



The University of Ulster has been recognised by the Department of Employment and Learning (DEL) as a Centre for Excellence in Teaching and Learning - CETL(NI) - for the development of institutional e-learning services to enhance the learning experience.

The aim of this CETL(NI) is to "promote, facilitate and reward the adoption of a 'learner centred' reflective practice approach to the development of teaching and learning, in particular with the use of e-learning technologies".

Key Strands of the CETL

The following points identify the key strands of the CETL:

- Facilitating reflective practice within the (online) classroom context.
- Identifying and promoting effective practice.
- Research and evaluation.

Each strand has both a technical and a cultural change focus. This CETL builds on the University of Ulster's recognised experience in the development and provision of (online) learner support services, pedagogic support for academic staff/course teams and the development of innovative e-learning systems and services.

It is located within the Institute of Lifelong Learning and liaises closely with the Staff Development and Library Services of the University.

The CETL(NI) Institutional E-learning Services is actively developing a suite of inter-related support services to assist staff to enhance how they teach, assess and support their learners.

This initiative will begin piloting a suite of inter-connected tools and resources in Academic Year 2006/07 to allow staff to:

- Better understand the learner context of the cohorts they are teaching.
- Simply discover approaches, tools and resources used successfully by colleagues in UU and beyond.
- Simply reflect on and evaluate their own practice and how it impacts on the learner experience.

In addition, all users will benefit from an integrated suite of support services that will provide users with simple and informative information about e-learning tools and how to best use them.

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About Us

As part of a major national teaching and learning initiative, the University was awarded in excess of £1.5 million, over five years, and has established (June 2004) a centre to further develop its institutional e-learning support services.

The *Centre for Institutional E-Learning Services* forms part of a national network of Centres of Excellence for Teaching and Learning (CETL) funded by HEFCE and DELNI, details of which are available at <http://www.heacademy.ac.uk/CETL.htm>. In Northern Ireland the centres are designated CETL(NI).

This funding has been granted in recognition of the University's established track record in the provision of pedagogic support and online learner support services, and in the development of innovative e-learning services and systems.

The Centre is based within the Institute of Lifelong Learning and seeks to effectively promote, evaluate, identify, and reward innovative and exemplary practice in teaching and learning. As part of this work, a range of online tools to promote and facilitate a reflective approach to the development of student learning are being developed.

These tools will provide staff with dynamic reports and will allow searches from within the online classroom to a range of cohort profiles, examples of best practice, appropriate re-usable resources, and evaluation tools. The integration of these tools into WebCT will enable staff to best impact on the learner experience when developing their teaching, and will offer the opportunity for staff to share their experiences with colleagues.

Aims and Objectives

Aims

The main aim of the Centre is to “promote, facilitate and reward the adoption of a ‘learner centred’ reflective practice approach to the development of teaching and learning, in particular with respect to the use of e-learning technologies”.

Objectives

- To seek to develop the following areas of strength:
 - The development of (online) learner support services.
 - Pedagogic support for academic staff/course teams.
 - The development of innovative e-learning systems and services.
 - Effectively promote, evaluate, identify and reward innovative and exemplary practice.
 - To seek to develop a reference model for excellent and effective practice that could be used to promote and evaluate practice. The strategy of the Centre is to extend and develop existing teaching practice and e-learning rubrics in order to capture them and codify them to provide a simple reference framework for practitioners.
 - To develop a range of online tools to promote and facilitate a reflective approach to the development of student learning. These tools will be embedded within and informed by the online classroom context and will interact with a range of institutional and external data/content repositories.
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Facilitating Cultural Change in Academic Practice

The more staff (and students) access, engage and interact with appropriate support resources, data and communities, the more informed and effective the cultural change.

Benefits

The benefits of providing rich and relevant information and services inside the online classroom include:

- Raising awareness of access to and utilisation of quality supporting data, resources, tools, services and communities.
- Providing supportive suggestions to assist users to associate and form connections with other available services.
- Encouraging reflective journeys of practice to take place, drawing on shared experiences from peers.
- Assisting cultural change in an efficient and effective manner.

The CETL is developing agents and tools to provide a personalised 'concierge' services to facilitate personalised access to quality local and external data, resources and services that are relevant to the users immediate context (role, subject, cohort etc.).

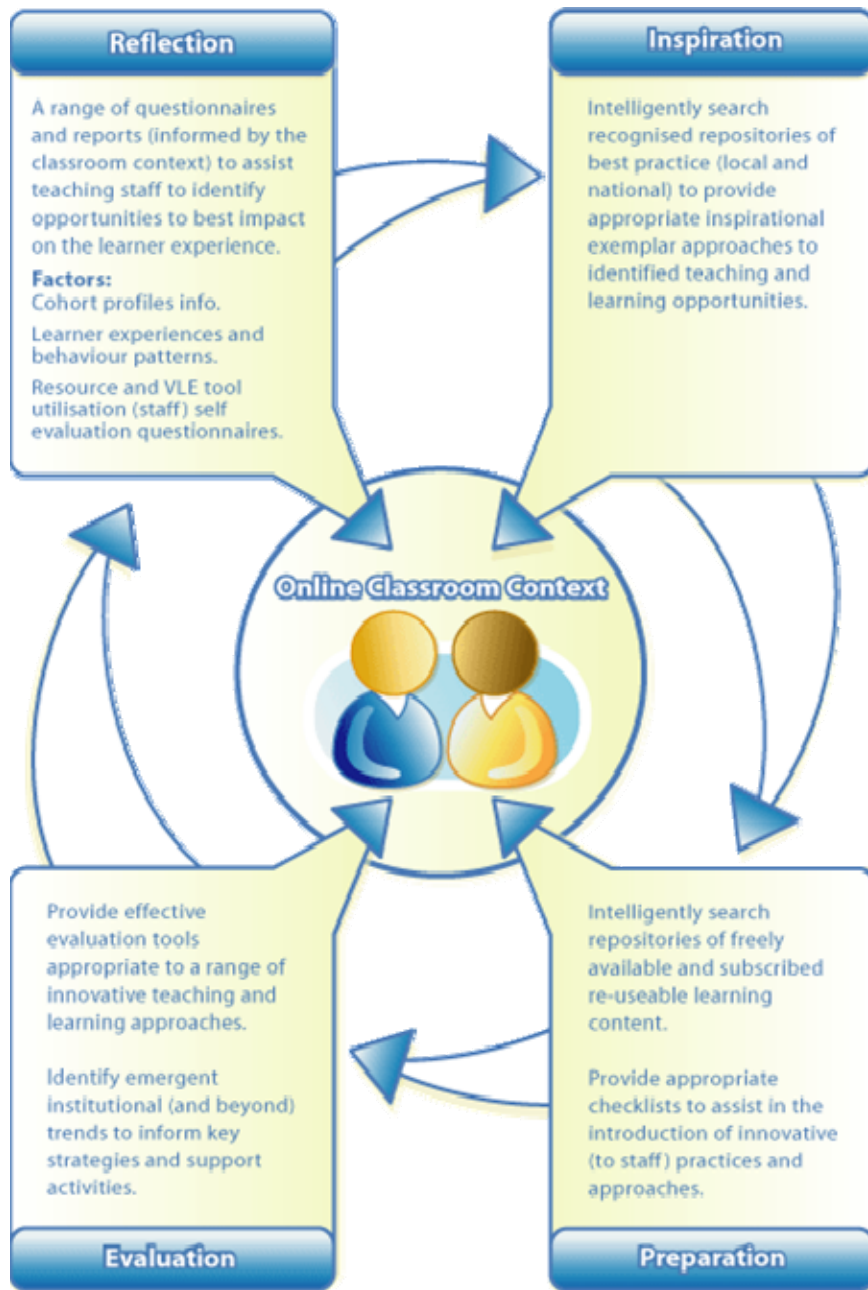


Figure 1: Promoting Reflective Practice

Sharing Experiences and Practices

In line with mainstream Internet2 initiatives, the aim is to promote two-way participation in addition to providing targeted access to relevant resources in a convenient manner; the agents will encourage users to share with key services and to participate in local and external communities of practice and forums.

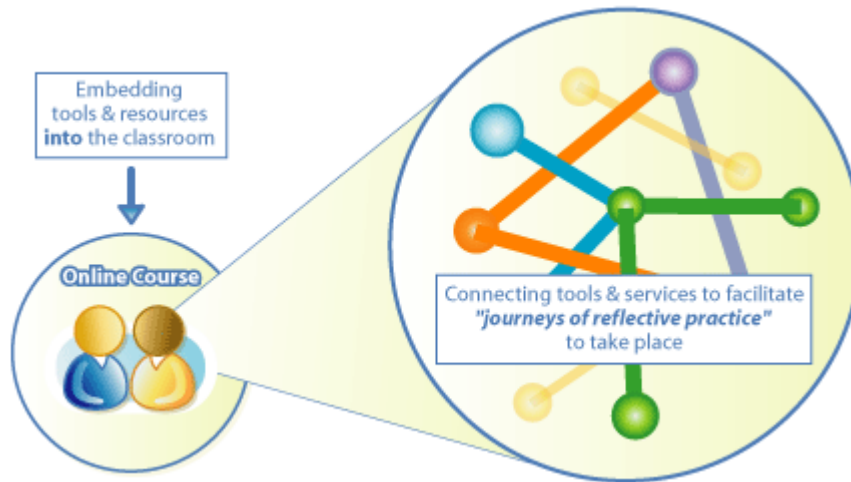


Figure 2: Embedding a Connected Support Environment into the Online Classroom

Related Links

["Connectivism – A Learning Theory for the Digital Age"](#), (George Siemens, University of Manitoba)

["Future of Web Apps"](#), Tom Coates (Yahoo)

<http://www.connectivism.ca>

Tools and Resources

The tools/resources strand of our CETL project combines a number of aspects, including research, statistical analysis and technical/programming.

General aims of this strand include:

- Constructing CETL information repositories and aggregating these, along with other relevant internal and external educational information resources in the online learning environment via a suite of customised WebCT tools. These resources will be tailored to the WebCT user role.
- Querying student administration systems to extract statistics and student profiling information, translating this into meaningful reports and displaying these appropriately via one of the aforementioned tools. It is hoped that this information will assist teaching staff in counteracting issues of retention and so on by highlighting potential risk areas, and will encourage teaching adaptation to the needs of the learners.

Some of the proposed tools are listed below; however this list may change, according to feedback from staff and the needs of the students/staff.

Learning Model/Teaching Practice Based Tools

- Module Activity Tracking Tool

Retention Based Tools

- Student Personal Profiling Tool
- Student WebCT Profiling Tool

Resource Aggregation Tools (Display According To Role in WebCT Vista)

- Case Study Search Tool
- Vista Tool Resources

The next page illustrates how these tools come together under a CETL Tool/Resource and following pages explain each tool in more detail and illustrate.

CETL Tools and Resources Top Level System Model

The figure below illustrates how the tools and resources fit together within this strand of the project.

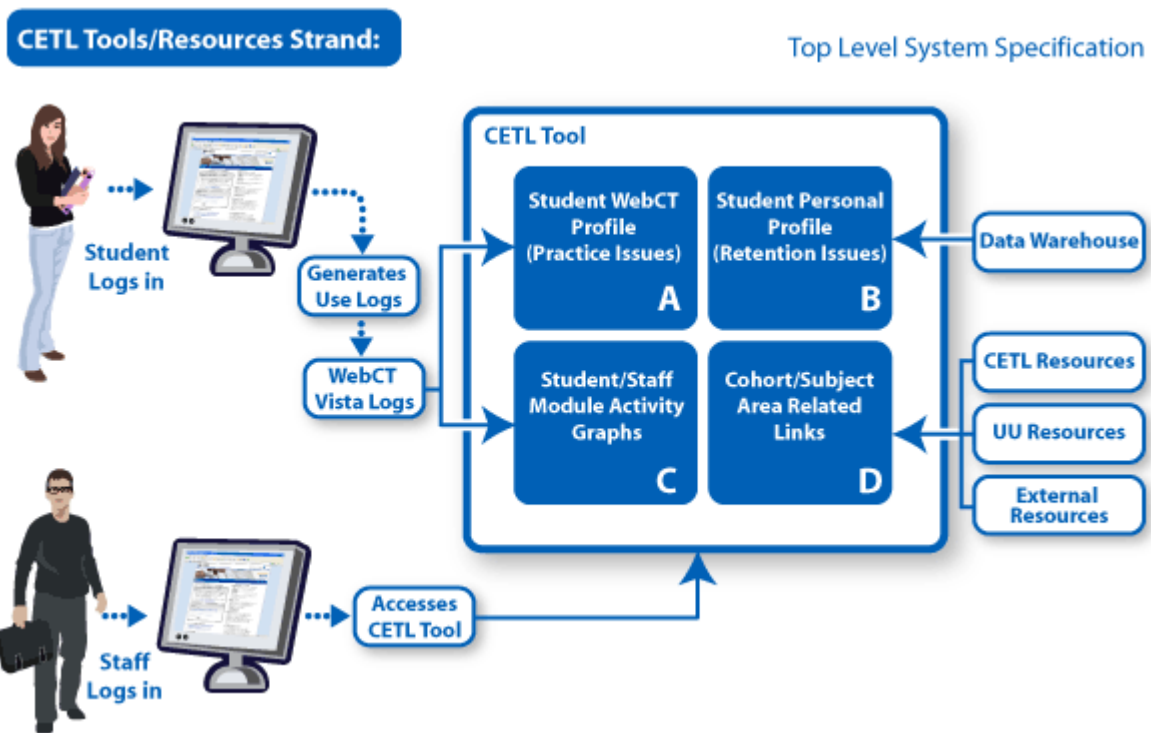


Figure1: CETL Tool Top Level System Model

* Please note: Each staff member's view of each tool may differ depending on their role in the University/module, e.g. teaching, technical/support, and associate staff. This will be filtered by their role in Vista and possibly LDAP, and will be described in further stages of development.

** A, B, C and D although component parts of the overall CETL tool, are tools within their own right, and will be further developed individually as the project progresses.

The tools and resources are explained in further detail on the following pages.

Retention Based Tools

Student Personal Profiling Tool

This tool uses WebCT IDs of students in a module area to gather information from student records database and display anonymous statistics, charts and information on aspects such as:

- Entry route to course
- Gender distribution
- Potential accessibility issues
- Resit flags

The tool also queries previous WebCT logs to get IDs for the previous cohort, and subsequently the student records system to get statistics (comparable to that above) for the last cohort of students.

Statistics will be displayed in a graphical manner in WebCT, showing current and last cohort information side by side for easy comparison, to encourage teaching adaptive to the needs of current students.

Student WebCT Profiling Tool

This tool uses WebCT IDs of students in module areas to gather information from the WebCT Vista reporting tables. For example:

- Has the student used WebCT or been involved in an online module before?
- Has the student used the chat tool before?
- Has the student used the mail tool before?

These statistics will be grouped into cohort distributions to display comparisons between incoming and outgoing students of a module. For example, incoming students to a module may have used the chat and mail tool previously, whereas outgoing students for the module may have only used the mail tool. This information will be highlighted to the lecturer and allow them to adapt their module accordingly to enhance the learning experience for the next cohort.

Learning Model/Teaching Practice Based Tools

Module Activity Tracking Tool

This tool will track the student activity over the course of the module and plot it against the teaching staff activity to see if the teaching and learning patterns match.

Resource Aggregation Tools (Display according to role in WebCT Vista)

Case Study Search Tool

The Case Study Tool will search our internal database of case studies of good practice, populated by the planned call for good practice, providing links to repositories of case studies relevant to subject area, cohort size, etc... It will also search UU case study repository/staff development database.

This tool will also map metadata to other case study repositories, for example, the Higher Education Academy and seamlessly integrate both internal and external studies into the WebCT environment for easy reference.

WebCT Vista Tool Resources

According to the user role within WebCT Vista, this tool will provide links to support documents/tutorials on how to use the tools in Vista, i.e. for staff and student use.

Capturing and Sharing Practice

A key component of this CETL is the development of a range of tools and services available from within the on-line classroom context that can directly support staff and students to inform and support the teaching and learning processes and are intuitive to use, discoverable and can link to other relevant tools and services.

To capture and share educational practice, we are using a number of methods including:

- Models Of Educational Practice (Hybrid Learning Model – further information available from the CETL website)
- Case Studies Of Effective Teaching
- Case Studies Of Effective Learning

Case Study (Teaching Perspective)

Capturing Case Studies of E-Learning Practice

A case study template has been developed as part of the CETL initiative to capture case studies of e-learning practice from the teaching perspective.

The aims of this exercise will be dual purpose, encouraging critical reflection among teaching practitioners, and building a repository of effective practice which can be catalogued and integrated into the CETL tools. These can then be used to inform future teaching and lesson plans delivered at the University.

In developing innovative methods of collecting examples of effective e-learning we can ensure that relevant information is captured in an efficient and re-useable manner. We are also working closely with templates and standards put in place by other educational bodies such as JISC so that our case studies can be easily mapped to those of other institutions.

Method of Capture

We have developed an innovative web-based form to help us capture and catalogue effective educational practice case studies from a staff perspective. The form has been designed to be easy and intuitive to complete.

The interface content will be automatically and dynamically tailored to the situation and the user choices by only displaying relevant information on the screen and using auto-completion where appropriate.

The case study form should assist the user in it's completion, and be less intimidating than similar forms which are often unwieldy and time consuming to complete.

Case Study (Learner Perspective)

Capturing Case Studies of E-Learning Practice

A template has been developed as part of the CETL initiative to capture case studies of e-learning practice from the learner perspective.

The aims of this exercise will be dual purpose, encouraging critical reflection among learners of examples of good practice, and building a repository of effective practice which can be catalogued and integrated into the CETL tools. These can then be used to inspire other learners and to inform future teaching and lesson plans delivered, and, will ultimately enhance the experience of future learners at the University.

In developing innovative methods of collecting examples of effective e-learning we can ensure that relevant information is captured in an efficient and re-useable manner. We are also working closely with templates and standards put in place by other educational bodies such as JISC so that our case studies can be easily mapped to those of other institutions.

Method of Capture

We are developing an innovative web-based form which will help us capture and catalogue effective educational practice case studies from the learner perspective. The form has been designed to be easy and intuitive to complete.

The interface content will be automatically and dynamically tailored to the situation and the user choices by only displaying relevant information on the screen and using auto-completion where appropriate. The student case study form will capture examples of effective e-learning practice as well as different aspects of the learning experience.

It will assist the user in its completion by providing appropriate scaffolding support in the form of examples and guidance notes to ensure the form is both efficient and supportive for the learner.

Contact Us

CETL(NI): Institutional E-learning Services
University of Ulster at Jordanstown
Shore Road, Newtownabbey
Northern Ireland BT37 0QB

<http://cetl.ulster.ac.uk/elearning>
Enquiries: elarning@cetl.ulster.ac.uk