

The DEHub is also working with other projects:

Virtual Worlds working group

DEHub is in the early stages of conceptualising and developing a Virtual Worlds working group. As students increasingly engage with alternative social networking (or realities) there is scope for educators to explore whether they pose opportunities for rethinking learning and teaching spaces. They argue that there is a requirement to shift away from mapping traditional thinking about what constitutes a learning experience when considering virtual worlds. Together with DEHub institutional partners we hope to facilitate best practices in research on, and teaching within, virtual worlds (eg: 2nd Life and cutting edge Web 2.0 technologies).

Students from two ICT Education units also know Sue Gregory as Jass Easterman. Jass is Sue's avatar in the virtual world of Second Life where she takes students to explore the educational possibilities of learning and teaching in a virtual world. A virtual world simulates real life through a computer program where avatars, a virtual being or presentation of oneself, interact with the environment and others. You can see a picture of Jass on the right. Jass's image does not change so that her students recognise her immediately, although it is possible to do so by the click of a button. Twelve months ago, Jass ventured into Second Life with students who volunteered to use the virtual world to complete one of their unit assessment tasks. There, Jass demonstrated how a virtual world could be used for the student's future teaching. The unit objectives were to discuss and demonstrate educational advantages of using a virtual world and identify potential constraints or dangers. Students also had to give examples of how they would use the environment in their future teaching.



Figure 1. Jass Easterman

The students met with Jass each week for a two hour period. The first hour was spent together in the environment that Jass created for them called Education Online Headquarters, see a discussion taking place in Figure 2. Students knew that this was where they started and finished each evening and where they spent the first hour discussing the use of Second Life as an educational tool. The second hour was spent on virtual lectures by academics from different institutions around the world where they explained how they were using Second Life with their students. These included European and Australian universities and a Sydney private school.



Figure 2. Discussion in progress at Education Online Headquarters

All students were given pre and post semester surveys to complete and all online dialogue was recorded. Twelve students ventured into Second Life with Jass and these are a couple of quotes that typify what the students felt:

- “It has been one of the highlights of my entire uni life! (This is my 7th year of uni and only performing in operas has been better).”
- “In a strange way I think exploring a virtual world can actually make that world more real than say looking at pictures or reading texts or even viewing a video.”
- “I had defining experience last week when we sat down in that open air lecture space and I sat on one side and the rest of you sat on the other side. Suddenly I felt lonely and without thinking got up and moved to where you were all sitting. And then I thought that felt so real!”

This coming semester in 2009, Jass will be venturing into Second Life with a new cohort of students from the same units. She will also be taking, but in a different session, pre-service teachers who will explore a real workshop and duplicate Second Life workshop on deBono's Six Thinking Hats. A new environment, a classroom and playground, has been created for these sessions by Jass.

Teaching Workloads: Planning and Implementing a Benefits-Oriented Costs Model for Technology Enhanced Learning

Recently, in collaboration with the University of Southern Queensland (USQ), Central Queensland University (CQU), and the Australian Catholic University (ACU), UNE's Emeritus Professor Grant Harman and Professor Belinda Tynan were successful in being awarded an ALTC Competitive grant for their e-Teaching Workloads study. The project team will work with Schools and Course Teams within the four participating universities (three of which are DEHub partners) to plan and implement strategies for a prospective rather than retrospective cost-benefit model, which can enable innovators to plan and understand the relationship between the expected learning benefits and the likely teaching costs.

The project aims to assess the costs and benefits of online teaching, specifically via development of appropriate methodologies for within-institution costing and exploration of the implications for staff workloads. The project team will work with Schools and Course Teams within four participating universities (UNE, Australian Catholic University, Central Queensland University, and University of Southern Queensland) to plan and implement a prospective rather than a retrospective cost-benefit model. A prospective cost-benefit model promises to of enable innovators to plan new courses understanding the relationship between the expected learning benefits and likely teaching costs. Our approach will be based on the models of Laurillard (2007) and Twigg (2003).

Over the past decade, most Australian universities have moved increasingly towards online course delivery for both undergraduate and graduate programs. In many cases, online teaching is becoming part of routine teaching loads. Yet detailed and accurate financial and workload data are not readily available. As a result, institutional policies are often guided more by untested assumptions about likely reduction of costs per student unit, rather than being evidence-based, with the result that implementation of new technologies for online teaching intended to reduce costs per student 'unit' end up representing a 'black hole' of additional expense. Reliable and relevant cost information can assist universities to make better informed choices, particularly with regard

to mixes of particular technologies, the choice of units for wholly online delivery, class sizes and allocation of duties to particular staff members. Laurillard (2007) argues that, while new technologies promise greater personalisation and learning productivity, without careful modelling of the effects on staff time, costs can easily increase without commensurate benefits being achieved. This leads her to suggest a relatively simplified planning model for new courses using technology-enhanced learning. Significantly for about a decade, in the United States the American National Center for Academic Transformation, under the leadership of Carol Twigg, has been working with thirty universities on the re-design of large undergraduate courses, using technology to increase interaction, improve learning outcomes and reduce costs. Evaluation results have demonstrated improved student learning in twenty of the projects, while all thirty institutions reduced costs by about 40 per cent on average (Twigg 2003). Twigg's models vary between participating institutions; however, the core elements are similar to that proposed by Laurillard. The approaches of both Laurillard and Twigg assume that enhanced teaching and learning and associated cost advantages are difficult to achieve without changes being planned and managed. While academics often show relatively little interest in cost studies, the costs of various types of teaching delivery are particularly important in a time of increasing student numbers, declining budgets, pressures to maintain quality and substantial expenditure on new technologies to support e-learning. While it is widely known anecdotally that online learning often costs more than traditional methods, unfortunately despite a long tradition of costing for distance education, relatively little information is available on the relative costs of online versus face-to-face teaching, let alone in the more common model used today of 'hybrid delivery'.

References:  
Laurillard, D. (2007) 'Modelling benefits-oriented costs for technology enhanced learning', Higher Education, 54 (2), 21-39.  
Twigg, C.A. (2003) 'New models for online learning', Educause review, September/October, 8-38.

eDST

Staff from the eDST: Decision Support Tools for Multi-Disciplinary Applications in Higher Education project are now based alongside DEHub staff in their offices at the University of New England. The eDST project will plan how to incorporate educationally useful software, such as production system models, simulation software, decision support tools (DST) and databases, into a secure, well-structured, robust and fail-safe software and hardware system that can be implemented for delivery within curricula to support enhanced learning and teaching performance in agriculture and natural resources courses that may be extended to a wide array of discipline areas across the higher education sector.

The rationale for this project is that national collaboration between professional and academic communities will result in a shared network of understanding within the sector, which is essential for developing an innovative, widely-accepted protocol for implementation of a shared DST delivery system, embedding the use of DST in curricula, identifying needs and resolving outstanding issues surrounding technical aspects, IP and sustainability.

The primary aim of this project is to support deeper professional learning experiences for students by developing a protocol for implementing a system to deliver a range of licensed DST across the sector.

The key objectives are to identify and resolve barriers to a collaborative, technological approach and negotiate a widely-accepted protocol to facilitate development of a national DST platform that is extensible and able to be re-purposed by other academics and for students in a variety of contexts, as well as being robust, secure and appropriate for use in higher education.

The eDST is a collaborative project funded by the Australian Learning and Teaching Council (ALTC) involving nine Australian universities, coordinated by Professor David Cottle (UNE) and Dr Peter Lane (UTAS), with reference to a range of industry sectors (ICT, agriculture, business). Institutions interested in participating in eDST can contact the project coordinators through the DeHUB office or portal.

ODLAA

DEHub is working with ODLAA to facilitate the association's activities. The Executive of ODLAA is pleased to announce the details for the 2009 Symposia which will be held in Brisbane, Sydney and Melbourne.  
2009 ODLAA Symposia Series  
"Distance, Technology and Design"  
Brisbane: September 28  
Sydney: September 30  
Melbourne: October 2

Registration is FREE for all ODLAA Members and the early-bird rate for non-members is \$165 (closes August 21st), which includes an annual ODLAA membership!

The keynote speaker is Dr Brian Denman (University of New England) who recently published a major report on "Higher Education by Distance: Opportunities and Challenges at National and International Levels".

The Symposia Series is also fortunate to have the Professor Belinda Tynan (Brisbane), Professor Jan Herrington (Sydney), Associate Professor Sue Bennett (Sydney) and Dr Gregor Kennedy (Melbourne) presenting and facilitating.

The Symposia will provide a forum to address critical issues which confront the design of learning resources and environments for delivery to off-campus, distance and mobile student cohorts:

- Generational Preferences
- Collaboration Strategies
- Learning Styles
- Making Connections
- Learning Designs
- Flexibility and Convergence

Details of Symposia Hotels can be found at the registration site, and all participants are asked to pre-register:

[www.conferenceonline.com/index.cfm?initapp=1&page=booking&object=conference&id=14145&clear=1&forceHB=1](http://www.conferenceonline.com/index.cfm?initapp=1&page=booking&object=conference&id=14145&clear=1&forceHB=1)

For further information and enquiries, please contact: Rod Sims, Email: [rod.sims@faculty.capella.edu](mailto:rod.sims@faculty.capella.edu)

Benefits of DEHub

The sector and institutional benefits of partnership in the DEHub consortium include:

- Opportunity to inform government and policy agenda across the sector.
- Opportunity to aggregate research to strengthen institutional strategic goals and research foci in order to reduce duplication and operating costs.
- Increased funding opportunities through collaborative grants and tenders.
- Opportunity for DEHub publications to contribute to the research culture of each partner institution.

Key Themes

DEHub will focus on the three key themes as they relate to the Australian higher education sector:

- Distance Education Research and Evaluation
- Distance Education Learning and Teaching
- Distance Education Community and Open Learning

DEHub, as a central agency for distance education best practice, will be the primary 'first step' site on the way to updating and improving pedagogical approaches within these areas.

What is DEHub?

The Distance Education Hub (DEHub) is a central agency or 'hub' established to assist in disseminating best practices in the delivery of distance education in the Australian higher education sector. Our researchers are starting to address the research side of this; our website will function as a community for feedback and development and as a portal for the dissemination of information on these 'best practices'; and our external partners and stakeholders will work with us to ensure we achieve the best we can through cooperation, collaboration, the sharing of information and resources, and the reduction of overlap and duplication.

Looking to the future, some of the main thrusts in 2010 and 2011 will be the strengthening of our relationship with partners by working towards more collaborative research projects; further development of our virtual community of practice, and the development of an invitation only colloquium and an open international conference to be held one

The key DEHub operational priorities of 'ease-of-access', 'ease-of-understanding', and 'ease-of-implementation' will contribute to DEHub's goal of being the principal resource available to people engaged in distance education.

after the other to workshop and develop best practices in distance education in the higher education sector.

There has been some confusion about the role of DEHub within UNE. The DEHub project is not affiliated with UNE's eUniversity project. DEHub is focused on providing best practices to the Australian higher education sector as a whole, and whilst we hope to compliment the activities and projects underway at UNE, our scope is much broader than just a focus on UNE alone.

DEHub Summary

The 'DEHub: Innovation in Distance Learning' project will provide leadership in developing and implementing models for distance education across the Australian tertiary sector. It will engage in national and global collaborations on evidence-based approaches to new teaching technologies. Following overseas examples, such as JISC (UK) and SURF (Netherlands), DEHub will build capacity across the sector. It will promote innovative

modes of teaching and learning that strengthen the capacity of regional universities to meet the demands of their distance education students and to assist rural communities enhance their economic and social sustainability. DEHub has identified a distinctive strategy that will consolidate sector expertise in the use of technologies and enhance and build upon existing leadership in distance education. There is an absence of a dedicated higher education agency to support the sector on best approaches to learning technologies, to reduce duplication and to address student attrition in distance education. Australia is more 'wired' than ever before, but we are yet to capitalise on this infrastructure to enhance access to education. Increasing non-metropolitan participation rates will have high impact economically and socially and will shift the paradigm of relying on major population centres for basic support that will enhance the productivity and sustainability of previously vulnerable communities.

For further information on DEHub please contact:

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## UNE leads collaborative Distance Education project

The University of New England is leading a \$3.5 million project that will engage the Australian tertiary education sector in discussion and collaborative research on the practice of distance education.

Funded by the Commonwealth Government and directed by UNE's Professor Belinda Tynan, the project—named “DEHub: Innovation in Distance Learning”—aims to establish a central “hub” of research-based expertise at UNE and beyond to draw on information from around the world. The government funding for the project will continue through 2009, 2010 and 2011.

While UNE is the physical “hub” of the project, it hopes to collaborate with three other universities—Charles Sturt University, Central Queensland University, and the University of Southern Queensland—in establishing the research priorities for the project and conducting the research.

Earlier this month, representatives from these three universities and the academic networking company AARNet travelled to Armidale for discussions with Professor Tynan and DEHub personnel at UNE, as well as UNE's Deputy Vice-Chancellor, Professor Graham Webb, and the Pro Vice-Chancellor and Dean of UNE's Faculty of The Professions, Professor Victor Minichiello.

The Acting Project Manager of DEHub, Dr Nathan Wise (UNE), said that the project, based within

the Faculty of The Professions, would ensure best practice and facilitate improved delivery of distance education across Australia's higher education sector. “It will engage in national and global collaborations on evidence-based approaches to new teaching technologies,” he said, “and will promote innovative modes of learning and teaching that will strengthen the capacity of regional universities to meet the demands of their distance education students.”

Dr Wise said that the process of recruiting both research and support staff to the project is under way, as is planning for an international conference on distance education to be held next year. The conference would be preceded by a workshop (or “colloquium”) involving 20 of the world's most eminent authorities in the field.

DEHub will focus on three key themes, with an emphasis on tertiary and higher education contexts: Distance Education Learning and Teaching; Distance Education Community and Open Learning; Distance Education Research and Evaluation.

“For institutions, DEHub will mean additional opportunities for collaborative projects and savings through the sharing of resources,” Dr Wise explained. “And both teachers and students will benefit from the research, which is aimed at enhancing the educational experience of the whole community.”

## CSU, CQU and USQ join UNE as partners of the DEHub project.

Charles Sturt University, Central Queensland University and the University of Southern Queensland have all now confirmed their interest and ability to participate in the DEHub: Innovation in Distance Education project being led by the University of New England. The project, funded for three years by the Australian Government's Department of Education, Employment and Workplace Relations, aims to facilitate best practice in distance education across the Australian higher education sector.

Confirmation of the four-university DEHub consortium followed weeks of discussions, meetings and negotiations between representatives of the four institutions, who together host 44% of the Australian distance education student body. The impact of this consortium on the Australian higher education sector can be seen by the fact that in 2007 Charles Sturt University, Southern Queensland University and the University of New England occupied the top three positions in terms of the number of Australian distance education enrolments, with Central Queensland University occupying a close fifth place position (UNE Portfolio 2009).

The significance of the project to each of the four partners is evidenced by the proportion of external students within each institution. The extensive experience of working with large numbers of off-campus distance students provides scope for extensive

and reliable research and development activities. Together, these four partners form the core body of distance education providers in the Australian higher education sector; UNE, CQU, CSU and USQ, are best positioned to enhance practices across the sector and, as regional universities, have the capacity to address labour shortages, enhance social inclusion and establish secure foundations for sustaining rural and regional settings.

The DEHub project will be highly beneficial for rural and regional communities: for example, 65% of new commencing distance education students at UNE in 2008 were from rural and regional areas (UNE stats) and, in 2007, 57% of UNE's distance education graduates were employed in regional and rural areas. Individually, institutions often weaken resource expenditure through overlap, duplication, missed opportunities and failed solo initiatives. Together, the four DEHub partners present a strong consortium with which to lead national and global collaborations on evidence-based approaches to new teaching practices. By pooling resources, combining parallel research programs into collaborative programs and moving forward as a joint, united, organised body, DEHub can strengthen the delivery of high quality, distinctive distance education programs for the benefit of the entire sector.



## Physical and Virtual Learning Spaces in Higher Education

Charles Sturt University's representative on the DEHub Steering Committee, Professor Mike Keppell, is co-editing a new compilation of papers on higher education alongside Associate Professor Kay Souter and Matthew Riddle. Titled Physical and Virtual Learning Spaces in Higher Education: Concepts for the Modern Learning Environment, the book will address the question of how higher education institutions and administrators need to re-conceptualize, re-design and re-think the use of space for students entering university in the 21st Century. Higher education institutions are no longer defined by the physical boundaries of their traditional campus, but rather by the entire student experience, whether that be negotiating the physical corridors of the campus or connecting to virtual environments. The design of spaces to support the generation of knowledge by students themselves is an important and neglected field. With lectures and tutorials still predominant in higher education, the organization of space and time configures students as receivers of knowledge until the point of graduation, at which time they are expected to produce knowledge of their own. Rather than lecture halls with rowed seats being the predominant physical learning space for learning and teaching in higher education, learning spaces need to include physical/virtual, formal/informal, blended and mobile, with consideration given to flexibility, adaptability and time. They need to mirror contemporary learning and teaching strategies that emphasize independent and peer-based learning in both physical and virtual learning spaces, taking into account how students perceive and utilize space in higher education settings. In meeting these priorities, it is essential for universities to support synchronous and asynchronous, multi-disciplinary, multi-campus and inter-institutional collaboration amongst students, between students and teaching staff and amongst teaching staff.

This book will explore the concept of learning spaces within the higher education context. It will be written for professionals who want to improve their understanding of physical and virtual learning spaces in the higher education setting in relation to optimizing teaching and learning. It will document real-world experiences of innovators in higher education who have redesigned spaces for learning and teaching. These innovators could include professors, educational designers, academic developers, librarians, educational innovators and learning and teaching professionals who conceptualise space and attempt to redesign learning spaces for the benefit of learning. These innovators may work with departments, faculties or across the institution and obtain student feedback on a regular basis to inform their decisions. The book will document personal experiences of innovators working in higher education. Specifically the book will attempt:

- to re-define the concept of space in higher education to encompass a broader range of physical, virtual, formal, informal, blended, mobile, flexible and time-influenced factors;
  - to document case studies of real-world applications by learning space innovators;
  - to gain insight into how learning space innovators conceptualise the use of space for learning and teaching;
  - to describe the design strategies used by learning space innovators;
  - to begin to articulate the integration of learning spaces across the university context;
  - to provide an insight into the importance of learning space for optimal student learning;
  - to examine both successful and challenging projects that required the contribution of learning space innovators;
  - to examine cross-cultural and international perspectives on the role of learning space innovators;
  - to examine the role of universities within the broader learning environment of contemporary students in relation to virtual, physical, technological and cultural learning space provision;
- and
- to locate the role of universities within the broader learning environment of contemporary students in relation to virtual, physical, technological and cultural learning space provision.

For more information see:

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