central to current developments it was identified that it could include reference to personalisation, digital inclusion, e-portfolios and reusable learning objects. One respondent noted that it would be useful to include more detail regarding how objectives will be achieved or how further information will be provided to the sector.

7.3   Bilingual/Welsh language issues (2): Two respondents identified that further information on bilingual issues should be provided. This included developing quality bilingual resources for learners and the mainstreaming of the development of bilingual technologies, rather than as an afterthought. This could include the development of a bilingual Moodle platform. It was also noted that the strategy should include reference to ongoing government projects to assess bilingual software, and that it should be responsive to any conclusions reached.

7.4   Funding (2). Two respondents noted that they would welcome more information on funding opportunities available to support the strategy through its lifespan. One noted that funding was a principal barrier to further development and could delay the shift from pockets of innovation to the mainstream of learning and teaching provision, processes and practices.

7.5   Change (2): Conference delegates noted that the strategy could include a section on cultural change with a focus on sharing and reusing materials. Other respondents noted that it would be useful to include further information on effecting and managing change,

particularly cultural change, at all levels. It was reported that it is difficult to manage mainstreaming while also promoting the cutting edge. It was also reported that engagement with more advanced technology by some staff tends to increase students' expectations. It might therefore be useful for the strategy to highlight the need for institutions to manage the adoption of pedagogically appropriate technology to ensure that there is enhancement in line with the institution's strategy, but negating the negative impact of the gap between the 'early-adopters' and others, and ensure that students' expectations are based on appropriate assumptions and that there will be differing practices across the institution.

7.6   Links to other strategies (2): Respondents noted the importance of cross-referencing between this strategy and other strategies, including internal strategies, the FE sector, schools, teacher training, etc, to facilitate the development of a 'joined up' approach.

7.7   Benchmarking: conference delegates identified that it would be useful to have more information on the post-benchmarking angle. An individual respondent noted the importance of continuing links with English HEIs which had completed the process, in order to facilitate discussion and collaboration.

7.8   Technology: conference delegates and one respondent noted issues relating to technology. The respondent noted that reference to the use of games-based learning could be included in the strategy, given its potential to enhance the learning and teaching of work based learning. Conference delegates identified that there should be more information on the use of technology and physical spaces. They reported that they would welcome a more action-oriented section to the strategy, which could be more directive, to create a national steer, especially for those supporting such initiatives in institutions. They also identified a need for a section on the current position and links to work being done in schools. They noted the lag between technology and infrastructure, and the range of learning environments. They cited the importance of the use of technology to provide flexibility and access, eg in the context of work-based learning.

8   Other appropriate measurable indicators by which we will know if we have achieved our goal

8.1   Seventeen responses were received to this question. Four respondents specifically noted agreement with the indicators provided. Respondents (5) and conference delegates also reported the following:
  * Indicators need to be expressed flexibly, be clear, open and not too prescriptive
  * Institutions may have their own indicators;
  * The importance of the benchmarking exercise was highlighted;

- The annual monitoring statements should prove a useful indicator of how each institution is progressing with regards to the strategy. Further information was requested on how this information would be collected;
- The allocation of additional funding should be based on project descriptions with clearly defined and measurable outcomes;
- Measures should be specifically aligned with impact evaluation;
- It might be useful to set targets to measure broad indicators of success;
- Encouraging ongoing evaluation of technology-enhanced learning and teaching, appropriate to individual HEIs, would result in evidence of change being recorded naturally, which would provide a much better indicator of achievement of goals than having prescribed key performance indicators.

8.2　Difficulties cited by respondents (4) and conference delegates including the following:
- Measurement is not needed. The strategy needs to engage rather than to drive;
- Measurable indicators are difficult to identify, particularly as the strategy is framed in deliberately broad terms;
- The indicators were generally not seen to be stretching;
- Research was needed on what a good learning experience is, including different patterns of learning, and how it may be measured;
- Indicators such as students being able to communicate, gain support and access information in more flexible and novel ways do not necessarily enhance learning;
- There was an emphasis on measures relating to the facilitation of technology-enhanced learning rather than the impact of technology-enhanced learning;
- There were too many variables affecting issues such as achievement, retention and motivation to ascertain the impact attributable to technology-enhanced learning.

8.3　Potential indicators identified by respondents (7) and conference delegates included:
- National Student Survey results and other indicators of student satisfaction;
- Use of case studies to show significant improvements to the learning process;
- Increased efficiencies through collaborative activity, and other impact measurement of collaboration, including collective ownership and understanding;
- Post university graduate employment;
- Number of welsh medium or bilingual packages developed, and early provision of bilingual technologies;
- Number of related research papers developed;
- Usage statistics of learning programmes;

- Number of institutions with e-learning strategies;
- Benchmarking statements and institutional evaluations;
- Where the use of technology is viewed by staff at all levels and individual learners as relevant and beneficial whilst being integral and seamless;
- Benefits derived from collaboration between institutions;
- Use of indicators used within the JISC CAMEL project.

9 Other means which we might utilise to enhance ownership of this strategy by the sector

9.1 Consultation process (16): two responses commended the consultation process and identified that this enabled ownership of the strategy and its application at institutional level, and one identified that this process should be maintained throughout the lifespan of the strategy. A third respondent particularly welcomed the avoidance of a requirement to develop separate strategies for technology-enhanced learning. Another queried whether it was feasible for institutions, individually or as a sector, to have ownership of a strategy put in place by HEFCW. A further respondent identified that ownership should develop from practitioners in a bottom-up approach.

9.2 Collaboration (7): Various aspects of collaboration were cited as facilitating ownership of the strategy. This included
- Events to facilitate sharing good practice and difficulties of implementation, including working in partnership with the Academy;
- Fostering collaborative activity across the sector and by the sharing of best practice beyond the existing benchmarking exercise, including inside and outside of Wales;
- Development of an all Wales task force, comprised of e-learning practitioners that would work with institution on an individual basis to implement good practice and enable staff to understand and appreciate the concepts of blended learning and enhance their teaching and student learning;
- Sharing experience based on a coordinated approach set out in specific objectives which are either detailed in this strategy or in separate implementation guidelines agreed across the sector;
- Continuing strong links between the Welsh Medium E-learning Sub Group of the Centre and developments at HEFCW and across the sector.

9.3 AMS process (3): respondents requested information on the reporting of developments with regards to e-learning through the annual monitoring statements for learning and teaching strategies and the level of information that would be required. Two respondents also cited that it would be useful to embed the objectives of the strategy into related circulars. They reported it would have been useful to have the technology-enhanced learning strategy published in line with the

learning and teaching strategy guidance, as institutions frequently combine the two activities.

9.4 E-learning subgroup (2): Respondents noted that the composition of the ELSG should be representative of the sector as a whole, and could include students, trade union representatives, and representatives of the leadership foundation.

10 Other comments and suggestions

10.1 Eleven responses were received to this question, in addition to responses from conference delegates. Many of these were covered elsewhere in the responses. The principal ones are summarised below:

- Benchmarking and learning and teaching strategies: Conference delegates noted that some institutions have moved beyond the benchmarking. They identified a need for more funding to enable further changes and encourage aspiration to improve. A respondent noted that it was unclear how the benchmarking project would continue following its final phase and that it would be unfortunate should this be superseded by other forms of reflective practices;
- Learning and teaching strategies (2): Respondents queried how the technology-enhanced learning strategy tied in with the learning and teaching strategy guidance. They queried whether the strategy was lacking in specific focus by being too tied in to benchmarking and learning and teaching strategies. One respondent noted that it was vital that the strategy was mainstreamed as quickly as possible as part of each institutional Learning and Teaching Strategy. One respondent noted that it might be sensible to shorten the timescale for review of the TEL strategy to allow the next round of learning and teaching strategies to be informed by revisions to the technology-enhanced learning strategy;
- Staff development: Conference delegates noted that the capacity for staff development could be a challenge. A respondent recommended that in the section related to staff development reference be made to the training and recognition of new professionals, in schemes such as the postgraduate certificate in teaching in higher education or the HEA professional recognition scheme. It is key that new professionals in the sector receive appropriate training and support when engaging in this area.

Annex C

Respondents

Higher Education Institutions
Aberystwyth University
Bangor University
University of Glamorgan
University of Wales, Newport
Swansea University
University of Wales, Institute Cardiff
Open University
University of Wales, Lampeter
Trinity College Carmarthen
Cardiff University
Swansea Institute of Higher Education

Further Education Institutions
Coleg Llandrillo

Organisations
Higher Education Wales
Welsh Medium Teaching and Development Centre
The Association for Learning Technology

Two individual responses