

A review of e-learning and the business case for Skills for Health

June 2007

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1. Executive Summary

- 1.1 This study, carried out in early 2007, highlights the e-learning related issues that Skills for Health need to consider in delivering their operational plans and activities.
- 1.2 Against the backdrop of a range of strategic drivers impacting on the UK health sector, the published Sector Skills Agreements indicate a requirement for a flexible workforce developed around the competence frameworks.
- 1.3 To support delivery of workforce change, Skills for Health needs to secure the active engagement of sector employers, education and training providers and learners and demonstrate the value of its major products, occupational standards, qualifications frameworks and competence tools.
- 1.4 One significant method of securing engagement is to embed the competences developed by Skills for Health within the education and training provision offered within the sector. Embedding competences in education provision does a number of things:
 - it raises the profile of the competences developed by Skills for Health.
 - it demonstrates the utility of the competences in upskilling the workforce.
 - it enables staff to acquire those additional skills which from time to time are required to meet the changing nature of the workplace.
 - it helps secure a culture of lifelong learning.
- 1.5 Hitherto, recognition for and embedding of competences within education and training provision has been left largely to:
 - the providers of, for example, NVQs who develop local training and development solutions.
 - work related to the design of Higher Education qualifications based of the Skills for Health 'learning design principles'.
- 1.6 Research derived from developing Sector Skills Agreements indicates that employers wish to see a change in the nature of education and training provision available to them. In particular, they express a preference for competence based approaches supported by more 'just here, just now, just enough' modes of delivery.
- 1.7 Such approaches require new learning modes and models, including e-learning, and strongly suggests that competence based approaches are designed into learning at the outset and not as an afterthought.

1.8 The report Modernising healthcare training (April 2006) suggested that;

'These approaches have the real potential to transform the delivery of learning across the healthcare sector, and must be the model for commissioning future Higher Education (HE) and Further Education (FE) learning provision'

Modernising healthcare training: e-learning in healthcare services - April 2006 – Executive Summary

1.9 Since the publication of the above report and the associated 'e-learning roadmap' some progress has been made by the sector e-learning Alliance of which Skills for Health is a member. However, relatively little action has been taken with regard to the report's recommended development of a competence based approach utilising National Occupational standards (NOS). It is strongly recommended that Skills for Health now need to lead on this vital dimension to achieve their Strategic Goals and Aims.

Recommendations

1.10 Our recommendations are set out in full in section 7. They address the full range of activities and actions needed to support the development and implementation of an effective e-learning contribution to the Skills for Health mission, in particular supporting skills development aligned to NOS.

1.11 In summary we recommend that Skills for Health takes a lead on the following:

Raising Awareness of the benefits of e-learning and competence based solutions to staff development

- Design and develop a 'best practice' e-learning product as an exemplar so that potential users and stakeholders can understand and replicate solutions which address the development of competence. Such a product should deliver the requirements identified in the Sector Skills Agreement research, namely they should resonate with NOS, and the Knowledge and Skills Framework, and should make best use of the workplace as a key learning resource in order to deliver evidence of functional competence and underpinning knowledge.
- Invest in producing a demonstrator that shows how e-learning fits into the complex and varied activities that a member of staff and manager might undertake, and establishes clear links with existing frameworks, tools and products that have been developed to deliver a competent, flexible workforce.
- Extend the Skills for Health web based Competence Application Tools to include links to appropriate learning materials.
- Identify quality learning materials which already exist and ensure that these development solutions articulate with the Skills for Health web based Competence Application Tools. This will provide added value to users of the tools and stimulate providers of e-learning to map their provision against NOS.

Engaging Stakeholders

- Implement a communication programme that sets out the benefits of the proposed approach to all stakeholders and establishes e-learning as an essential part of the blend of activities that will enable Skills for Health to achieve its aims.
- Establish a Stakeholder Group to oversee the implementation of the exemplar and demonstrator and its subsequent roll out.
- Establish, through the building of the exemplar, and from a review of quality procedures developed by BECTa, The e-Learning Alliance and others, a framework for assessing the quality of e-learning materials and the processes for updating the web based Competence Application Tools.
- Ensure that other current Skills for Health initiatives and projects recognise the findings of this report and vice versa.

Supporting the process

- Support the roll out of the exemplar and demonstrator to ensure the initial investment is maximised and embedded. Focus this roll out on issues which are of major and current importance to sector stakeholders, for example issues related to the Department of Health's 18 week wait initiative.

2. Introduction

- 2.1 Recent strategic decisions and current policies related to healthcare in the United Kingdom require the sector to undergo radical transformation. The need to adopt new structures, and embrace new ways of working, new technologies and frameworks in order to improve productivity and ensure competence has, in principle, been accepted. It is recognised, however, that translating acceptance in principle to practice will require strategic and consistent action and support.
- 2.2 The delivery of all aspects of healthcare depends on the availability of sufficient and appropriately competent staff; thus the provision of efficient and effective education and training is imperative. While the traditional qualification led systems have served the service well in the past it often fails to secure quality changes over short timescales. Indeed, as the research underpinning the Sector Skills Agreements across the UK has illustrated, in terms of meeting the sector's skill demands of the 21st century, "more of the same will not do". Current provision will not deliver:

'skilled, flexible and modernised workforce capable of improving productivity and performance and reducing health inequalities.' *Skills for Health Strategic Objective 3*

- 2.3 Various options to meet this need have been considered and, as in most sectors, there has been considerable interest in how new technologies can benefit health care training and development.
- 2.4 During the past ten years a wide range of initiatives have been implemented around e-learning. However, such developments have often been piecemeal and poorly coordinated. Critically, many of these were not designed to connect with other parallel initiatives; in particular very few have addressed the competence development work which Skills for Health has led and which provides an excellent indication of the nationally recognised standards required by sector employers.
- 2.5 The result of this lack of integration has resulted in massive duplication of effort and a failure of the sector to make most effective use of its knowledge of required workplace competences in the design, development and commissioning of education and training solutions.
- 2.6 In order to encourage the strategic adoption of e-learning developments the National Workforce Group (NWG), in November 2005 published a framework document, 'Supporting Best Practice in e-learning across the NHS'. A key proposal within this framework was the development of a 'road map' to establish how the healthcare sector could develop a 'joined up' approach towards the adoption and deployment of e-learning.

- 2.7 The 'road map' was published in the document, 'Modernising healthcare training: e-learning in healthcare services'. It called for the development of 'a clear business case' - informed by both evidence and need and was:
- Designed to maximise impact in the workplace.
 - Linked to major initiatives e.g. KSF and National Occupational Standards.
 - Focussed on seeking out best practice solutions.
 - Able to offer portability of recognition for learning.
 - Able to help the sector make optimum use of its purchasing power.
 - Based on standards and guidelines for e-learning.
- 2.8 The benefits of developing such a business case were identified as follows:
- Reduces the duplication of effort in designing what are often costly and complex specifications.
 - Assist in ensuring the development of 'joined up' solutions linked to national priorities and initiatives.
 - Facilitates the commissioning of materials.
 - Improves the engagement of employers with education and training provision.
 - Improves patient care.
- 2.9 The 'road map' was well received by healthcare constituents and since publication a number of steps have been taken to move the agenda forward including the recent establishment of an 'e-Learning Alliance for Health'. This is a four-country group which includes representation from Skills for Health.
- 2.10 The Alliance is in the early stages of its development and without a strategic focus individual members continue to seek funding separately in line with their organisation's needs. As a result the e-learning agenda, which could play a critical role in achieving transformation and is a key strand of the Skills for Health Operational Plan, continues to move in a piecemeal way. There is little visible progress on delivering the benefits outlined in 2.7 above. This is especially true of the non- professionally qualified sector of the healthcare service.
- 2.11 As this situation has prevailed throughout the 14 months since the 'road map' was published, Skills for Health, as the Sector Skills Council, has commissioned the development of a business case to enable the organisation to decide on the actions and investment required to facilitate a joined up e-learning strategy for the healthcare sector, and progress Strategic Objectives 3 and 4, below.

3. 'Implement solutions which deliver a skilled, flexible and modernised workforce capable of improving productivity, performance and reducing health inequalities.'

4. 'Champion an approach to workforce planning and development that is based on the common currency of national workforce competences.'

- 2.12 This report summarises the process, methodology, findings, conclusions and recommendations that constitute the business case required.

3. Methodology

3.1 Our approach to the project was based around a series of interviews and a review of strategic and operational plans and various leading research and development documents. Throughout the review and interviews we were mindful of the 4 strands of the project brief:

- An analysis of need for e-learning provision – we were particularly mindful of the requirements of Skills for Health constituents and attempted to obtain a consensus view of priorities from interviewees.
- An Analysis of e-learning design solutions – we were particularly looking for learning solutions designed around the need to demonstrate competence.
- Identifying best practice – both in e-learning materials and delivery infrastructure.
- Identifiable 'business' benefits – that could assist in building a business case for e-learning that could support Skills for Health achieving its objectives.

Literature Review

3.2 Our literature review included the following key documents.

- Skills for Health Strategic Plan – 2007-2012.
- Skills for Health Operational Plan 2007/08 (we have only published/completed the composite plan)
- The Sector Skills Agreement for Health (England).
- The Sector Skills Agreement for Health (Scotland).
- Awards/Qualifications process in healthcare Higher Education (Draft) – 2007.
- The Government Response to the Health Select Committee Report on Workforce Planning – May 2007.
- Sector Skills Agreement – Scoping the Demand by Healthcare employers for LSC funded programmes in the years 2016/17 – Phase II Final Report (Draft) 2007
- Additionally we reviewed the internal documents relating to the 18 week wait and read research papers from leading experts

Structured Interviews

3.3 A significant part of the work was based around telephone and face to face interviews. The interviews were carried out with four key stakeholder groups:

- Country and Regional Directors for Skills for Health
- Other Skills for Health staff
- Healthcare sector professionals
- Non healthcare sector staff

3.4 The full list of interviewees is shown at **Appendix A**.

- 3.5 The interviews were designed to support our research and develop our thinking. They addressed 5 key areas:
- Was e-learning as a concept seen as a solution to the challenges facing the Health Service.
 - Where does e-learning fit within the work of Skills for Health where it is not being addressed elsewhere?
 - What were the learning design principles that should be built into effective e-learning, with particular reference to demonstrating the application of competence?
 - The identification of Best Practice and identifiable Gaps
 - What would be the focus of a business case for e-learning development in Skills for Health?

4. Findings

- 4.1 The transformation of the healthcare service has been based on a wide range of reviews and initiatives, emerging strategies and targets. Structures and systems are not yet finalised and embedded. Interviewees confirmed that people have little quality time to get to grips with anything outside their day to day activities and against this backdrop stressed the need to raise awareness of anything or any organisation that is in place to support them in the change at every possible opportunity.
- 4.2 Our findings are presented in the following categories:
- General Findings
 - What Skills for Health need from e-learning, including a review of strategic documents
 - The 18 Week Wait initiative
 - Use of competences and e-learning by Skills for Health
 - Best Practice, including materials and support

General Findings

- 4.3 In the context of the project the following findings emerged.
- There is lack of clarity about the role of Skills for Health.
 - There is a lack of understanding of the potential of e-learning to assist Skills for Health deliver its mission and raise its own profile as an effective and accessible resource.
 - There is no common understanding about what can be defined as e-learning. Consistently the comment was, "We know we need e-learning but what do we mean by e?" Interviewees offered very different understandings but all identified the need for a common definition. At the simplest level it is difficult to recognise excellence or best practice in something that has not been adequately defined. In general there was agreement that e-learning was any learning that is enabled by technology.
 - With the exception of some managers and staff who are using the competence framework to develop the Post Outlines people do not understand that they can apply the competence framework to their advantage.
 - Though much of the competence framework is in place and there are tools on the Skills for Health website to support its use, these appear to have been designed for people who already have a reasonable understanding of competence, the Knowledge and Skills Framework and the National Occupational Standards. For those lacking in this knowledge, the tools and competences may be difficult to access, navigate and use.

What does Skills for Health need from e-learning?

- 4.4 Quite clearly there is an expectation that e-learning will deliver significant change within the healthcare sector. However, as we highlight in Section 5 of this report, it cannot be assumed that this change will just happen without a robust and thorough debate supplemented by an exploration of appropriate models and demonstrators. Whilst the e-learning Alliance has responsibility for moving forward several aspects highlighted in the 'road map', it is clear that the alignment of competence to learning design is an area that Skills for Health should lead on in order to make timely progress on this important issue.
- 4.5 In order for e-learning to be an effective part of the solution going forward it will be crucial that effective e-learning materials and programmes are in place to support the transformation of workforce practices envisaged within the initiatives, including Agenda for Change, the Sector Skills Agreement and the 18 week wait. Skills for Health must be seen to be taking a lead role in this area to ensure that the competences developed by them are incorporated into development solutions.
- 4.6 The sector needs e-learning solutions that recognise the developing competence based approach so that the workforce can be up-skilled and remodelled to reflect the National agenda and employers' needs. Such solutions cannot be developed on a piecemeal basis; rather they require strategic planning and need to be designed to articulate with other 'e' initiatives including the e-KSF and the Electronic Staff Record.
- 4.7 The competence based approach to workforce planning is beginning to be recognised by employers and provide Skills for Health with an opportunity to develop leadership in this crucial area. Although not yet universally accepted, Skills for Health must seek to ensure that as far as practicable, the competence based approach to learning design is inherent in all learning ('e' or otherwise) and extend into the previously 'off limits' areas that have traditionally defended their specialisms. Work has already started on the learning design principles developed for Higher Education (HE) by Skills for Health, but these currently find expression mainly in the development of awards and not in the development of educational materials. We did not encounter widespread evidence of this approach outside the HE sector.
- 4.8 This is not a simple goal, more like a direction of travel. If the benefits of e-learning that were articulated in the 'road map' are to be achieved, the perceived barriers between professions need to be lowered. This should not undermine or detract from the internal decision making processes that have protected professional standards to date. Skills for Health need to be able to show, through facilitating effective learning design, that such barriers are surmountable. Many of the interviewees have demonstrated the willingness to produce an exemplar based on the model described in the following sections, and work collaboratively across professional disciplines. Skills for Health need to be accepted as the facilitator of this process and lead the challenge to secure many of the benefits that e-learning can bring.

Strategic Documents Review

4.9 Throughout the documents we reviewed there were constant references to the applicability of e-learning. We have extracted, and quote below, the relevant sections of:

- The Sector Skills Agreement
- The Strategic Plan 2007-2012
- The Composite Operational Plan
- Other Documents

Sector Skills Agreements

4.10 The Sector Skills Agreements for England and Scotland both imply the need for new modes of learning.

Our Aim

To help the whole sector develop solutions which deliver a skilled and flexible workforce in order to improve health and healthcare

To do this we will:

*... **Influence education and training supply**..... Ensuring the sector gets the skills it wants through influencing learning supply*

More explicitly

Integral to education policies are a range of developments to promote.....Innovative and accessible learning methods including e-learning.

4.11 The benefits of e-learning are clearly referenced and accepted and are also published in the above SSAs (see for example Annex 7 of the SSA for England, reproduced at Appendix B)

4.12 Skills for Health need to be able to demonstrate application of this intent to all stakeholders in tangible and practical ways.

Strategic Plan 2007-2012

4.13 The Skills for Health Strategic Plan published in January 2007, makes several statements that are relevant to the need to stimulate the development of learning provision which provides 'just here, just now, just in time solutions', and which have a direct impact on performance. To date however, there has been little or no investment to achieve this. We have reproduced the relevant sections of the Strategic Plan at **Appendix C**.

Operational Plan

<p>The intent articulated in 5.1.4 of the Strategic Plan finds further expression in the Composite Operational Plan, the detail of which is reproduced at Appendix D</p>	<p>Page 6 (v8)</p>
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- 4.14 The weight of the strategic intent articulated in these documents now needs to be balanced by operational action to further support and raise awareness of the role of Skills for Health in the (e) learning environment.

Other relevant documents

- 4.15 The potential of e-learning has already been recognised by Government:

	Reference
<p>The Government Response to the Health Select Committee Report on Workforce Planning 2007</p> <p>'The introduction of significant IT-based approaches to education and training is recognised as essential for delivering business continuity and major financial savings in health and social care, whilst simultaneously driving improvements in patient safety and quality of care.</p> <p>We have already delivered this solution in radiology, through the Radiology Integrated Training Initiative (R-ITI), to international acclaim and with clear financial and quality gains for the NHS.</p> <p>.....'</p>	<p>Para 12</p>

- 4.16 Skills for Health, by leading on the development of suitable materials that support the utilisation of workforce competences can demonstrate to its constituents the extent and influence of its strategic intent.

18 week wait initiative

- 4.17 Delivering an 18 week patient pathway from GP referral to the start of treatment by the end of 2008 is a key objective for the NHS. The Department of Health, at the beginning of June identified key development tasks for Skills for Health in association with this target. These tasks included identifying competences against the specified 18 week workstreams and made specific reference to the development of e-learning solutions for:

- Ultrasound
- Audiology and
- Physiological measurement.

- 4.18 Within the context of the 18 week wait, e-learning, allied to competence based approaches to training and development is seen to be a critically important factor in accelerating the development of skills acquisition.

Use of Competences and e-learning by Skills for Health

- 4.19 We feel compelled to mention this as several of the interviewees brought it to our attention. Currently Skills for Health staff are undergoing Health and Safety training via web based materials provided by United Bristol Healthcare Trust. For many this was the first experience of e-learning and comments ranged from "quite good" to "boring". We have not seen these materials so cannot comment on their design, but two factors are worthy of note.
- 4.20 Firstly, one interviewee commented that the module that shows how to set up your workstation correctly was presented as the third module, over an hour into the session of e-learning. This indicates a lack of critical consideration when considering the sequencing of learning activities.
- 4.21 Secondly, it was noted that alternative materials had been developed by the Core Learning Unit and were available free of charge. The Bristol modules appear to have been purchased commercially. This may be because the CLU modules were not available at the time, but is indicative of the lack of awareness of availability of materials which we highlight below when we consider best practice.
- 4.22 Finally, one interviewee commented that there was limited assessment, no testing of competence and no mapping to the KSF. By comparison, the CLU materials are partially mapped to the KSF.

Best Practice

- 4.23 We sought to identify best practice in e-learning within the healthcare sector and observed two dimensions to emerging best practice:
- The availability of quality learning materials.
 - Examples of learning infrastructure and support as part of e-learning design.
- 4.24 In attempting to identify best practice within the healthcare sector, the following issues emerged:
- Production of e-learning across the sector is highly atomised with little historic evidence of coordination of purchasing or commissioning.
 - There is no central repository for e-learning materials so it is difficult to know what is available. This renders accessing materials difficult for potential users and employers.
 - There is no published definition of best practice or template against which materials can be evaluated. This makes the best practice definition subjective.
 - There is no agreed template to ensure consistent quality, although Connecting for Health have very recently developed a document for consultation 'The e-learning toolkit'. The evaluation of quality is difficult if something cannot be assessed against a quality standard.
 - There is no agreed commissioning model for developing or acquiring e-learning materials.
 - Few materials appear to use a competence based approach and even fewer would appear to utilise the NOS developed by Skills for Health.
 - With few exceptions there appears to be little or no formalisation of the culture of sharing and no established process or forum for

promoting good practice across the regions. An exception to this is the e-learning network for Wales (see below).

- 4.25 The main reasons for identifying best practice are to make it available to others to:
- Use, thereby saving the time, effort and resource currently wasted reinventing the wheel.
 - Use as a benchmark if they wish to develop best practice materials.
 - View models of best practice infrastructure and support to ensure a high return on any e-learning investment.
- 4.26 The e-learning 'road map' document recommended that a central database for holding or providing a link with materials would be desirable in order to address the issues identified above. Such a database would also facilitate the quality assurance process and allow materials to be categorised as appropriate for use within accredited programmes.
- 4.27 Some initial work on this has been undertaken by the e-Learning Alliance but as yet it appears that there is no agreement within the sector, of the standards needed to populate and maintain such a database or, who should be responsible for establishing and maintaining it.
- 4.28 As materials are only one side of the learning model it is equally desirable for an organisation to have responsibility for gathering and promoting examples of best practice infrastructure and support for e-learning in the healthcare service.
- 4.29 There would appear to be a logical connection between these two requirements and the need for Skills for Health to promote the development of materials and models that demonstrate best practice and the application of competence. We have identified this as a major gap, and an opportunity for Skills for Health to extend the web based Competence Application Tools to include information about the e-learning that is already available. This will be valuable for the full range of learning in addition to 'e'.

e- learning materials

- 4.30 The majority of the materials that interviewees offered as exemplars of e-learning are based around a PC or web environment, and are predominated by information based content. The use of simulations and other technology based materials is overshadowed by this rather narrow view of 'e' learning. This resonated with the views of interviewees, many of who wanted a clearer definition of 'e' and of different modes of delivery.
- 4.31 We came across many examples of sound and innovative materials. However, whilst we have some evidence of the ability to map these to the KSF and NOS competences, this has all been done in retrospect. There was no evidence that the design of these materials had been influenced directly by the need to demonstrate the application of competence.
- 4.29 Currently most materials are lodged within commissioning organisations and are not accessible to anyone outside the 'client' group. In some instances organisations provide links to central resources but these relate

to the learning provided by the organisation or institution and again are not accessible to others. One such example is HERON, the link to materials for the University of Stirling.

- 4.31 We have selected the following examples from the many that were described to us to demonstrate the range of e-learning models being developed.

R-ITI and e-learning for healthcare www.riti.org.uk

- 4.32 R-ITI is a collaboration between the Royal College of Radiologists, the Department of Health and the NHS. R-ITI provides an innovative learning solution combining traditional proven teaching models with state of the art technology. The Integrated Training Initiative delivers a new approach to training radiologists, increasing capacity to meet demand without putting additional strain on current resource. It will shortly be available nationally to radiologists and nonradiologists, with further e-learning potential for all sector staff.
- 4.33 R-ITI has delivered:
- A national archive of peer-validated cases (Validated Case Archive);
 - Over 1,000 e-learning sessions for self-paced learning & knowledge acquisition, underpinned by a comprehensive Learning Management System which tracks progress.
 - Three new Academies.
- 4.34 The concepts of R-ITI have now been developed into a national e-learning programme. DH plans to expand this across the healthcare sector, to develop and deliver an extensive database of multi-professional, generic and specialist nationally quality-assured e-learning material, all tracked and recorded throughout the individual's career progression, with the ability to provide personal development plans, revalidation tools and bespoke learning paths for retraining and remedial support.
- 4.35 In conjunction with Connecting for Health, DH is taking forward the development of a national LMS (Learner Management System) to act as the primary source for content and to facilitate the transferable, tracked record.

Core Learning Unit www.clu.nhs.uk

- 4.36 The Core Learning Unit has a range of e-learning materials that have been developed over a number of years. Currently the modules that are available on-line are:

	Mapped to KSF
Infection Control Programme	Y
Fire Safety Awareness	Y
Manual Handling	Y
Health and Safety Awareness	Y
Equality & Diversity	in hand
Disability Awareness	in hand
Gas Safe - Nurse training	in hand
Infusion Devices	Y
Being Open	in hand
Introduction to Patient Safety	in hand

- 4.37 The infection control programme picked up a silver award in the category of 'e-Learning Project of the Year' at the IT Training Awards 2007. Most of these units have been mapped to the KSF. This mapping is generally to Level 2 but in some cases extends to Level 4
- 4.38 Programmes planned for this year include:
- Conflict Resolution
 - Mixed Messages
 - Child Protection
- 4.39 A full update of the Core Learning Unit programmes is attached at **Appendix E**

Hebrides Battlebus

- 4.40 Though this award winning project was designed as a solution to the challenge of developing and assessing remote learners in the Scottish Highlands and Islands it would be equally effective for all remote communities from the west coast of Ireland to rural Berkshire. It will become increasingly difficult, both in terms of resource and budget, for learners from such areas to be released to attend the centres where there will be sufficient opportunity for them to acquire skills and be assessed as competent.
- 4.41 It has long been accepted that, in order to become competent at a skill, the learner needs to practise. All the professional training that has taken place in the healthcare sector to date provides the opportunity to practice and become competent in a skill under the guidance of an expert. Acquiring knowledge electronically is easy but applying that knowledge requires a more sophisticated model than interacting with materials on a computer.

- 4.42 The Battlebus is a nice example of how technology can be used to bring the opportunity for practice and preliminary assessment to remote learners. It is a small bus, capable of being ferried wherever it is required and equipped with a relatively complex robot and equipment. Software can be changed to meet different needs and there is no reason why the facility cannot be extended to use a web cam to interact with experts or mentors on a real time basis if required.

Serious Gaming Alliance www.seriousgamesalliance.org

- 4.43 Professor Bob Stone at the University of Birmingham is a member of the Serious Games Alliance, which is aiming to deliver affordable interactive 3D training solutions through the application of cutting-edge computer games technology. Professor Stone, and his Human Interface Technologies (HIT) Team, are well known to the health care sector.

Extract from web site <http://tinyurl.com/2yk344>

The HIT Team has a long-running track record in the field of task and usability analyses in support of surgical training technologies, from keyhole surgery and mastoidectomy to operating theatre robotics, and the Team's personnel are involved with the North of England Wolfson Centre for Human Centred Medical Technologies, based at Manchester's Royal Infirmary and the Programme Advisory Committee for the Department of Health's New and Emerging Technologies (NEAT) Initiative. Other major interests include medical (radiological) imaging, bioinformatics, the exploitation of the Web for medical information and training purposes, defence medicine and Virtual Reality for healthcare assessment and rehabilitation.

Best practice infrastructure and support

- 4.44 Generally the sharing of best practice infrastructure and support, 'what works', happens in a random way and is invariably the result of the tenacious efforts of an individual with a strategic view, an individual with a passion for enabling others to learn – sometimes within Skills for Health, or a learning institution.
- 4.45 Having the mechanism to record what is available is one aspect of the challenge, promoting the culture of sharing best practice is the other. We are aware that there are existing forums for sharing best practice and our attention was drawn to the e-learning network for Wales.
- 4.46 We have observed in many similar initiatives the crucial role of effective support mechanisms to embed and nurture learning strategies. Support of this type will be vital to ensure any further investment in learning materials is maximised.

e-learning Network for Wales

- 4.47 The e-learning Network, established in 2002, was set up specifically to address the sharing of best practice between all Trusts, GP surgeries and others and offers opportunities for those who have a responsibility or enthusiasm for e-learning to:
- identify and share best practice
 - broaden understanding of key strategic priorities to help inform implementation
 - of learning initiatives
 - explore 'emerging trends' in the market place
 - participate in discussion forums for peer networking
 - and cross-organisational learning
- 4.48 We understand that this network is very successful in attracting and retaining members and in disseminating and collecting e-learning related information. We believe that this model for sharing best practice should be examined in depth by Skills for Health and considered for other parts of the UK.

IVIMEDS and IVINurse

- 4.49 IVIMEDS model is best described as blended learning, using technology to enrich, extend and support the learning experience rather than simply using it to access content. The organisation's aim is to provide access to world class learning materials that can be shared by all partners worldwide. Though IVIMEDS has a rigorous process to ensure the quality and relevance of its comprehensive range of materials and resources, what is truly unique about the organisation is the infrastructure and learning model it has developed in order to support and enrich the whole e-learning experience.
- 4.50 All programmes are developed to enable assessment over the following skills and competences:
- Acquisition of knowledge. This can easily be tested and we found it to be the most commonly used assessment across the e-learning offering
 - Ability to think critically and analytically. This is tested pre and post learning experience.
 - Evidence that the learner has moved their thinking or understanding forward
 - Ability to write for research or publication
 -
- 4.51 The above range of assessment is appropriate to the level of the IVIMEDS student, post qualification. However, the model could readily be adapted for most levels. In essence the model guides the learner to learn and in particular, learn how to thoroughly investigate and solve problems. The model takes the learner through the entire learning cycle, ensuring they can apply and evaluate the learning rather than simply acquire knowledge. This skill can readily be transferred to all situations where new information is acquired.

IVIMEDS and the Skills for Health Sector Skills Academy.

- 4.52 Work on developing an appropriate model for Sector Skills Academy is currently being undertaken by Skills for Health . As those responsible for the Academy's development wish to include metacognitive development in the Academy's provision it would be beneficial for Skills for Health to examine the IVIMEDS model and consider whether or how it be a linked resource.

Joining up Best Practice

- 4.53 We are aware of trusts joining up the various tools available but not in a replicable manner. Some, for example West Kent NHS and Social Care Trust, have connected the e-KSF to their Learning Management Systems, so that linkages can be made between the competence framework, Personal Development Plans and learning materials.
- 4.54 Alongside this we are mindful of the recent announcement on joining up e-KSF and the ESR so that trusts using both systems will be able to share data across both systems, eliminating the need for duplication of data entry. Joiners and leavers information will automatically populate e-KSF with no need for manual intervention. This is an excellent example of how efficiencies can be achieved.

Simulations

- 4.55 We were told of a growing number of simulation based learning initiatives and the current interest in this mode of learning. Mike Farrell at the North West Academy is currently researching the use of simulators on behalf of the North West SHA with a view to informing further investment opportunities and sharing best practice. This report will be available in June.

5. Business Case

- 5.1 This business case has been developed to show how the proposed investment will contribute to the achievement of the benefits outlined in 2.7 above, and the strategic objectives and policy outcomes required from e-learning in the healthcare sector as set out in the Sector Skills Agreement.
- 5.2 In a bottom line driven world a business case too frequently concentrates on the financial argument and rationale for any decision.
- 5.3 The emphasis is on the cost of an investment rather than the risk to the organisation/sector if that investment is not made. This business case redresses that imbalance.
- 5.4 It is not possible with the information available currently, to prepare a financial business case for e-learning within the context of this study.
- 5.5 There are 3 key reasons for this:
 - The benefits available within the training budget from the adoption of e-learning are not uniform. They depend on the particular learning activity to be delivered (wholly or in part) by e-learning. There are significant variations in the benefits achievable for the large number of activities – so that an average model is of little value.
 - The proposed change in job structure and therefore learning requirements and e-learning requirements necessitated by the need to reengineer the sector's workforce, renders any such mechanistic calculation obsolete.
 - There is currently no useful quantification of the 'training requirement' generated by the changes currently facing the sector. Nor is there a strategic statement of the role of e-learning in delivering the Agenda.
- 5.6 However, a compelling strategic argument for developing one or more exemplars can be drawn from these last two points.
- 5.7 Any significant attention to workforce reengineering will create a massive training and learning requirement. This demand will need to be met alongside the need to assess competence and accredit learning where appropriate. 'bite sized chunks' of learning will need to be available to allow the flexible acquisition of skills that the new workforce paradigms will require.
- 5.8 The scale of the changes to be achieved will make the use of traditional methods of training delivery inappropriate, particularly as it is likely that learning requirements and solutions will become more focussed on the acquisition of skills as a lifelong process and rather less emphasis on the acquisition of programme led qualifications.
- 5.9 As a result there will be an unprecedented demand for alternative mechanisms of delivery of competence based learning, assessment and accreditation. e-learning is an obvious and easily scalable solution.

- 5.10 It cannot be taken for granted, however, that e-learning will 'just work'. Potential models of delivery and, in particular assessment and accreditation need to be evaluated.
- 5.11 Once appropriate models have been agreed and established they will need to be mobilised on an 'industrial' scale to meet the increased demand.
- 5.12 Further work on modelling the workforce data is being carried out by Skills for Health in the Eastern Region in collaboration with Jennifer Fenellon and John Sargent. This is due to conclude in 2009.

An example financial business case for e-learning

- 5.13 This case study was chosen because detailed thorough analysis was conducted to isolate the various components of the initiative. These included separating the impact of the Technology Learning Competence (TLC) programme from the incentive scheme. These processes are described in detail in 'Proving the value of HR' pp97-112 Phillips and Phillips, 2007 ROI Institute.

Background

- The company faced declining sales of petroleum products for 3 successive quarters and was forecasting further decline
- A needs assessment suggested that a diminishing quality of sales relationships with customers and prospects was the main reason for lack of performance.
- An investment was made in designing and delivering an e-learning to all of its 117 sales staff.

An e-learning solution was used because:

- All staff had laptop computers that could be used to access the learning materials quickly.
- The required competences were known and a curriculum was available for rapid implementation
- Staff could study in their spare time this would not impact adversely on sales. Staff were happy to do this because a new incentive scheme was also introduced at the same time

Results

5.14 After 6 months an interim report was prepared. Summary details of the ROI analysis of the e-learning programme are shown below.

Fully loaded costs of TLC programme	\$
Development costs	354,500
Materials /software	68,500
Equipment	91,000
Sales support staff time – 8 people@ \$150 / day x 8 days	21,600
Sales staff time – zero – all done in own time as a result of sales incentive plan – see below	0
Analysis and evaluation costs	71,000
Total costs	606,000
Benefits Attributable to TLC programme	
Increased sales profit (pro rata, based on 6 months data)	1,867,000
Return on investment – first 12 months	
ROI = net increase in profit/ costs x100% = 1867,000- 606,000/ 606,000 x 100% = 206%	
Non quantified benefits	
No ROI has yet been calculated on the sales incentive plan which yielded an additional \$1,806,000. These costs, however, have been taken into account in the net profit figure above	

5.15 This example demonstrates the potential scale of the return on investment and illustrates the compelling argument for effective e-learning in appropriate circumstances, and should act as a 'call for action' whilst there is still uncertainty about the availability of accurate workforce data.

Costs of Developing Best Practice e-learning materials

5.16 Although it is not possible at this time to present a fully modelled financial business case for the reasons outlined above, we have set out in our recommendations a number of activities that Skills for Health could engage with that would provide some models for developing best practice e-learning materials that meet the strategic objectives of Skills for Health.

5.17 We set out below the likely costs of these activities as a guide. Having tested the market we believe that these represent an upper quartile range of costs.

5.18 The recommendations contained in Section 7 include:

- Produce a specific e-learning module as an exemplar of excellent e-learning so that others can understand the complexity of issues including the application of competence. We have examined existing e-learning provision and based upon this recommend a budget of £20,000 - £30,000 to be further refined by the Stakeholder Group.
- Invest in producing a demonstrator that shows how e-learning fits into the complex and varied activities that a member of staff and manager might undertake, and establishes clear links with the tools that have been developed to deliver a competent flexible workforce. We would recommend a budgetary figure of around £30,000, although the exact scope and therefore budget needs to be specified further.
- Extend the Skills for Health web based Competence Application Tools to include links to appropriate learning materials. We are mindful of the existing project to strengthen the electronic linkages with e-KSF but have not costed this additional requirement, although we would expect this to be less than £10,000. There may be additional annual licensing costs that need to be identified further if our recommendations are accepted. There will be additional costs of the resources necessary to collect relevant materials and assess against the competence framework.
- Implement a communication programme that promotes and explains the function and benefits of the proposed approach to all stakeholders. This programme should be used to demonstrate/exhibit the demonstrator. Wherever possible communication should be integrated into existing activities such as conferences and regional events planned to take place within Skills for Health and stakeholder organisations. We would expect that involvement in the Stakeholder Group, would ensure that the communication plan would be extended to all constituents. As a consequence we would not envisage significant additional expenditure to achieve this.

6. Conclusions

- 6.1 When the e-learning 'road map' for the healthcare sector was published and distributed 14 months ago it was well received by all healthcare constituents.
- 6.2 It offered clear opportunities for Skills for Health to work with partners to help shape the nature and focus of e-learning development and delivery across the Sector.
- 6.3 Since the publication of the 'roadmap' Skills for Health has moved forward on several of its objectives and aims. It has brokered SSAs in England and Scotland, with SSAs in Wales, Northern Ireland and the English Region currently under development. These are vital to enabling common focus, carried out a great deal work on developing the national workforce competence framework and identified what will be required to deliver a workforce profile capable of meeting sector requirements.
- 6.4 Many partners have made significant progress on developing additional tools to support e-learning, but this still lacks the coordination envisaged in the 'road map', and brings the value of best practice solutions to a wider audience.
- 6.5 What has emerged in all our discussions is that there is patchy awareness of all the work that has been done, of what is available, and how it could all work together to ensure the quality of learning and learning provision going forward. A point repeated again and again was that this 'patchy awareness' applies to all learning outside the traditional professional framework not just 'e'.
- 6.6 We conclude that this is an opportune moment for Skills for Health, in its role as promoter/advocate of the competence based approach, to pull together all the good work that has been done and demonstrate how it can be used in a cohesive and imaginative way to the benefit of employers, employees and the communities they serve.
- 6.7 Delivery of this strategic intent will require Skills for Health to:
 - Demonstrate what effective e-learning looks like.
 - Demonstrate the context within which learning, both 'e' and non 'e' operates now, and in the future.
 - Address the awareness and engagement of all stakeholders in relation to the competency approach and the role e-learning can play.

7. Recommendations

- 7.1 Our recommendations fall into three categories, raising awareness, engaging stakeholders, and supporting the process. If accepted, these recommendations will meet many of the Skills for Health key objectives outlined in section 4 above. In summary our recommendations are that Skills for Health takes the lead in:

Raising Awareness of the benefits of e-learning and competence based solutions to staff development

- Design and develop a 'best practice' e-learning product as an exemplar so that potential users and stakeholders can understand and replicate solutions which address the development of competence. Such a product should deliver the requirements identified in the Sector Skills Agreement research, namely they should resonate with NOS, and the Knowledge and Skills Framework, and should make best use of the workplace as a key learning resource in order to deliver evidence of functional competence and underpinning knowledge.
- Invest in producing a demonstrator that shows how e-learning fits into the complex and varied activities that a member of staff and manager might undertake, and establishes clear links with existing frameworks, tools and products that have been developed to deliver a competent, flexible workforce.
- Extend the Skills for Health web based Competence Application Tools to include links to appropriate learning materials.
- Identify quality learning materials which already exist and ensure that these development solutions articulate with the Skills for Health web based Competence Application Tools. This will provide added value to users of the tools and stimulate providers of e-learning to map their provision against NOS.

Engaging Stakeholders

- Implement a communication programme that sets out the benefits of the proposed approach to all stakeholders and establishes e-learning as an essential part of the blend of activities that will enable Skills for Health to achieve its aims.
- Establish a Stakeholder Group to oversee the implementation of the exemplar and demonstrator and its subsequent roll out.
- Establish, through the building of the exemplar, and from a review of quality procedures developed by BECTa, The e-Learning Alliance and others, a framework for assessing the quality of e-learning materials and the processes for updating the web based Competence Application Tools.

- Ensure that other current Skills for Health initiatives and projects recognise the findings of this report and vice versa.

Supporting the process

- Support the roll out of the exemplar and demonstrator to ensure the initial investment is maximised and embedded. Focus this roll out on issues which are of major and current importance to sector stakeholders, for example issues related to the Department of Health's 18 week wait initiative.

An e-learning exemplar

- 7.2 If the demonstrator shows how the process works, and how a member of staff might arrive at the point where it is considered e-learning might be appropriate, the exemplar will show the attributes of a world class piece of e-learning related to a priority issue for Skills for Health and /or its stakeholders.
- 7.3 The exemplar will:
- Be a model of a well designed piece of e-learning for a specific task
 - Be accessible as a stand alone item or be accessed from the demonstrator
 - Provide the learning design template for future units of e-learning
 - Inform the quality assurance process by acting as an benchmark artefact against other resources
 - It is anticipated that such an exemplar would be capable of contributing significantly to NOS/ KSF evidence requirements and of offering credits which could be contributed to academic and professional awards
- 7.4 The exemplar development will be overseen by a Stakeholder Group who will be responsible for agreeing the subject matter, the androgogical / pedagogical design specification, the procurement and the acceptance of the final product(s).

Producing a demonstrator

- 7.5 Whilst producing an exemplar of e-learning may show the attributes of effective e-learning, it is unlikely that the full potential of e-learning will be fully understood unless the context in which it is set is also demonstrated. The concept of a demonstrator that is self contained, and includes an exemplar of e-learning found favour with many of the interviewees.
- 7.6 The demonstrator should be a self contained artefact and may be a DVD or web site, but it should be capable of being operated and understood without the need for additional interpretation. It could be a simple 'stills' based demonstration of the elements of the process, or at the other extreme, a fully directed video with actors and voice over. Its principal aim will be to set the e-learning exemplar in a context and demonstrate the

process a member of staff would go through with their manager to identify learning needs and how these could be met.

7.7 The demonstrator set in the context of a personal development review, would:

- Provide a route map that shows and 'walks through' the process of moving from the development of a personal development plan, the identification of development needs, the securing of education and training and the acquisition of competence.
- Join up the process making links with all of the relevant tools and resources such as the e-KSF and existing learning resources.
- Demonstrate what needs to happen, why and how.

7.8 In a wider context the demonstrator would:

- Stimulate the development of quality materials
- Stimulate 'out of the box' thinking in order to identify and incorporate ways of assessing the application of knowledge.
- Enable people to understand competence
- Enable people to understand the importance of achieving competence in order to progress.
- Raise the profile of Skills for Health and establish the organisation as the authoritative voice in the healthcare sector.

Suggested Format for Demonstrator

7.9 The suggested format for the demonstrator starts with an exploratory discussion to identify a task in line with local need or that a member of staff wants to do, and follows the processes that they may use to acquire competence in that task.

7.10 The process is as follows:

Step 1	Step 2	Step 3	Step 4	Step 5
Completion of PDP	Identification of skills gaps	Identification of required competences Linkages to KSF? Linkages to NOS?	Location of sources of education and training support	Assessment

Figure 7.1 – The 5 steps

7.11 Step 1 – Within this step the manager would identify a new task that may be required.

7.12 Step 2 – The member of staff and the manager would explore what this means in terms of skills gaps.

- 7.13 This leads into Step 3, the identification of required competences. They may use the tools available, such as the Skills for Health Competence Application Tools, or they may be assisted by their Training and Development Manager in this process. The manager at this stage may be primarily interested in the acquisition of competence but the staff member may also be concerned with linkages to the KSF and perhaps to qualifications.
- 7.14 Step 4 - once the required competence(s) have been identified, a range of learning materials ('e' and non 'e') could be identified. At the moment there is no easy way of doing this. But if the availability of appropriate materials was identified in the Competence Application Tools the process of selecting materials would be greatly simplified. If this approach were adopted it would, of course, require materials to be mapped against NOS and KSF. Although this might appear costly, it has already been completed by some organisations such as the Core Learning Unit. Other providers may be encouraged to do so as it could provide them with a new channel to market. The benefit to Skills for Health is that it would stimulate greater usage of NOS within education and training programmes

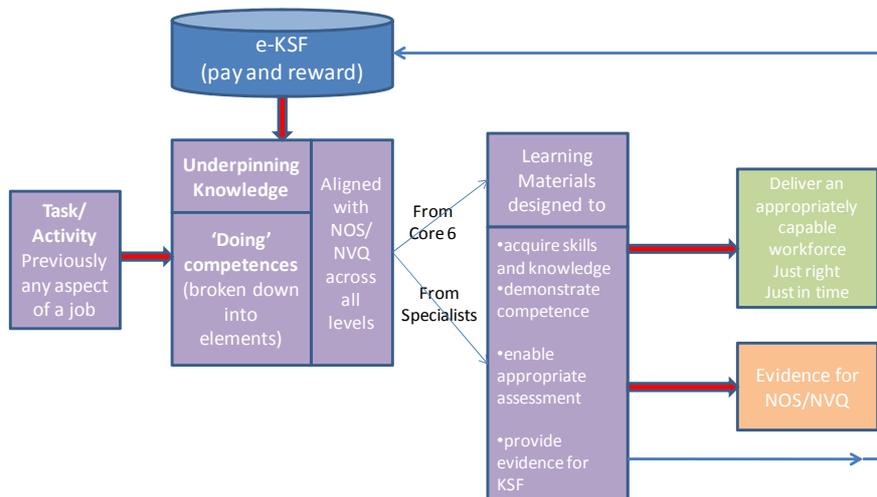


Figure 7.2 – Step 5 – competence assessment

- 7.15 Step 5 - Once the learning material had been selected a member of staff could work through this in the most appropriate manner and process (e.g. their Learning Management System, using their Personal Development Plan etc.). Once the learning had taken place, performance evidence could be stored as evidence of competence and used for demonstrating achievement in terms of the KSF, or in terms of vocational awards such as (S)NVQs and possibly Higher Education awards.
- 7.16 Currently there are imperfections with this model, which we would expect to be addressed as the demonstrator is developed.
- Where mapping of e-learning provision against competences exists, it generally extends only to the underpinning knowledge, and would need to be extended to the performance components of the competences.

- There needs to be clarity at the outset as to how to ensure that the learning allowed the generation of appropriate performance evidence for the assessment of competence.
- There is emerging evidence of the utility of 'e' approaches as a robust means of assessing knowledge and understanding. However the assessment of performance using electronic means alone is sometimes difficult and often impossible. This strongly implies that blended solutions involving a mixture of 'e' based and work-based learning are required. This process will be informed by the development of the demonstrator.

The Stakeholder Group

- 7.17 The 'road map' proposed last year, suggested that a multidisciplinary group should oversee the development of e-learning standards in a number of areas. Some of these, mainly the technical standards, are being developed with the Connecting for Health team. Others have been developed by BECTA and have widespread acceptance.
- 7.18 During our recent consultations we have been encouraged by the continuing desire to work collaboratively and believe that a small Stakeholder Group should oversee the development of the exemplar. This approach has found favour with the relevant stakeholders, but the desire to work together needs to be based around a specific task.
- 7.19 The Stakeholder Group would:
- Oversee the work on the exemplar.
 - Be led by Skills for Health.
 - Be responsible for developing a design template
- 7.20 It is essential that the group includes appropriate educational design expertise. Such a group could be based around the membership of the e-learning Alliance and could include:
- Sector employers
 - The Core Learning Unit
 - IVIMeds/IVINurse
 - Connecting for Health
 - The National e-learning Programme *e-LfH*
 - The NHS E- learning Alliance
 - The North West Academy – Mike Farrell
 - Recognised experts on KSF and NOS and on HE credit issues.
- 7.21 By initially working in a collaborative manner where each party brings its own expertise to the project, and fulfils that specific role rather than representing their 'host' organisation, the expertise within the healthcare sector will be used to produce the materials that exemplify current best practice and future learning design requirements.
- 7.22 Bringing together these stakeholders to complete the relatively succinct task of specifying the exemplar will also build confidence and trust and establish buy-in. We recommend that this process will require facilitation from someone outside the Stakeholder Group to ensure timely progress.

Consider extending the Skills for Health web based Competence Application Tools

- 7.23 The current range of tools available from the Skills for Health web site recognises the complexity of the competence approach. Whilst still in the early days of acceptance, these tools are helping managers and staff create and manage job outlines as an initial phase of transforming the workforce.
- 7.24 However, as illustrated in 7.14 above, it is not easy for a member of staff to link the competence that they are trying to achieve, with the learning materials that may be available. As stated previously, some of this mapping has already been carried out by organisations such as the CLU, but this is not held on the Skills for Health database.

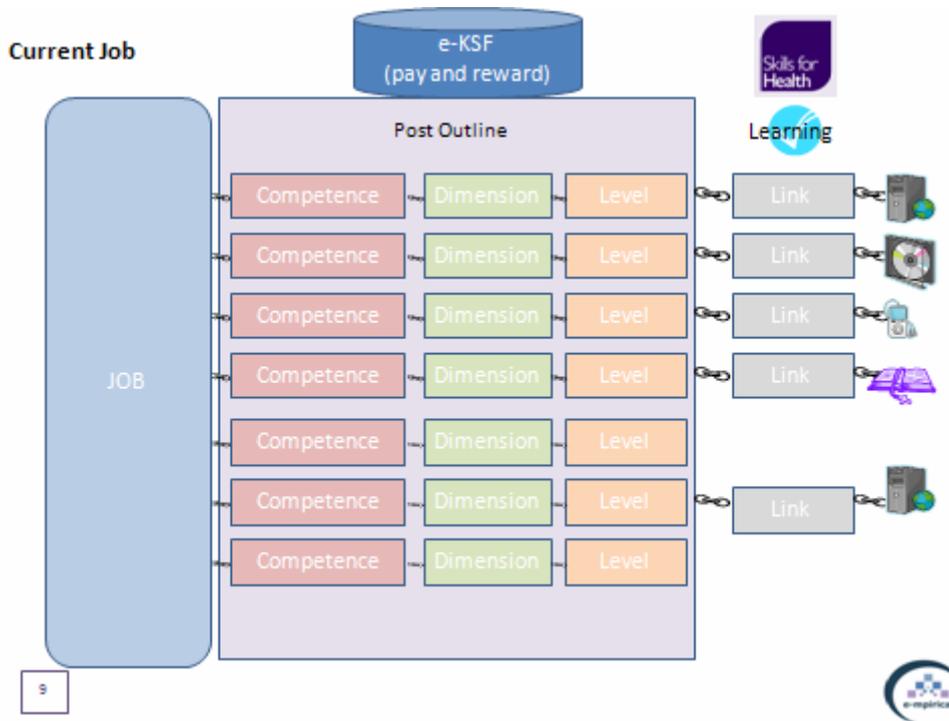


Figure 7.3 alignment of learning materials to competences

- 7.25 Adapting the Skills for Health Competence Application Tools to include this information would enable a clear link to be established **and** maintained.

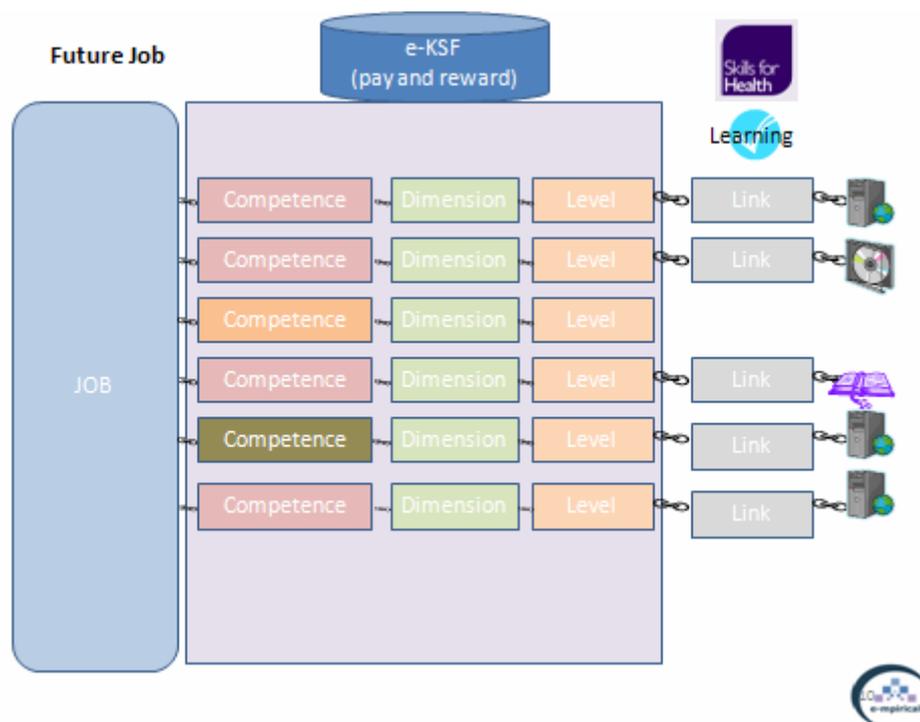


Figure 7.4 rearranging the competences

- 7.26 Once mapped in this fashion, the linkages will remain in place for the future when, and if, a new job requires the same competences.
- 7.27 The linkages will only be short descriptions of the material and will include information on how to obtain the materials with indicative costs. It is not proposed that Skills for Health act as a broker for these materials or become involved in 'selling' materials.
- 7.28 One of the benefits of this approach, centralising the linkage information on the Skills for Health database, is that it can be used subsequently to populate other databases, it will not mandate a particular approach on employers.

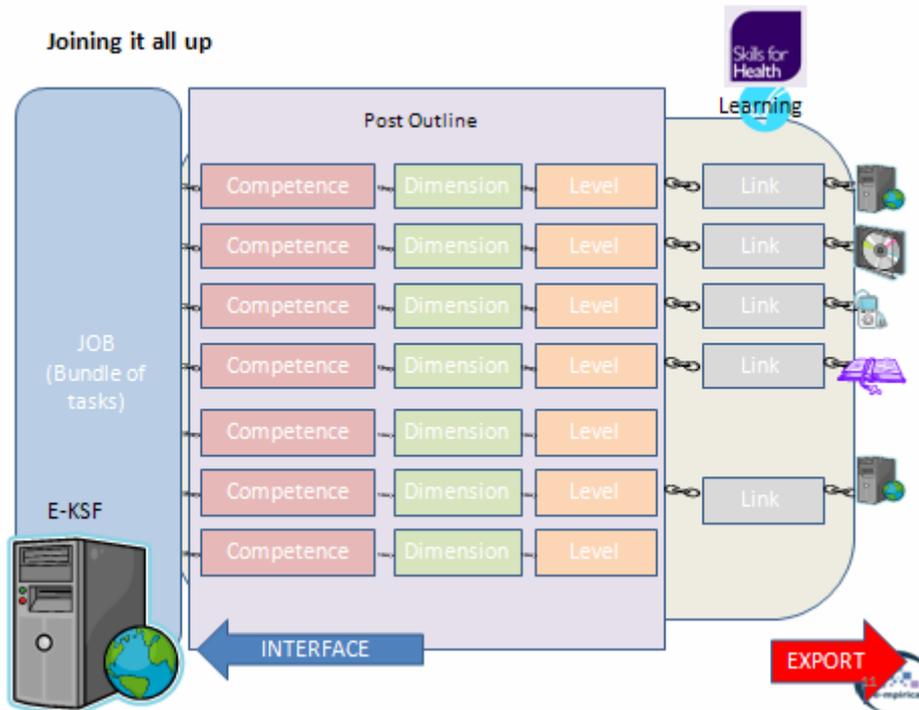


Figure 7.5 joining it all up

- 7.29 For those employers using the e-KSF, the linkages could be obtained within the e-KSF using the same interface technology that is currently due to be implemented in September 2007. For those not using e-KSF, the same information could be exported from Skills for Health to other systems.
- 7.30 We recognise that there are other considerations apart from the technical ones discussed above. Principally we recommend that further consideration should be given to the governance of 'quality assuring' the process that established the links to appropriate learning materials. In these deliberations, the inter-relationship with the e-KSF and the governance of this will need to be recognised. The role of the KSF Group (KSF-G) needs to be considered in this wider context.

Communicate to all stakeholders

- 7.31 A recurring theme throughout our research has been that there are too many initiatives and activities going on to get a grasp on anything in detail. Joining up the various facets is not just the task of the demonstrator and exemplar.
- 7.32 An effective communication strategy that showcases the demonstrator and exemplar should build upon existing communication activities being undertaken by Skills for Health so that this is not seen as 'something else'. Planned and executed effectively, the plan should:
- Raise the profile of Skills for Health.
 - Raise awareness of the KSF and all related tools.
 - Demonstrate the Demonstrator.
 - Show people how everything can all work together.
 - Showcase innovative e-learning solutions.
 - Raise awareness of the potential of 'e'.

7.33 It is outside the brief of this project to recommend a communication strategy, but the most effective methods suggested to us during the research included:

- Regional workshops.
- An comprehensive engagement programme.
- Workshops linked to other Skills for Health activities, e.g. raising awareness of the local SSA work in the East of England.

Engagement – Other

7.34 Having addressed the engagement of the Stakeholder Group via the design of the exemplar, and the communication strategy to engage the workforce, we recommend two additional actions:

- Whilst the approach outlined above will reach the majority of staff and employers at a broad level, there will be a need to extend the process to develop further understanding of the application and design of effective learning models. It is recommended that the principles of the demonstrator be applied to a small number of existing projects and pilots to develop in-depth experience of the issues that will emerge over the coming months and years. A good opportunity for this resides within the work related to the 18 week wait which Skills for Health is engaged in.
- The current work being undertaken in assessing the needs for LSC funded programmes, 'Sector Skills Agreement – Scoping the Demand by Healthcare employers for LSC funded programmes in the years 2016/17 – Phase II Final Report (Draft) 2007' identifies a vast range of 'complexities' affecting the arena within which our recommendations are set. In implementing our recommendations, Skills for Health should be aware of the emerging conclusions of the LSC report. Similarly the LSC report should be informed of any recommendations from this report that Skills for Health chose to implement.

Supporting the process

7.31 Whilst our recommendations on awareness and engagement set out proposals for initial action that go both 'wide and deep', we are mindful that these may not be sufficient to sustain the activity in the long term.

7.32 Longer term support, as exemplified by the e-learning network in Wales, is required to ensure that:

- Employers (and employees) are supported at a regional level to use the range of tools.
- A best practice network is developed within the regions and countries.
- Further mapping and gapping activity is carried out to identify best practice.
- Active encouragement is given to those organisations that want to 'submit' their learning materials for 'quality assurance' and inclusion in the competence database as discussed above.

- 7.33 We are aware of the emerging view that there is a role for a national network of academies within Skills for Health, but recognise that the thinking may not be fully developed at this point in time. We would however recommend that the support issues identified above should form part of the thinking on the future of academies.

Appendix A - Interviewee List

Jonathan Evans	Project Manager
John Rogers	Chief Executive
Maria Whittaker	Director Wales
Danielle Price	Director NI
Avis Mulhearn	Regional Director North East and North West -
Bob Adams	Regional Director South West and West Midlands -
Jennifer Fenelon	Regional Director South East & East -
Kathy Tyler	Regional Director London -
Helen Fields	Associate Director Policy
Cathy O'Sullivan	Skills for Health
Angelo Varetto	Programme Manager Development and Cross Sector
Maggie Havergal	Manager for Scotland
Mike Farrell	North West Academy
Julia McGregor	North West Academy
Gill Cunnah	North West Academy
Julie Smith	Core Programmes Learning Unit
Adam Wardle	Workforce Confederation
Alun Ryan	e-learning for Health
John Taylor	e-learning for Health
Paul Schanzer	National Leadership and Innovation Agency for Healthcare
Liz Rogerson	IVIMEDS
Angela Clarke	National Library for Health
Gilly Salmon	e-learning Alliance Chair
Tim Newham	Think Associates
Kubair Shirazee	ikonami ltd

Appendix B - Sector Skills Agreement Annex 7

DEVELOPMENT AND IMPLEMENTATION OF E-LEARNING SOLUTIONS

Background and purpose

The recently published report "Modernising healthcare training: e-learning in healthcare services", identified a number of clear benefits which would arise from the establishment of a coordinated, sector wide, e-learning strategy. These benefits were summarised as follows:

Strategic benefits

- Better use of NHS purchasing muscle and improved return on investment.
- Learning available when and where needed.
- Ensure more equitable access to training opportunities.
- Assured quality and quantity of learning supply.
- Reduced duplication and costs - increased efficiency.
- Improved information flow about demand and supply, to assist planning.
- Coordination of discrete activities such as the Knowledge and Skills Framework (KSF), the Electronic Staff Record (ESR), qualifications and career frameworks.
- Customisation of study routes and qualifications.
- Promotion of an NHS wide knowledge economy.
- Stimulation of communities of learning.

Benefits to organisations

- Improved performance through linking learning design to performance monitoring criteria.
- Improved knowledge of what is available.
- Improved knowledge management.
- Improved timeliness of supply of learning – learning on demand becomes a reality.
- Improved quality of learning.
- Improved efficiency of learning supply.
- Improved return on training investment.
- Direct links between the ESR, learning supply and the KSF outcomes, driven by performance reviews.

Benefits to learners

- Improved access to learning – a 'just here, just now, just enough' model of training and development.
- Improved access via e- tools to research and communities of learning.
- Improved quality of learning materials and learning support.
- Reduced costs of learning.
- Links between ESR, KSF, National Occupational Standards (NOS)/professional standards and qualifications frameworks.
- Facilitation of multi-professional learning.
- Transferability of study routes and qualifications

Appendix C – Strategic Plan 2007-2012

		Reference
<p>Skills for Health’s purpose is to:</p> <p>Develop a skilled, flexible and productive workforce for the whole health sector in all UK nations to raise the quality of health and healthcare for the public, patients and service users.</p> <p>To do this we will:</p>		
<p>Influence education and training supply</p>	<p>Ensuring the sector gets the skills it wants through influencing learning supply by developing a “Sector Skills Agreement”.</p> <p>Developing employer-led partnership approaches to quality assurance of education and training.</p>	1.2.1
<p>Sector Trends</p> <ul style="list-style-type: none"> • more use of patient pathways, multi-professional and multi-disciplinary working, • a changing balance between community and hospital based services, • organisational change and the need for increased productivity 		2.1.7
<p>Workforce Trends</p> <ul style="list-style-type: none"> • Removal of barriers preventing those with potential to progress their careers and gain appropriate competences and qualifications • Better partnership between employers, education commissioners and providers of skills development in planning for workforce skills and productivity at all levels and across the whole workforce. 		2.1.8
<p>Challenges and Gaps</p> <ul style="list-style-type: none"> • Continuing barriers to skills development resulting from differences of funding across different workforce groups particularly for staff without professional qualifications; combined with lack of suitable accessible or flexible provision. • The need to enhance employability as an integral element of workforce skills and development across the sector – including access to literacy, numeracy, language and IT skills for those in the workforce who will benefit. • The challenges of delivering innovative learning design solutions, inclusive of e-learning, and how more creative, 		

<p>customised learning can support work-based skills development.</p>	<p>2.1.9</p>
<p>Future Skills Requirements</p> <ul style="list-style-type: none"> • SSA evidence points towards future skill needs in the following key areas: • Increased investment in literacy, numeracy, language and IT skills • Increased demands for adaptability and creativity (innovation) • Increased leadership and management • Knowledge management and IT skills • Increases in qualification levels 2, 3 and 4 skills and in development beyond healthcare professional registration to support career and educational progression pathways and underpin new and expanded roles • Increased demand for more “just here, just in time, just enough” learning and development solutions 	<p>3.1.2</p>
<p>Addressing future Skills needs This strategic plan and the Sector Skills Agreements provide renewed impetus for re-defining workforce priorities, developing stretching measures to evaluate progress and impact, and for building on existing successes.</p>	<p>3.1.6</p>
<p>Strategic Intent</p> <p>Our over-arching strategic intent is to:</p> <p>Develop a skilled, flexible and productive workforce for the whole health sector in all UK nations, to raise the quality of health and healthcare for the public, patients and service users</p>	<p>5.1.2</p>
<p>Strategic Aim 3</p> <p>Implement solutions which deliver a skilled, flexible and modernised workforce capable of improving productivity, performance and reducing health inequalities.</p> <ul style="list-style-type: none"> • Enable the recognition and transferability of achievement within the UK and Europe to meet the needs of employers and learners, including the development of a rationalised framework of qualifications. • Champion the development of innovative education, training and development solutions, including e-learning. • Co-ordinate a shared approach to cost effective quality assurance of healthcare education, helping to optimise patient safety and wherever possible reduce the regulatory burden on education providers. 	<p>5.1.4</p>

Strategic Aim 4

Champion an approach to workforce planning and development that is based on the common currency of national workforce competences.

- Develop, maintain and review a comprehensive database of national workforce competences and ensure they are recognised as the common language and currency of workforce development.
- Produce a series of frameworks, products, tools and guides to support recognition and transferability of skills which have an excellent reputation for quality and ease of use.
- Demonstrate the benefits to the public, patients, service users and employers of a competence based approach to developing a more skilled, flexible and productive workforce.

5.1.4

Appendix D - Operational Plan

<p>Champion the development of innovative education, training and development solutions, including e-learning</p>	<p>Through the UK e-learning alliance - support and guide implementation of an e-learning road map for the sector (in England) and explore applications and potential in other Nations</p> <p>Demonstrate application of e-learning using Skills for Health products</p> <p>Use outcomes of country and regional SSA plans to promote further approaches to flexible, responsive provision</p>	<p>Complete business case and consult with key partners (initially in England) on implementation and funding implications</p> <p>Exploratory discussions with other Nations during 2007 (including contribution to NES led development plans for the 'e' library in Scotland).</p> <p>Identify and negotiate funding sources to develop tailored materials</p> <p>Articulate with other sector based e-learning, new role developments, KSF implementation and work based learning activity</p> <p>Align with Modernising Careers, NWW, skills escalation and demonstration site work programmes/ emergent outcomes</p>	<p>Brian Payne Strategy and UK Networks Directorate</p> <p>Working with Executive, Associate, Country and Regional Directors</p>	<p>Business case for the non professionally regulated groups within the sector – and roll out implications agreed - end 2007</p> <p>e-learning materials funding negotiated by Autumn 2007</p> <p>Recommendations on the future work required to support the continuing development of work based learning within the sector</p> <p>Regional SSA and country plans identifying approaches consistent with local priorities</p>
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Appendix E – Core Learning Unit – Programme Update 2007

Programme information NHS CLU

Explanation of numbering:

1. Brief description of programme learning time and delivery methods
2. Accreditation
3. Development information

CURRENTLY AVAILABLE	
1. Infection Control:	clinical and non-clinical learning pathway
	<ol style="list-style-type: none"> 1. 2 hours to complete the e-learning component, which CNO recommends every member of staff completes. The progression modules are for non-clinical staff and take approximately 6 hours. They are composed of blend of delivery techniques: e-learning, facilitated face to face, group work, work based practice and videos. There are face to face materials for the whole programme. 2. City and Guilds Level 2 or an online test and certificate. Part of Common Induction Award. £7.30 per module payable direct to C&G 3. 4 further modules will be developed in 2007/2008, for specific clinical interventions example Urinary Catheters and Central Venous Lines.
2. Fire Safety Awareness	
	<ol style="list-style-type: none"> 1. 2 hour e-learning programme designed to support and enhance the normal face to face delivery within an organisation. 2. City and Guilds Level 2 or an online test and certificate - part of Common Induction Award. £7.30 per module payable direct to C&G 3. Endorsed by National Association of Fire Officers and NHS Employers
3. Health and Safety Awareness	
	<ol style="list-style-type: none"> 1. A one hour e-learning programme designed to support and enhance normal face to face delivery within an organisation 2. City and Guilds level 2 – part of Common Induction Award. £7.30 per module 3. Endorsed by Health & Safety Executive and NHS Employers
4. Manual Handling	
	<ol style="list-style-type: none"> 1. A one hour e-learning programme designed to support and enhance normal face to face delivery within an organisation 2. City and Guilds level 2 or an online test and certificate – part of Common Induction Award. £7.30 per module 3. Endorsed by National Back Exchange and NHS Employers
5. Concise Customer Care	
	<ol style="list-style-type: none"> 1. 10 hours face to face, work based practice and workbook 2. Open College Network level 1 or a certificate of completion. £13 per module payable direct to OCN 3. Revised 2006 to comply with new NOS
6. Long Customer Care	
	<ol style="list-style-type: none"> 1. 40 hours learning – Face to face, work based practice and workbook 2. Open College Network level 2 or certificate. £30 payable to OCN 3. Revised to comply with new NOS
7. Equality and Diversity – Respect for People	
	<ol style="list-style-type: none"> 1. A 2 hour e-learning programme. A workbook version is available from Grassroots

2. Under development with City and Guilds – level 2 – will be part of the Common Induction Award. £7.30 payable to C&G
3. Available from July 2006. New version online March 2007

8. Disability Awareness

1. A 2 hour e-learning programme. A workbook version is available from Grassroots
2. Under development with City and Guilds – level 2 – will be part of Common Induction Award. £7.30 payable to C&G
3. Available from January 2007 update/policy revision costs with--Grassroots

9. Introduction to Patient Safety

1. A two hour e-learning programme
2. Will accredit with C&G
3. Programme available from Jan 2007. Developed in conjunction with National Patient Safety Agency

10. Being Open

1. A blended learning programme which can take from 10 hours to several days
2. Will accredit with C&G
3. Developed in conjunction with National Patient Safety Agency

11. Infusion Devices

1. A 40 hour learning programme with a blended learning approach, e-learning, face to face, all supported by work based practical Competencies. Programme designed for staff working with infusion Devices – usually staff at a post graduate level. Including social care staff
2. City and Guilds level 3. £22.70 payable to C&G
3. Developed in conjunction with National Patient Safety Agency

12. Medical Gasses for Nurses

1. A 2 hour e- learning programme to meet HTM policy
2. Negotiating with C&G
3. Working in partnership with BOC to develop porter and estates staff programmes for management of O2, to meet HTM policy.

COMING SOON

18. Conflict Resolution

1. An e- learning programme is under development with the CFSS and expert reference group
2. Will be accredited by City and Guilds at level 2 – will be added to Common Induction Award when completed. £7.30 payable to C&G
3. Expert ref group scoping programme

19. Mixed Messages

1. A one hour e-learning programme
2. Will be accredited with C&G
3. Programme available from April 2007

20. Immunisation and Vaccination

1. A paper based programme developed by the teaching PCTs. An expert ref group scoped the programme and will develop an e-learning version.
2. Will be accredited with C&G
3. Available from Sept 2007

21. Protection of Vulnerable Adults

1. Sourcing this programme at the moment.
2. Will seek accreditation from City and Guilds
3. Currently sourcing programme. Aim to launch in 2007

22. Public Health

1. Expert ref group scoping final programme with DH and the Open University. Adaptation of a level 3 programme currently available
2. Will be accredited with City and Guilds at level 2, and intended to be part of the Common Induction Award
3. Aim to launch in 2007

23. Child Protection

1. A 2 hour e-learning awareness programme which can be accessed as a paper based work-book
2. None at present, but will explore with C&G. Will have a certificate from NSPCC
3. Pilot phase near completion and will be released in June 2007. Policy and procedure changes with Educare. Scoping project with IHM to provide supervisors level 3 child protection programme.

24. Nutrition for Patients

1. Under discussion/ being sourced at the moment.
2. Linked to Essence of Care accreditation
3. Aim to launch in 2007

26. Mentoring for Success

1. A paper based traditionally delivered programme with some work based learning and a workbook/portfolio. Aimed originally at Porters, but can be used in any role at that level.
2. None currently
3. Some e-elements will be developed in 2007