

JISC

e-Administration

Improving Staff i-Skills

An introductory guide



697. **Skill**. N. skill, skilfulness, address; dexterity, dexterousness; adroitness, expertness &c. adj.; proficiency, competence, technical competence

698. **i-Skill**. N. i-Skills, information skills, information literacy, e-literacy, information fluency...

699. **Unskilfulness**. N. unskillfulness &c. adj.; want of skill &c.; incompetence; inability, infelicity, indexterity[obs3], inexperience; disqualification...

There is a pressing need for further and higher education institutions to promote and improve staff i-skills, but this area is under-researched and lacking in guidelines for practitioners.

This document has been compiled for all those with a responsibility for developing staff in further and higher education. It will help you to:

- Define i-skills
- Understand why they are important for individuals and institutions
- Recognise i-skills in context
- Make a start on an i-skills staff development plan
- Develop ideas to help you deliver i-skills provision for your own institution

Defining i-skills

What's it all about?

Working in a rapidly growing and complex digital environment has increased our dependency on information. But there is increasing evidence that our information skills are not keeping pace in any systematic fashion. We all need help to develop the techniques we use, often unconsciously, to handle information in our daily lives – our i-skills.

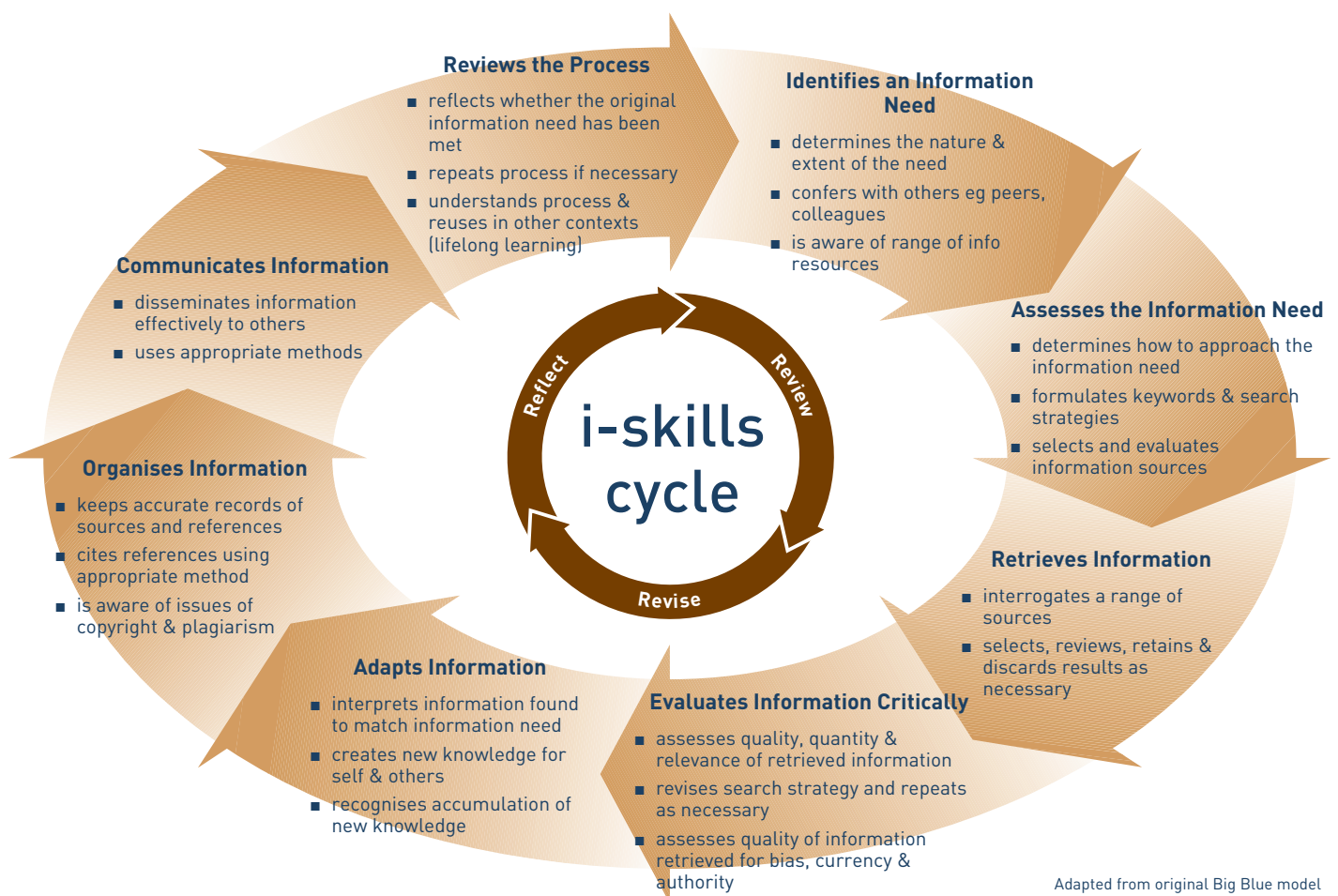
You may not have heard the term 'i-skills' up to now, but probably terms such as information skills, e-literacy, information literacy, knowledge management and research skills are more familiar. This guide uses the term **i-skills** to encompass all of these.

i-Skills are defined as: **the ability to identify, assess, retrieve, evaluate, adapt, organise and communicate information within an iterative context of review and reflection**

But what does this mean in practice and how can staff development help?

The i-skills cycle

i-Skills are needed at every stage of the information cycle and you may have a varying level of involvement at different stages, depending on your role. In some areas you may be required to have an expert level of i-skills. In others you will only need a working knowledge and may depend on other colleagues for specialist help.



For those promoting staff i-skills, it is not so much the choice of terms used that is important, but understanding how the skills in this cycle should be applied in the context of someone's work role.

The table below gives some scenarios of where and how i-skills might be used. You should bear in mind that the steps in the process are not necessarily discrete nor always carried out in sequence. They can be applied in many different contexts.

Identify/assess information need

Planning any new information-related work – a presentation, report or other publication – requires identifying and assessing information needs. Alternatively, it could be a case of recognising that existing information needs to be updated, added to or improved, or adapted for a new purpose, dissemination route or medium.

Locate/retrieve

Information can be found in many places, and there are efficient ways to both find and retrieve it - maybe on a website, or via a search engine. Would you know which browser to use for what purpose, and be able to search efficiently and effectively? Once the information is located, it may need to be ordered over the Internet or printed – are these processes understood? If someone is assisting the search, have you briefed them properly about what you are looking for?

Assess/evaluate

If you're the end customer for the information, you should be in a good position to do this step yourself. If others are involved, however, do they fully understand the aims and criteria they need to work to? Do you have the skills necessary to evaluate information from the web as opposed to traditional academic or business sources?

Adapt/create/use

Do you know how to display information effectively, in the most relevant way, and using a range of media, including electronic? If others prepare this step on your behalf, do you know enough about the capabilities of different media to guide the process, and assess the outcome?

Organise

Do you (or others in your team) know how to reference sources and manipulate data? Are good records kept of sources used, and information gathered, for future reference? Do you know how to keep your email files well-organised and free of unwanted data?

Communicate

How are your presentation skills? What about in an electronic environment? Are you able to adapt the presentation to suit another environment? Do you know how to upload information onto a Virtual Learning Environment (VLE) for dissemination or sharing with others?

Reflect/review

As with all processes, the last step is to review and reflect on the outcomes, the effectiveness and efficiency of the process, and whether any improvements or additional information are needed.

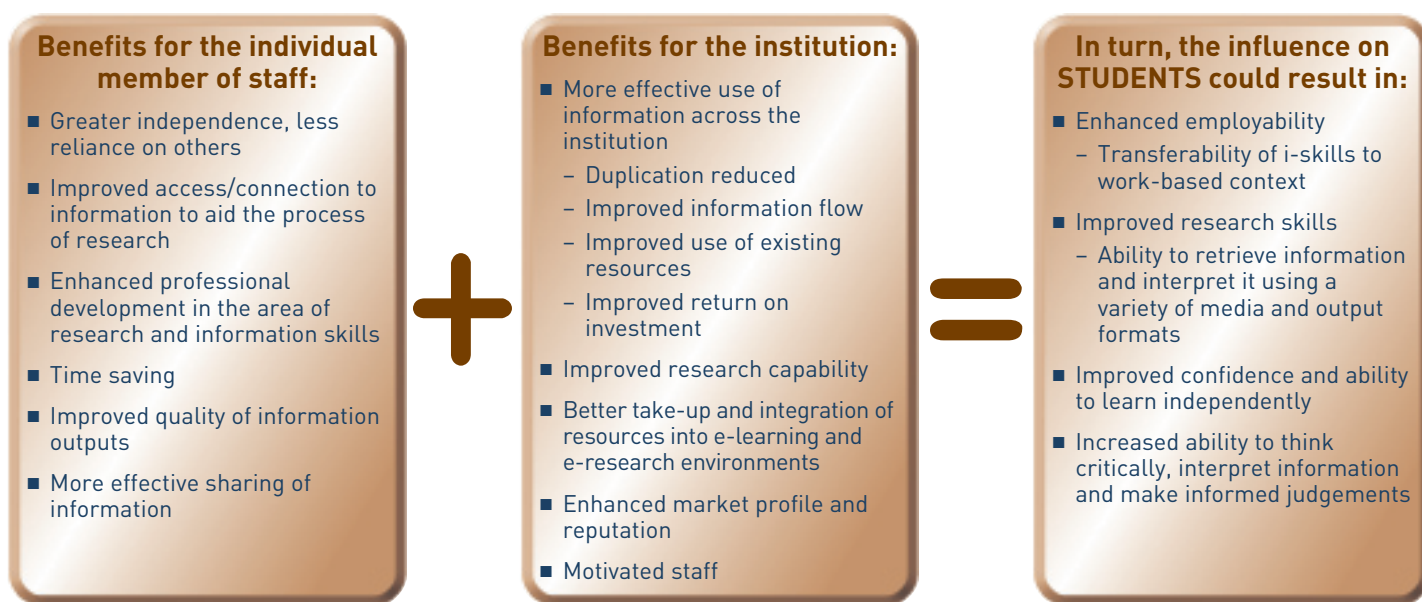
Adding up the benefits of better i-skills

Taking steps to improve i-skills has not always been a priority for staff in further and higher education (FE/HE), and this can present some hurdles for staff development teams. It is therefore helpful to understand the benefits of improving i-skills for different target audiences in order to promote support activities effectively.

In order to achieve the benefits outlined, a greater understanding is required of the role that i-skills should play

in creating cohesive and sensible approaches to information management. Some members of your institution may already be using i-skills – it could be a matter of harnessing these skills to greater effect either within their own areas, or collaboratively across the institution. The table below gives examples of the types of contribution and collaboration that can be made:

Is this how i-skills are practised in your institution?



i-Skills in context

Library/Learning Resources	Admin/Support Staff	Curriculum/Academic Staff
<ul style="list-style-type: none"> ■ Specialist knowledge in some areas, eg sourcing, filtering and organising information ■ Supporting curriculum/academic information needs ■ Advising and/or training others in managing information and technology 	<ul style="list-style-type: none"> ■ Supporting curriculum/academic or learning resources function with information and organisation ■ Developing presentations of information against a provided brief 	<ul style="list-style-type: none"> ■ Specialist knowledge for evaluation and analysis of information in own subject area ■ Supporting others by providing a clear brief for those assisting in an information process ■ Delivering/disseminating information to suit a specific audience

How does your institution measure up?

Looking at this i-skills analysis, do you recognise your institution? Does it foster its areas of strength, or try to live with the weaknesses? And what are the implications?

An institution with good i-skills will:

- Manage information efficiently and effectively
- Communicate appropriately internally and externally
- Keep individuals up to date with new technologies
- Use information and technology for better organisation of their work and time
- Use i-skills and associated processes as a vehicle to improve quality



It has the opportunity to develop:

- A shared approach to managing information processes, as required by the Common Inspection Framework
- A sound foundation for achieving and/or maintaining high standards in research and teaching/learning
- A better understanding and use of associated technologies, such as VLEs
- A reputation with students for having a motivated, progressive approach
- A healthy mix of independence and interdependency across the institution
- Effective use of resources (better return on investment)
- Increased use of facilities and services, such as remote access to institution's Intranet

An institution with poor or patchy i-skills is likely to:

- Duplicate effort
- Miss important information
- Suffer from confused communication or misunderstood requirements, instructions and/or criteria
- Have a poor understanding of own and others' roles in information processing
- Demonstrate a lack of awareness or understanding of their role in helping to achieve good communication and keeping up to date with information
- Have 'no time' to spend on keeping up with new ideas or attending training



It is at risk of:

- Demotivating those with good or specialist i-skills
- Falling behind its competitors due to insufficient knowledge and expertise of up-to-date technology and thinking
- Developing/maintaining the 'silo' effect, where there is little sharing or understanding across the institution of the 'big picture' and their role within it
- Failing to benefit from cross-pollination of skills and information between departments
- Inefficient/insufficient use of information resources and technologies
- Losing (motivation of) students interested in becoming proficient in i-skills and associated technologies
- Vulnerability to misuse of information and technology (such as viruses, email, spam, Intellectual Property Rights etc) through lack of understanding

Planning your staff i-skills programme

In this section you will find ideas for moving i-skills into the mainstream of your institution's staff development programmes.

Advice and suggestions are aimed at everyone involved in i-skills delivery – staff developers, senior management, library and information services teams, teaching and learning support and so on.

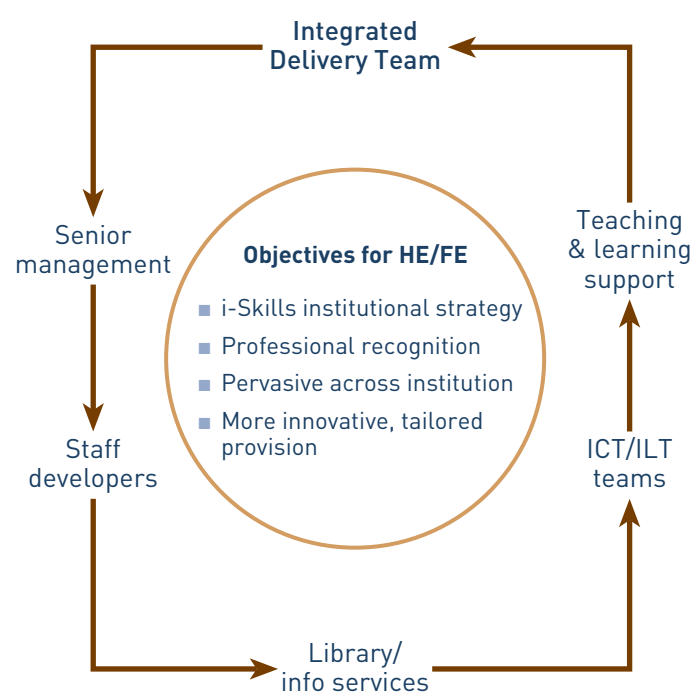
Current state of play

i-Skills training for students is widely available across FE/HE. The provision for staff in institutions appears to be fragmented, however, with few structured programmes in place and patchy take-up. JISC commissioned a study in 2003 to look at this and the findings confirmed the need for more support in this area:

- Institutions and individuals are not sure what i-skills are all about, so do not recognise that there is a need to improve them
- Only in a few cases are i-skills part of an institution-wide strategy for development of staff core skills
- i-skills are not explicitly recognised in professional development frameworks or appraisals
- No examples were found of i-skills staff development provision for non-academic staff
- Patchy take-up of i-skills training is a widespread problem
- Many academic staff are getting by, while students' expectations are increasing
- Most i-skills staff development is provided by library staff, sometimes in collaboration with Staff Development and IT/IS teams
- Provision is often via ad hoc sessions rather than structured programmes and tends to take a 'one size fits all' approach
- Subject-focused provision – i-skills in context – works best
- **BUT, once people take the first step in i-skills training, they come back for more**

What's the objective?

There are few roles in FE/HE where i-skills do not apply, so staff development in this area should be planned, supported and delivered as part of your institution's strategic framework. Improving i-skills can make a difference to the performance of the whole institution as well as that of individuals, so staff development provision needs to be part of the mainstream rather than a 'library thing'.



Recognition within your institution of the contribution i-skills can make to professional development is essential if staff are to be motivated to spend time on i-skills training.

For i-skills to be pervasive across the institution, everyone needs to be involved in an appropriate way:

- Senior management
- Staff developers
- Library & information services
- Teaching and Learning support
- Academic departments
- Administration teams

The first step in addressing this and ensuring strong buy-in across your institutions is to develop a clear plan for your i-skills training, involving all relevant stakeholders.

Including specific i-skills objectives within your institution's strategic plans (information, ICT, HR, teaching and learning) is an important first step and needs senior management support.

What should you do next ? Read on...

Getting started on your i-Skills Staff Development Plan

Feedback from surveys of current i-skills staff development provision indicates that there is a lack of strategic planning in this area. This means that ownership for i-skills development is fragmented across several different departments and central services. More importantly, i-skills are not explicitly recognised in FE and HE institutions' strategic plans.

The first step in addressing this and ensuring strong buy-in across your institution is to develop a clear plan for your i-skills training, involving all relevant stakeholders.

So what needs to be covered in the plan?

The outline plan opposite may be a useful starting point for developing a strategic i-skills plan. For practical suggestions to help you develop, deliver and promote staff i-skills, why not take a look at the insert in this document entitled **Starter for 10**. If the insert is missing or you would like further copies, please visit www.jisc.ac.uk/cpdresources.

The i-skills challenge

Recognition

Consensus

Commitment

Collaboration

i-Skills Staff Development Plan Outline

Objectives

- What are you trying to achieve?
- Set measurable targets
- Link these explicitly to your institution's ICT, HR and staff development goals

Needs

- Identify the needs of all target audiences, academic and non-academic
- How are they inter-related?

Action plan

- What actions will you take to meet these needs?
- What content is required?
- How will staff development be delivered (where, formats, timing)?
- Can you tie in the provision with other activities that staff are already attending?
- Are there external agencies with which you wish to collaborate?

Communications

- How will you promote provision effectively to each target audience?
- Have you made clear the benefits of improving i-skills?

Measuring impact

- How do you plan to measure the impact of your provision?
- Do you have baseline information on i-skills capability prior to the training?
- What can you do to assess the longer term benefits of your provision on working practice and culture?

Schedule

- Do you have a detailed schedule for developing and rolling out your plan?
- Are all key people available?

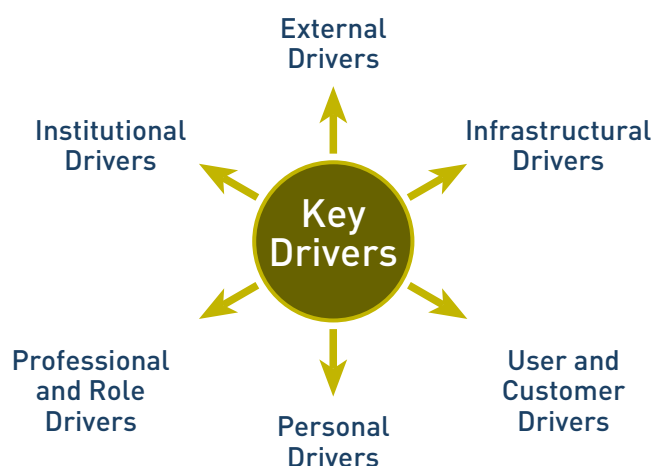
Resources

- Have you involved relevant senior staff to ensure their support?
- Have you included a range of staff types in your planning group?
- Do you have a central contact person as a focal point for promoting staff i-skills?

Align your programme with drivers for change

New staff development initiatives in the i-skills area will have more chance of success if they are aligned with drivers for change in institutions. There are several types of driver that can be influential for i-skills programmes and you will want to tap into those that have most relevance for your institution.

Types of staff development driver



External Drivers

Can you link your programme to institutional performance in the RAE or QA reviews?

Institutional Drivers

Can you demonstrate that it will contribute to improved performance and processes? Will it promote consideration of i-skills in recruitment and staff appraisal processes?

Infrastructural Drivers

Is it clear how i-skills can be integrated in core e-learning and ICT processes within the institution?

Professional and Role Drivers

Does your programme appeal to those seeking professional development? Can you offer accreditation or recognition by professional bodies for different roles?

User and Customer Drivers

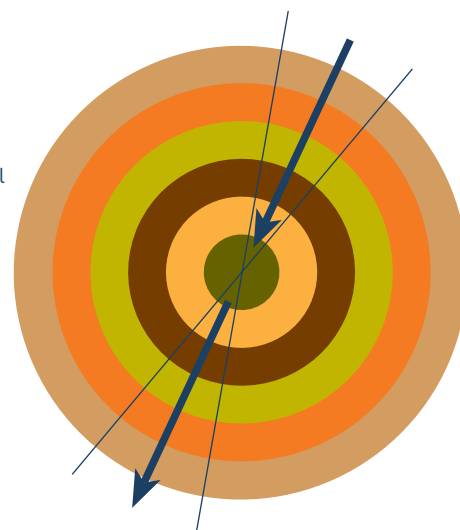
Student expectations of staff i-skills are increasing – can this be used to help promote your programme?

Personal Drivers

What personal issues are driving i-skills development and are you addressing these in your programme?

Layers of drivers

- External
- Institutional
- Infrastructural
- User/customer
- Role/professional
- Personal



This second diagram indicates that it is possible to start at any point in order to stimulate interest and demand. But you should be aware of the other layers of drivers that may come into play, and that may need to be managed to ensure that they support rather than inhibit achievement of the objective.

Working with other organisations

A number of support organisations and initiatives in FE and HE have already made progress in promoting staff i-skills and they can provide useful input to any programmes you are planning for your institution.

Netskills runs workshops on ICT skills, e-learning and i-skills for FE and HE. Staff developers and library teams can also license Netskills materials for use on in-house training courses. Netskills has recently been involved in a UK-wide programme of advance information skills training for staff in public libraries.

The **Higher Education Academy (HEA)**, formerly known as the Learning and Teaching Support Network, comprises a Generic Centre and 24 subject based Centres. A number of staff i-skills support services have been developed within its subject network:

- The Supporting New Academic Staff (SNAS) Programme is developing a range of materials and training events to support selection of teaching resources

- The LawPaths project aims to support effective use of new, digital legal sources
- LTSN Information and Computer Sciences has undertaken a review of e-literacy packages for students, which may provide useful pointers for staff i-skills provision

Regional Support Centres offer a varied programme of staff development events and courses for FE institutions and can be a useful partner in developing your i-skills programme. Some centres are also developing forums that aim to address the staff i-skills challenge.

The **Resource Discovery Network Virtual Training Suite (RDN-VTS)** is a set of free, online tutorials designed to help students, lecturers and researchers improve their Internet literacy and IT skills. Tutorials have been developed for different HE disciplines.



Further information on staff i-skills

i-skills studies

Big Blue connect Investigation into the information skills sets of staff working in FE and HE, looking at competencies within different roles and developing a map of i-skills. Manchester Metropolitan University, December 2003

www.library.mmu.ac.uk/bbconnect

Staff Development Provision Study Study to provide an overview of existing staff development provision for i-skills in FE and HE. Reviewed provision by institutions and support organisations and assessed areas of strengths and weaknesses. ESYS plc, December 2003

www.jisc.ac.uk/cpdresources

Drivers for Staff Development Study Study to identify the drivers for staff development in HE and FE and explores the implications for development of staff i-skills. HE Consulting, December 2003

www.jisc.ac.uk/cpdresources

Other publications in this series

This publication has two sister publications. Other publications relating to this area of work are also available:

Please visit www.jisc.ac.uk/cpdresources

JISC Staff Information Skills Set Programme

The Joint Information Systems Committee (JISC) supports Further and Higher Education in the use of information and communications technology. The Staff Information Skills Set project (SISS) has been established to take forwards JISC's work in the area of i-skills.

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Useful websites

Useful websites

Resource Discovery Network (RDN)

High-quality Internet resources for further and higher education

www.rdn.ac.uk

Resource Discovery Network Virtual Training Suite

Online tutorials and workshops to support staff and student i-skills

www.vts.rdn.ac.uk

Scottish FE Unit (SFEU)

Support staff development through events and knowledge networks

www.sfeu.ac.uk

Examples of i-skills programmes and projects

Supporting New Academic Staff (SNAS)

Teaching resources, materials and training events for new staff in various disciplines

www.heacademy.ac.uk/SNAS.htm

LawPaths

Project to support use of new electronic legal information resources

<http://library.kent.ac.uk/library/lawpaths/default.htm>

Higher Education Academy (HEA)

Survey of student e-literacy training packages

www.ics.ltsn.ac.uk/pub/italics/issue1/stubbings/010.html

SEEK – Sheffield Evidence for Effectiveness and Knowledge

Joint NHS/FE-developed website to support i-skills in evidence-based medicine

www.shef.ac.uk/seek/learntools.htm

Note: These examples were taken from the JISC-funded study in December 2003 to review existing i-skills provision. If you have interesting examples that could be included here please contact the JISC SISS programme manager, m.batchelor@jisc.ac.uk

Training providers

Association for Learning Technologies (ALT)

Workshops and events on handling content for teaching and learning, copyright and so on

www.alt.ac.uk

FERL Practitioners Programme (FPP)

Module G – Covers creating and adapting content for teaching and learning. Module I – Covers different approaches to finding subject-based ILT resources, issues relating to finding, storing and disseminating resources locally in line with current legislation and good practice

www.ferl.becta.org.uk/fpp

The Higher Education Academy (HEA)

The HEA provides discipline-based support for learning and teaching through its Subject Network

www.heacademy.ac.uk

JISC Legal

Free enquiry service, information resources and training events related to legal issues such as Freedom of Information, Copyright and Data Protection

www.jisclegal.ac.uk

JISC Plagiarism Service

Raising awareness of plagiarism in the academic community through advice, online resources, training and an electronic detection service

www.jiscpas.ac.uk

JISC Regional Support Centres

Locally based support for FE staff development in i-skills

www.jisc.ac.uk/index.cfm?name=rsc

National Learning Network

Database of staff development events and resources

www.nln.ac.uk

Netskills

A JISC-supported service providing workshops and materials to support staff and student i-skills

www.netskills.ac.uk

Improving Staff i-Skills

This document is available in alternative formats

For more information: www.jisc.ac.uk/cpdresources

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