

2. Skills and competences for staff

Competences identified at the LTSN workshop

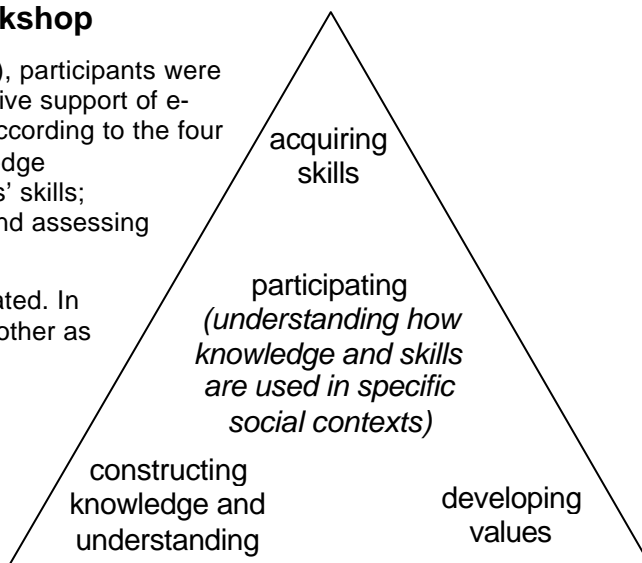
At the LTSN workshop on e-tutoring (17th April 2002), participants were invited to develop a list of skills needed for the effective support of e-learners. The overall skillset was divided into four, according to the four processes of e-learning: scaffolding learners' knowledge development; promoting the development of learners' skills; facilitating participation; and designing, supporting and assessing learner activities.

These four skillsets are also seen as highly inter-related. In one sense they were only distinguished from one another as a means of managing the field under discussion.

Scaffolding learner's knowledge development

E-tutors must be able to:

- give learners access to appropriate content and media (links, reading lists, starting points for investigation...)
- design appropriate online materials
- give learners tools and frameworks to apply to content
- make clear the learning outcomes
- guide learners through content (e.g. sequencing, navigation, pointers, overviews, summaries, guidelines on time)
- support learners' interactions with content and media (asking questions, evaluating, challenging, summarising, synthesising, prompting etc)
- model academic process in the relevant discipline
- model the learning process
- articulate and scaffold academic process
- give students relevant tasks
- provide feedback on tasks



Promoting learners' skills

Relevant skills include:

- Subject and topic specific skills
- Generic learning skills (critical evaluation, writing, finding and accessing resources, note-taking, summarising, understanding materials, translating ideas from one medium to another, applying ideas to new domains, problem solving, prioritising, time management)

E-tutors must be able to:

- Model these skills explicitly
- Break complex skills down into smaller units (tasks) to scaffold skills development
- Take different approaches depending on subject area (e.g. text-based, fact-based, practice-based)
- Encourage peer and self evaluation of students' skills
- Know when to separate/distinguish and when to integrate ideas
- Use techniques such as games, simulations and role play

Facilitating participation

E-tutors must be able to:

- Communicate clearly
- Provide a safe environment
- Mediate/moderate activities and discussions
- Motivate students
- Orchestrate diverse student needs

- Model (or be explicit about) quality and etiquette of contributions
- Where appropriate be challenging, be controversial, play devil's advocate
- Build teams and collaborations
- Be sensitive to cultures and contexts
- Relate learning activities to learners' values and expectations
- Be aware of a range of online behaviours (e.g. lurking) and understand/value those behaviours
- Be aware of group dynamics
- Be aware of how software features influence interaction
- Clarify the purpose of discussions (set goals)
- Design assessment strategies that promote participation
- Develop appropriate group architectures for different tasks and student numbers
- Ensure students have functional access to the online environment

Designing online activities

E-tutors must be able to:

- design appropriate learning outcomes
- create tasks that are relevant to the topic and outcomes
- create tasks that are challenging but not beyond learner capabilities
- facilitate the activities set
- encourage collaboration and peer review where appropriate
- structure sub-tasks
- ensure relevance to real-world problems and scenarios
- schedule time on task appropriately

Some **general skills** which cut across all categories included:

- clearly articulate learning outcomes
- design appropriate assessment strategies and criteria
- deploy a range of learning and teaching models and appropriate strategies
- scale activities to group numbers
- adapt activities to group learning needs and preferences
- prepare support materials in advance
- see the situation from the student's point of view
- be fully familiar with all software and systems used
- manage minor technical problems as they arise

In addition to these specific skills for supporting e-learners, it was understood that there were a range of other skills that in practice would need to be deployed if e-learning opportunities were to be effectively developed. These included skills for 'developing' and 'managing' e-learning projects. In an ideal world these roles might be kept entirely separate from the role of e-tutor, but in practice most staff working with these technologies had been required to take on many or all of these other functions. These 'surrounding' skills included:

- negotiating for support from other services (e.g. computing services)
- working effectively in teams
- time management
- social skills

The following pages include two sets of competences for online tutors derived from FENTO (the Further Education National Training Organisation) and the EFFECTS project.

FENTO competencies for e-tutors

These competencies cover a broad range of possible e-tutoring activities, only a sub-set of which are likely to be required in a particular instance. The roles required of e-tutors vary enormously depending on the design and application of the overall learning programme to which the tutor contributes and on the hardware and software tools available to support e-tutoring. The following areas of general expertise are assumed as prerequisites and provide a basis for the competencies:

- subject-matter
- pedagogical
- information and communications technology

These competencies specifically exclude those relating to the overall design and development of an online learning programme, which are covered in the Institute's [Competencies for e-Learning Developers](#).

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Plan how e-tutoring will be employed

In conjunction with the designers of the overall learning intervention, and at an early stage in the design process, determine how e-tutoring can best add value to the learning experience. In consultation with technical experts, select the most appropriate tools and methods for e-tutoring, taking into account:

- the hardware, software and network bandwidth available both at the server end and to individual learners, wherever they will be when accessing the course
- the nature of the learning to be accomplished
- the likely preferences of learners Budget for the cost of e-tutoring, taking into account:
 - the amount of tutor time involved
 - the hardware, software, connection costs and technical support required

Incorporate the plans for e-tutoring into the overall plans for the learning intervention.

Establish the technical facilities necessary to support e-tutoring

In conjunction with technical experts and in accordance with the policy and procedures of your organisation, establish the technical facilities required to deliver the e-tutoring solution, including, where applicable:

- software to support e-mail, bulletin boards and conferencing
- a domain name or location within an existing domain
- Web hosting facilities
- a system providing 'virtual classrooms' (which may include some or all of the above)
- a learning management system (which may include some or all of the above)

Establish relationships with new learners

Gather information about new learners that will help you to provide the necessary support, for example:

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- their basic details - name, age, gender and so on
 - their educational and career background
 - what they already know about the subject being covered
 - any constraints, personal or otherwise, that may get in the way of their progress
 - their goals for the course
 - their degree of computer literacy
 - their preferred styles of learning
 - the timetable they hope to work to
 - their proposed strategy for study
 - the support they require from you and from other learners Provide new learners with information about you, including:
 - your basic details, background and experience
 - any other information about you and your life, which will help to add a human touch
 - the supporting role that you will be supplying as tutor
 - your contact details (off-line as well as online) Establish a 'learning contract' with new learners to clarify what each can reasonably expect of the other:
 - what time and effort the learner will put in to the course
 - how the learner will contribute to group activities and assignments
 - what support the learner can expect from you as a tutor
 - the methods that will be used for communication
 - the rules governing communication - times of day, frequency of communication, response times
 - how any technical problems should be resolved
 - the basis on which the learner's progress will be assessed
 - what will happen in the event of absence, sickness or other unforeseen events
 - what the consequences are of the learner failing to meet their side of the contract
 - what actions the learner can take if you fail to deliver on your obligations

Communicate appropriately with learners

Communicate with learners:

- clearly and concisely, avoiding unnecessary use of jargon
- avoiding sexism, racism, ageism or other discriminatory behaviour
- with empathy, using a friendly, non-patronising tone

Provide administrative support

In accordance with the policies and procedures of your organisation and the capabilities of your learning management software, provide administrative support to the course, including, where applicable:

- registering new learners, entering contact details and providing security access to protected areas
- arranging learners into groups
- organising times for synchronous events, if any
- recording learner activity and progress (where not automatic)

Provide learners with technical and subject matter expertise

Resolve ad-hoc technical queries quickly and effectively. To minimise the need for individualised technical support, develop lists of answers to frequently asked questions and post these on the course Web site. Where appropriate to the overall plan for delivery of content, prepare and deliver real-time, online lessons using conferencing software. Where appropriate given the learner's existing knowledge and the information available to them, ask questions that will encourage the learner to reach their own learning conclusions. Provide direct responses, including examples, analogies and explanations, to subject matter queries, where you have expert knowledge that is not available in any other way to the learner. Refer learners to existing online materials, books, Web sites and other sources and help them to develop the skills to locate similar information for themselves in future.

Initiate activities that will facilitate learning

Establish a study programme that integrates all components of the course, including, for example, self-study, research, assignments, group activities and tests. Ensure that this programme is flexible enough to cater for

differing learning styles. Respond flexibly and in a timely manner to emergent learner needs by, for example:

- initiating discussion questions
- organising group activities
- setting assignments
- supplying or suggesting additional study materials or other sources of expertise

Provide learners with support and encouragement

Help learners to set challenging yet achievable goals for the completion and quality of coursework. Demonstrate confidence in learners' ability to succeed. Chase learners where some action on their part is expected but has not occurred. Identify situations where learners are in difficulty and provide the necessary support, including, where necessary, assistance in revising their plans for completing the course. Recognise the achievements of learners.

Assess learners' performance

Select assessment methods such as tests, simulations and submitted assignments that adequately test for the successful attainment of learning objectives. Where possible, take steps to authenticate learner assessments, i.e. to ensure that responses to assignments and tests come from the learners themselves. Provide learners with specific, timely feedback on their performance.

Use Web pages for communication with and between learners

Use Web pages to provide a focal point for information about the course, including, where relevant: information on learners

- details of the study programme
- the calendar of events
- Web links and reading lists
- access to self-study materials

Prepare Web pages that conform to the established rules of Web usability.

Use e-mail for communication with learners

Collect the e-mail addresses of all learners and organise these into an address group (an 'alias'). Set up folders to store incoming and outgoing e-mails to/from individual learners. Create templates for frequently-used responses, but adapt these to ensure each learner obtains an individualised response. Obey the rules of 'netiquette' and help learners to do likewise. Respond to e-mails from learners within the time specified in the learning contract. If this time is likely to be exceeded, send an acknowledgement with an estimate of when you will respond.

Use bulletin boards and discussion forums for communication with and between learners

In asynchronous group discussions:

- initiate discussion topics and questions to stimulate use of the facility
- encourage learners to initiate their own discussions
- establish the rules of communication, including the procedure for making a contribution
- control discussions that are straying off course, whilst providing adequate means for social interaction between learners
- act against any misuse of the facility
- summarise outcomes at each stage of the discussion
- delete dead topics

Use text, audio and video conferencing for communication with and between learners

In synchronous group discussions:

- communicate the goal of the discussion and the timeframe
 - establish the rules of communication - the procedure for making a contribution; the use of private one-to-one messaging; how the tutor regains control
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- encourage all members of the discussion to contribute
 - tactfully restrain members of the group who are tending to dominate
 - prevent the discussion from straying off course
 - act against anyone breaking the rules, particularly when members are in conflict
 - summarise outcomes at each stage of the discussion
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Evaluate and continuously improve e-tutoring support

Obtain feedback and suggestions from learners with regard to the e-tutoring they have received. Assess the experiences of learners in working through the course to determine where e-tutoring has been a success or where a different approach would have been more successful. Maintain records of time spent on tutoring and compare the results with the budget. Continuously improve the tutoring service to ensure it is adding maximum value within available budgets. Plan for and participate in development activities that will continue to improve your subject matter, pedagogical and technical expertise as well as the specific e-tutoring competencies as outlined in this document.

SEDA Embedding Learning Technologies Award

Outcomes	Example Activity This might involve you in: -	Examples of Evidence You might evidence this outcome by:
<p>1. Reflection on their own personal and professional needs, and in particular their continuing professional development</p> <p><i>This will include evidence that you have:</i> Reviewed your needs in relation to embedding C&IT and made an appropriate CPD action plan to meet your individual requirements. Undertaken your own CPD and shown how you have incorporated this into your implementation plan.</p>	<p>This might involve you in:</p> <ul style="list-style-type: none"> • identifying your training needs using a SWOT analysis and action plan • arranging support when or attending staff development events • obtaining relevant software and learning how to use it • arranging for a demonstration of equipment • discussing your plans and progress with a learning set • arranging for someone with relevant expertise to come and talk to you (your department, your learning set) • organising a discussion list/user group to share experiences • attending workshops/conferences nationally • seeking relevant support when needed 	<p>You might evidence this outcome by:</p> <ul style="list-style-type: none"> • records of attendance at workshops with examples of what you learnt and why you attended • a statement from someone who has supported your learning of a new package • notes from a user group meeting or meeting with a mentor • a set of how-to notes developed from a demonstration/training session you attended • sample emails from a user group discussion

<p>2. The ability to use interpersonal, organisational and coping skills</p> <p>This will include evidence that you have:</p> <p><i>Developed appropriate skills to identify and overcome any problems or issues.</i></p> <p><i>Effectively communicated with appropriate persons or bodies to overcome problems.</i></p> <p><i>Managed the process of implementation and embedding of learning technologies.</i></p>	<p>This might involve you in:</p> <ul style="list-style-type: none"> • supporting and facilitating the delivery of a course • ensuring the project is running to the agreed plan and taking measures to ensure completion • giving a lunchtime seminar on what you have done to your department. 	<p>You might evidence this outcome by:</p> <ul style="list-style-type: none"> • a witness statement from colleague(s) working with you on the project • a support/training session plan with reflections on its effectiveness • extracts from a diary or log, which show what you did to keep the project on schedule • emails from a consultation in which you passed on your experience to a colleague intending to carry out similar developments
<p>3. The ability to use their specialist knowledge and skills appropriately in the HE context</p>		
<p>3.1: Conducted a review of C&IT in learning and teaching and shown an understanding of the underlying educational processes</p> <p>This will include evidence that you have: <i>Conducted a review of appropriate learning technologies and their applications and demonstrated an awareness of their use in a range of learning situations</i></p>	<p>This might involve you in:</p> <ul style="list-style-type: none"> • conducting a review of the relevant educational and/or discipline literature • reviewing a specific learning technology (e.g. CAL packages in Biology) • reviewing technologies which could aid students with disabilities • reviewing technologies to enable flexible access and/or independent learning • planning and undertaking your own professional development on using learning technologies • observing someone who is already using learning technologies • charting the learner's progress around the learning cycle and identify where C&IT impacts upon it 	<p>You might evidence this outcome by:</p> <ul style="list-style-type: none"> • an annotated bibliography of relevant literature and resources • a report and recommendations to the appropriate committee of your department, course or institution • a set of web pages summarising your review of a particular technology • observation notes from your investigations • follow up activities from relevant staff development events (e.g. EFFECTS workshops) • an report on the impact of C&IT on learners and its relevance to your role in the learning process

<p>3.2: Analysed opportunities and constraints in using C&IT and selected C&IT appropriate to the learning situation</p> <p>This will include evidence that you have: <i>Analysed the leaning needs of students, carried out an IT audit to identify resource availability and constraints, and identified appropriate technologies on the basis of educational principles and availability, taking into account discipline-related and local factors</i></p>	<p>This might involve you in:</p> <ul style="list-style-type: none"> • conducting a critical review of your current course to identify strengths and weaknesses, those elements best suited to face to face, print or use of learning technologies. • conducting an audit of C&IT available to your course, programme or department • evaluating a range of learning technologies and identifying their strengths and weaknesses in a particular context • consulting with appropriate people in the institution (e.g. technical staff) or external bodies (e.g. LTSN Subject Centre) on your choice of learning technology • running a short (1 session) pilot with a small group to gauge their reactions • undertaking a survey of other institutions to establish what is being used effectively 	<p>You might evidence this outcome by:</p> <ul style="list-style-type: none"> • an audio tape of a discussion with a member of your faculty support team • a report and recommendations to an appropriate committee • a module outline with a number of suggestions on how it may be improved • a list of technologies you have considered with conclusions on their suitability • a flow diagram of the process that someone following in your footsteps would need to follow in order to make a decision • copies of email communications which demonstrate external advice you have taken • a reflective diary of the problems you encountered in your decision making process
<p>3.3: Designed a learning resource, programme or activity to integrate appropriate C&IT</p> <p>This will include evidence that you have: <i>Designed and planned a strategy for (re)structuring a course according to pedagogic principles to integrate appropriate C&IT. The strategy should include an evaluation plan (see Outcome 3.5)</i></p>	<p>This might involve you in:</p> <ul style="list-style-type: none"> • producing a timed plan for the implementation and evaluation • analysing the costs in terms of resources, staffing, materials etc. • making contingency plans to accommodate problems with the integration of the technology • liaising/consulting with appropriate technical and support staff within the institution to set-up the integration • negotiating levels of support and resources • piloting the resources you want to use • planning a staff development workshop for teaching and professional staff working with you on the course • acting as consultant to a member of academic staff and producing a strategy to help them integrate C&IT effectively 	<p>You might evidence this outcome by:</p> <ul style="list-style-type: none"> • a project plan including a Gantt chart and resource allocation chart • minutes of a consultation/briefing meeting to arrange implementation plans • a spreadsheet of the cost analysis, showing how the new module structure compares with existing delivery methods • timetable of computer based learning or assessment activities to be undertaken by students • formal documentation of course outcomes and assessment strategy • a session plan for a staff development workshop

<p>3.4: Implemented a developed strategy</p> <p><i>This will include evidence that you have:</i> Enabled students to use the learning technologies effectively and supported the learning process as appropriate (eg for academic staff delivered the course and assessed students.)</p>	<p>This might involve you in:</p> <ul style="list-style-type: none"> • delivering and assessing a restructured course • supporting and facilitating the delivery of a course • moderating online discussions • facilitating small groups at a distance using video conferencing • ensuring computer assisted learning sessions are effectively delivered and assessed • running a training/support session for students (and staff) to become familiar with the new technology • ensuring the project is running to the agreed plan and taking measures to ensure completion 	<p>You might evidence this outcome by:</p> <ul style="list-style-type: none"> • a witness statement from colleague(s) working with you on the project • a support/training session plan with reflections on its effectiveness • an observation with feedback and comments of a teaching session where students are using the learning technology • a video of a session using new technologies with comments and reflections • sample text from a computer based discussion, web site or interactive CAL application • extracts from a dairy or log, which show what you did to keep the project on schedule
<p>3.5: Evaluated impact of the interventions</p> <p><i>This will include evidence that you have:</i> Evaluated the impact of the incorporation of technology on students and colleagues. Maintained an Provided feedback for students and colleagues and disseminated experience and findings to department or more widely awareness of external changes and made adaptations as necessary</p>	<p>This might involve you in:</p> <ul style="list-style-type: none"> • choosing a suitable evaluation method • producing evaluation forms and collecting data from your students • collecting data from a computer based tracking/logging system • arranging observations/interviews by an external evaluator • organising focus groups • monitoring mailbase discussions to find out what others are doing • reviewing relevant educational/technology literature and relating your own work to current developments • conducting observations of students as they carry out course activities 	<p>You might evidence this outcome by:</p> <ul style="list-style-type: none"> • your evaluation report • an extract from your dairy with notes of your own observations • a summary of student feedback with your reflective comments • a video of student interviews or notes from a discussion • a selection of email messages that show how you have discussed developments with others and how you intend to incorporate their feedback into your course

<p>3.6: Disseminated and embedded the findings of the evaluation</p> <p><i>This will include evidence that you have:</i> <i>Disseminated your experience and findings to colleagues in your department, institution or more widely. Acted as an advocate for the effective uses of learning technologies, or contributed to the development of understanding, practice or policy.</i></p>	<p>This might involve you in:</p> <ul style="list-style-type: none"> • involving students in the action learning process, by finding out what they want and letting them know what you are going to do and why • summarising the evaluation data and making it available for public viewing on the web • giving a lunchtime seminar on what you have done to your department. • presenting a paper at a conference or submitting an article to a journal • writing a list of 'do's and 'don't's for use by colleagues implementing similar technology in the future, and ensure it is widely available 	<p>You might evidence this outcome by:</p> <ul style="list-style-type: none"> • examples of feedback given to students • a PowerPoint presentation from a workshop with anecdotal feedback from peers and your own reflections • a conference paper/extract and your reflections • a case study published on a web site or in a journal • emails from a consultation in which you passed on your experience to a colleague intending to carry out similar developments
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