

Proposal for the Australian Annual Higher Education Student ICT Study (AAHESIS)

1. Overview: Value/Need for the project

This proposal for an Australian Annual Higher Education Student ICT Study directly addresses ALTC's Priority 2 – that is, proposals that deliver *strategic approaches to learning and teaching that address the increasing diversity of the student body*. This proposal specifically focuses on student diversity in relation to ICT capability. Its national, collaborative all-of-sector approach supports the ALTC objectives of *identifying learning and teaching issues that impact on the Australian higher education system and facilitative national approaches to address these and other emerging issues*. The proposal supports ALTC Principles of *Inclusiveness, Long term change – through a focus on systemic change and capacity building, and Collaboration*.

The aim of the project is to provide a survey instrument and process that will provide information about ICT capability, use and experience of commencing higher education students in Australia. As more and more higher education institutions begin offering online courses and seek to cater for diverse student groups, the complexity of accommodating differences in student preparedness, including ICT skills, for higher education study will increase. The availability of the information gathered by this survey will enable universities to better target their programs and services to support students' success.

The significant in-kind support from the project partners in this project provides ALTC with value for money. The information from the survey is high impact as it is information not currently available. It will provide an evidence base to support decision making for ICT investments for individual universities and for the sector as a whole.

2. Rationale

Significant investments are being made in information and communications technologies (ICT) for teaching and learning in Australia's higher education sector through: (1) investment in 21st century learning spaces through the Education Investment Fund; (2) the support of innovative teaching practice through both the Australian Learning and Teaching Council and internal institutional grants, (3) significant financial commitments to the Digital Education Revolution, the National Broadband Network and the VET Broadband Network, (4) existing commitments to AARNET; (5) institutional investments in and commitment to learning management systems such as Sakai, Moodle and Blackboard; iTunesU, iLecture and other audio technologies for lecture taping and podcasting, video conferencing software, wireless internet access, support of mobile technologies, as well as immersive learning environments such as Second Life; and (6) delivery of distance education and blending learning via the internet.

While the investments in dollars are significant, less attention has been paid to students' abilities in effectively using ICT for learning – that is, their ICT capability. In Australia the assumption that today's students are 'digital natives' (Prenkys 2001) is not extensively

researched, especially across both distance and on-campus students and where it has been researched it is not convincingly supported by reliable, replicable and longitudinal data (Millea and Galatis 2008). Innovations in the technologies and tools available also provide a challenge for relevance and timeliness (Kennedy, Judd, Churchward, Gray and Krause 2008).

Where research has been undertaken, the findings are inconclusive, with the literature suggesting that student experience with, and use of, technologies and technology tools varies considerably, as does their level of information literacy (JISC and British Library 2008) and their practice of using technology for learning. Distinctions are not necessarily made between students' technology use for entertainment and their technology use for learning, nor about the transferability of students' skills from one technology device, application or use to another (Kennedy, Dalgarno, Gray, Judd, Waycott, Bennett, Maton, Krause, Bishop, Chang and Churchward 2007; Kennedy et al. 2008, Sztendur and Milne, 2009).

This project will address the need for incorporating information about ICT capability, use and experience of commencing higher education students in Australia, in the provision of quality education programs. As more and more higher education institutions begin offering online courses and seeking to cater for diverse student groups, the complexity of accommodating differences in student preparedness, including ICT skills, for higher education study will increase.

The availability of such information would enable universities to better target their programs and services to support students' success. From 2012 the first cohort of school students affected by the Australian Government's Education Revolution initiative will be entering Australian universities (DEEWR 2009). The Education Revolution initiative is likely to have a significant impact on students' ICT capability prior to their entry to university. At the same time, the Australian Government is aiming to increase the numbers of Australians attaining university qualifications, and have the intent of increasing the proportion of low SES students in universities (Bradley 2008). These policies, along with the shift to a student voucher system, will significantly alter any previous assumptions that could be made about the student cohort in relation to ICT capability.

Over the last three years some Australian universities have recognised that they need, and will continue to need, reliable data about students' ICT skills, usage and expectations for planning purposes and have either implemented small scale ICT surveys of their students, have conducted pilots, or are planning to do so.

The need for this kind of student data does not just apply to the new generation of students coming straight from school, but also mature-aged students, post-graduate students and international students, as well as those from low SES and indigenous backgrounds that are commencing their studies. The availability of this data will enable universities to develop targeted support systems and services to meet particular student needs with the aim of improving student learning outcomes and completion rates.

At present there is no commonly used annual survey or study of the ICT capability of commencing Australian higher education students, or their use and expectations of technology for learning. However, there is clearly a need for such a study. This is demonstrated by pilots and small scale trials that individual universities have undertaken.

This proposal has support from sector-wide groups including the Australasian Council of Online, Distance and E-learning (ACODE), the Council of Australian University Directors of Information Technology (CAUDIT), Universities Australia, as well as no-for-profit cross sectoral agency owned by all Australia's ministers of education and training, Education Services Australia. Education Services Australia, ACODE and CAUDIT are partners in this proposal along with two universities that have already conducted pilot surveys. As the lead

agency in this proposal, Charles Sturt University is keen to implement such a survey for its own commencing distance and on-campus students.

The development of the proposed ICT study will be informed by the pilot studies that have already been undertaken, as well as through consultation with sector stakeholders.

Activities

- To collaborate with the sector to identify information needs in relation to commencing students ICT capability
- To collaboratively develop a survey instrument and process that will meet the information needs of individual institutions and the Australian higher education sector in relation to commencing students ICT capability
- To trial the survey instrument in 10 Australian universities
- To assess and refine the survey instrument in providing the information wanted by the sector
- To develop a sustainability plan for the annual implementation of the survey across the sector

3. Previous work

This project team and Reference Group will consider, though not be limited by, the pre-existing pilot studies undertaken by Australian universities.

UNSW–ADFA: implementation of the ECAR Study

In mid-2007 permission was granted to the Australian Defence Force Academy (ADFA) at the University of New South Wales (UNSW) to adapt and implement a version of the ECAR Study in return for providing feedback to EDUCAUSE on the implementation.

What is the ECAR Study?

In 2004 the Educause Center of Applied Research (ECAR) in the USA developed and implemented a survey of American undergraduate students to assess the IT skills with which they were entering universities. The aim of the survey was to: (1) provide information on the technology behaviours, preferences, and attitudes of higher education's undergraduates, especially as it relates to their academic experience; (2) provide information to college and university administrators that will help them implement campus technology environments for students; and, (3) inform the practices of teaching faculty who are working to incorporate information technologies in rich and meaningful ways into their curricula and pedagogies

The study has been conducted annually from 2004. The 2009 study included responses from 30,616 undergraduate students in 103 four-year institutions and students at 12 two-year institutions. The study incorporates a literature review and a review of other relevant surveys, a quantitative web-based survey, student focus groups, analysis of quantitative data and a comparison of longitudinal data from previous surveys.

UNSW-ADFA's intention was to begin a longitudinal study of its own commencing students to provide the same kinds of information available to higher education in the USA. The aim of the study was to gain an accurate understanding of students' pre-entry use of ICT as an evidence-base for making informed decisions about the educational deployment of, and development support for, technology enhanced learning and teaching at ADFA. In addition, the study helps to identify barriers to and opportunities for the expanding educational use of ICT and offers insights into opportunities for future developments.

The study was adapted for ADFA to take into account Australian language use and understanding of ICT, and the particular needs of ADFA as an organisation tasked with providing university graduates with the ICT skills required by the Australian Defence Force (Eijkman and Herrmann 2009).

(UNSW-ADFA is a partner in this project.)

Victoria University: pilot study

To obtain empirical data pertinent to students' use of and familiarity with ICT, Victoria University (VU) implemented a small pilot study in 2008 which resulted in 91 completed surveys from first year students in Sports Administration and Nursing. The study adopted an instrument developed by the Centre for Studies in Higher Education (CSHE) and the Biomedical Multimedia Unit at the University of Melbourne to gain evidence around the assumptions that the new generation of students in higher education are technology savvy 'digital natives'.

The questionnaire aimed to collect data on students' use of, and access to, various forms of technology including mobile phone, desktop and laptop computers, digital cameras, video games and MP3 players. It further explored students' use of computers for activities such as sending and receiving email, creating documents, instant messaging and searching for information both for study related and private use (Sztendur and Milne 2009, vii).

The VU report includes a literature review relating to current trends in the deployment of emerging technologies in higher education teaching and learning, as well as research investigating student ICT competency, learning preferences and expectations towards technology-supported learning and instruction.

(Victoria University is a partner in this project.)

University of Wollongong E-learning review

The University of Wollongong undertook a review of elearning in 2008 which included an online survey into student's ownership and access to particular technologies such as mobile phones and laptops, as well as their broadband internet usage.

(University of Wollongong will be a member of the Reference Group for this project.)

Macquarie University, University of Technology, Sydney, and University of Western Sydney

This group of three universities has determined there is a need for a survey to:

- Understand how students currently use technology in their learning
- Understand what technologies students would like to use at university
- Assist in capacity planning for ongoing technical infrastructure
- Plan for professional development for staff
- Plan for student IT/literacy skill development
- Provide a vision for future planning technical/staff development needs for the university

This group has reviewed existing survey tools, including ECAR, and found that the group needed more specific information about students' uses of the technology in the university context, that is, for learning and also administration-related activities. They have developed a survey and are piloting it in 2010.

(Macquarie University will be a member of the Reference Group for this project)

4. Significance of the project: the gap in existing surveys

Australian university students currently participate in the following surveys:

- Australasian Survey of Student Engagement (AUSSE)
- Course Experience Questionnaire (CEQ)
- Australian Graduate Survey (AGS)

The CEQ and AGS surveys are undertaken by all universities annually and are used by DEEWR and individual universities for a range of purposes.

The AUSSE is currently used by 29 universities and is focused on student engagement.

In DEEWR's Transforming Higher Education report (DEEWR 2009), it supported Recommendation 7 from the Bradley Review to mandate the implementation of these three surveys across the sector.

However, we do not currently have a higher education sector-wide study of students' ICT capability, even though the higher education sector provides extensive, and expensive, ICT services to its students. Consequently there is no longitudinal data to provide sector-wide data about students' ICT capability. Individual higher education institutions, and the sector as a whole, are making ICT investment decisions based on incomplete data and knowledge.

While each of the surveys mentioned above has its purpose, none addresses the ICT capability with which students are entering higher education institutions, nor how usage patterns are changing, or how these patterns impact on learning, planning or strategic decision making at an institutional or sectoral level.

Individual institutions have developed small scale surveys and pilots. If each university does this then there will be one-off institutionally-specific data available but not data that is sector-wide and able to be used for general ICT planning purposes, nor data that can be benchmarked across institutions or provide demographic information about student use of ICT for learning.

5. Aims and outcomes

Aims

The primary aims of the project are to:

- Provide information about commencing students ICT capability in Australian higher education institutions to enable the provision of targeted programs of support, better use of ICT resources, forward planning for ICT purchases, and provision of appropriate professional development for academics
- Provide longitudinal data tracking student diversity in relation to ICT capability
- Stronger cross-sector and within-institution linkages, relationships and collaboration between key groups making ICT decisions
- Stronger cross-sector engagement with issues to do with the management of student diversity

Outcomes

Depending on the questions defined by the sector through the collaboration process, the survey could provide:

- Demographic information at a sector level to enable the delivery targeted programs that support social inclusion, quality improvement and transparency

- Evidence to support, guide or direct ICT budgets into areas of greatest return and/or need
- Identify any differences between undergraduate and graduate students (and other demographic and student/graduate attribute information)
- Anonymous sector-wide information and evidence to guide government-funded whole-of-sector programs supporting the use of ICT learning, and/or to target research funds or projects
- Institutionally-specific information for each participant higher education provider to assist in institution-wide ICT planning, professional and academic development, and technical support

Specific outcomes for this proposal are:

- Stronger across-sector and within-institution linkages, relationships and collaboration between key groups making ICT decisions
- Stronger across-sector engagement with issues to do with the management of student diversity
- Benchmarking data about students' ICT-capability with ten participant Australian universities to support evidence based decision making
- Establishment of survey instrument, process and sustainability model to enable the annual implementation of the survey

6. This project proposal

This proposal is to develop a survey instrument and process for the implementation of a national Australian Annual Higher Education Student ICT Study. The survey will focus on commencing students. The project is highly collaborative and consultative with every Australian university provided with the opportunity to contribute to the development of the survey instrument to ensure it meets the needs of the sector. This engagement will be supported within institutions by the institutional representatives to ACODE and CAUDIT. The ACODE and CAUDIT representatives will be supported by the project team staff with oversight by CSU staff.

The project has two stages over two years:

Stage 1 (year 1):

- Part A: Consultation, collaboration and dissemination (first six months)
- Part B: Development of the survey instrument (second six months)

Stage 2 (year 2):

- Part A: University trials, data analysis (first six months)
- Part B: Report, Implementation model, Sustainability plan, Evaluation (second six months)

Year 1, Stage 1: Part a) Consultation, collaboration, and dissemination

Consultation and collaboration with the sector and its stakeholders is key to the success of the project, and is essential to ensure that the data gathered by the survey is relevant to the information needs of the sector.

The project will conduct focus groups in each state seeking representation from the groups within universities that are responsible for planning, budgeting and implementation of ICT

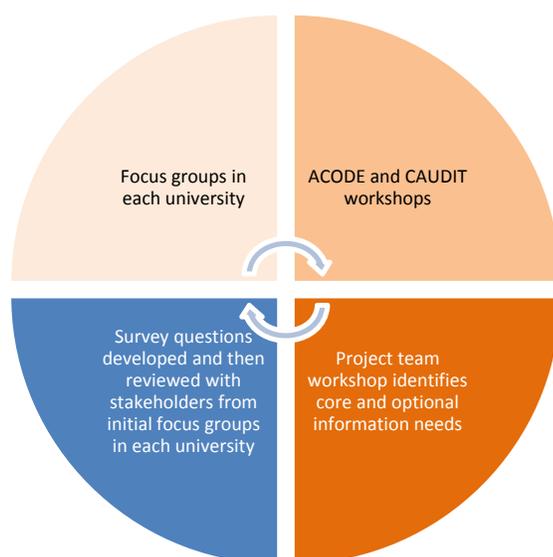
and IT. These are: teaching and learning, IT services, libraries, academic development, and university student support services (see Figure 1).

Focus groups consultation

- Each university holds a focus group coordinated by institutional ACODE and CAUDIT members and runs an internal process to identify key information needs that the ICT survey could provide.
- A workshop is held at scheduled ACODE and CAUDIT meetings to review and bring together the information gathered from the focus groups consultation.
- The workshops will identify priority areas common across the sector and start to identify core questions and questions that could form a ‘question bank’ of optional questions.
- It will consider implementation and sustainability models for the survey across the sector subsequent to the end of the project.
- The refinement process will continue via the project wiki, online meetings and communications as necessary, and communication through ACODE and CAUDIT institutional representatives.
- The project team will then have a workshop to bring together the findings of the consultation process and finalise survey questions.
- Questions will then be reviewed with the stakeholders from the initial consultation process.

Proposed model for consultation

Figure 1



Dissemination

- Dissemination of the focus and workshop activities will occur within institutions through ACODE and CAUDIT institutional representatives, via national ESA networks and will be part of the role of the Reference Group.

Deliverable: consultation and collaboration with Australian universities and development of the survey instrument, dissemination of information about the survey through the sector via CAUDIT and ACODE representatives, Reference Group members, ESA networks, and appropriate conferences, meetings and forums.

Year 1, Stage 1, Part b): Finalisation of the survey instrument, installation of survey software, set up of survey

- On the basis of the consultation process a survey instrument will be developed comprising a bank of core questions that would be used by all institutions, and bank(s) of optional questions that may be of particular importance to individual institutions.
- During this stage the Checkbox survey software will be purchased and tested, and survey questions added to the survey as they are finalised

Deliverable: finalisation of survey instrument, upgrading and testing of survey software, survey questions added to the survey software

Year 2, Stage 2, Part a): University trials, Student focus groups, Data analysis

- The survey will be implemented at up to 10 Australian universities.
- Three student focus groups will be conducted to validate (or otherwise) the survey's findings.
- The data from the trial will be reviewed and analysis commenced

Deliverables: trial of the survey instrument at ten Australian universities, report on the findings of the data from the survey including recommendations for improvements or enhancements, three student focus groups to test validity of the findings.

Year 2, Stage 2, Part b): Report, Implementation model, Sustainability plan, Evaluation (second six months)

This part of the project focuses on establishing the methodology and processes for the implementation of the survey sector wide. It will identify models for sustainability of the survey to ensure that it can undertaken regularly, become a rich source of longitudinal data to map changes in students over time, and also provide insight into the needs of incoming students on an annual basis.

- A report written analysing the data, and evaluating the success of the survey instrument and providing recommendations for improvement or enhancement.
- The report will include a review of other relevant surveys, identifying similarities and differences in the findings.
- The findings of the report will be disseminated through the sector via ACODE and CAUDIT meetings and then via the membership into individual institutions, the Reference Group, ESA networks, and the presentation of associated papers at conferences.
- An independent evaluation of the ICT survey instrument, findings and consultation processes.

Deliverables: Report, Evaluation of the project, sustainability model and implementation plan for sector-wide implementation

Evaluation Strategy

An Evaluation Strategy for the project will be documented as part of the overall project plan in Stage 1 Part A.

The Evaluation Strategy has three parts:

- (1) The Director, CSU with the CSU staff member that will provide oversight of the project, will evaluate the project with the project manager on a continuous basis by gathering a range of data to evaluate progress using criteria derived from the principles underpinning this initiative and the specific nominated outcomes.
- (2) An internal, yet formal evaluation of the project processes and outcomes will be done by the Director, CSU with the CSU staff member that will provide oversight of the project following the first semester of 2012 when the survey would have been implemented at up to 10 Australian universities. Student focus groups will be conducted to validate (or otherwise) the survey's findings. The data from the trial will be reviewed and a report written analysing the test data, and evaluating the success of the survey instrument and providing recommendations for improvement or enhancement. The report will include a review of other relevant surveys, identifying similarities and differences in the findings.
- (3) An external independent evaluation will be commissioned at end of 2012 before the sector-wide roll-out of the survey. The evaluator will have access to the range of data and performance indicators gathered during the two year project. An opportunity will be provided to talk to individuals or groups involved in the initiative to assist in preparation of the report.

Project governance and project partners roles

Lead agency: Charles Sturt University

The lead agency for this project is Charles Sturt University and its project director is Dr Philip Uys, Director, Strategic Learning and Teaching Innovation, Division of Learning and Teaching Services.

Charles Sturt University will undertake the oversight of the project, financial and project administration, and administrative and research support.

Reference Group: A Reference Group comprised of university representatives will be established to assist in developing, contributing to and responding to drafts of the survey instrument as it is developed. The Reference Group will comprise representatives from universities that are not project partners to ensure additional sectoral engagement in the project. Macquarie University and University of Wollongong have confirmed they will be members of the Reference Group.

Project partners

Education Services Australia is a not-for-profit, ministerial company established to provide services to the Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA) and other education and training bodies. It provides expertise in collaborative national projects and project management and delivery, and understanding of the issues and challenges around ICT and education and training. It will provide the project management, organisation and coordination of the consultation process with the sector, liaise with the partner organisations and lead agency and ensure the project meets its deliverables. It will liaise with CAUDIT in managing the software implementation and input the survey questions and generate standard reports for the trialling institutions. It will provide the data to individual organisations in SPSS format for further manipulation.

Project activities: As a MCEECDYA not-for-profit company Education Services Australia will act as the project manager and technical agency for this proposal facilitating the activities of the partners in delivering the project. Thus:

- The project will be a sector-wide initiative resulting in benefits for individual institutions as well as for the sector as a whole.
- Intellectual leadership by the lead agency and university sector partners will be separated from the day-to-day management of project activities and technical tasks.
- Professional project management using the Microsoft Solutions Framework

Project management: Education Services Australia has extensive experience in project management and delivery in the education sector and is responsible for a number of national projects including edna (www.edna.edu.au) and myfuture (www.myfuture.edu.au). It has extensive experience in successful collaborative projects with multiple partners. This is a collaborative project with every university having the opportunity to contribute to and participate in the development of the survey instrument.

Education Services Australia uses the Microsoft Solutions Framework for project management which has strong mechanisms supporting collaboration and communication. While MSF is used for software development, the communications model is relevant to this project. It defines the roles and responsibilities of the project team. Teams consist of peers, recognising the importance of each of the skills and roles to the success of the project. Core principles of MSF include fostering open communication, working towards a shared vision, empowering team members, establishing clear accountability and shared responsibility, focusing on delivering business value, staying agile, expecting change, investing in quality and learning from all experiences.

ESA has nominated Jenny Millea for this project.

Australasian Council of Online, Distance and E-learning (ACODE)

ACODE will provide substantial in-kind support for the project through its institutional members including conducting and participating in university-based focus groups, advocating for the survey within the member institutions, supporting dissemination of the survey and project information through their member universities, reviewing survey questions, and providing time at ACODE workshops in 2011 to enable ACODE members to review the focus group findings, and communicate project activities to its membership. It will support the conduct of the survey within the trialling universities and contribute to the development of a sustainable model for the ongoing implementation of the survey.

ACODE has nominated Dr Gordon Suddaby for this project.

Council of Australian University Directors of Information Technology (CAUDIT)

CAUDIT will provide substantial in-kind support for the project through its institutional members including conducting and participating in university-based focus groups, advocating for the survey within the member institutions, supporting dissemination of the survey and project information through their member universities, reviewing survey questions and providing time at CAUDIT meetings in 2011 to communicate project activities to its membership and workshop the outputs of the focus group activity. It will support the conduct of the survey within trialling universities and contribute to the development of a sustainable model for the ongoing implementation of the survey.

CAUDIT has nominated Peter Nissen for this project.

UNSW-ADFA

UNSW-ADFA will provide substantial in-kind support for the project through its institutional members, including conducting and participating in university-based focus groups, reviewing survey questions, as well as supporting the conduct of the survey within the trialling universities and contributing to the development of a sustainable model for the ongoing implementation of the survey.

UNSW-ADFA has nominated Dr Henk Eijkman for this project.

Victoria University

VU will provide substantial in-kind support for the project through its institutional members, including conducting and participating in university-based focus groups, reviewing survey questions, as well as supporting the conduct of the survey within the trialling universities and contributing to the development of a sustainable model for the ongoing implementation of the survey.

Victoria University has nominated Dr Ewa Sztendur for this project.

The two universities on the project team have each implemented pilot studies within their universities seeking information about their students' ICT capability. The project will benefit from their experience and build on their learning in the development of a whole-of-sector survey.

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Appendix 1: Budget, budget justification, and project timeline

Budget (GST exc)

	Budget Stage 1/Year 1			Budget Stage 2 / Year 2		
	ALTC \$	Other \$	Total \$	ALTC \$	Other \$	Total \$
PERSONNEL						
CSU Level 10 Lead investigator (5% for whole project plus 5% in-kind for whole project)	6000	6000	12000	6000	6000	12000
CSU Level 7 Research assistant/project coordinator (10% of time for whole of project)	17000		17000	17000		17000
Victoria University - statistics and survey development (CSU Level 10 equiv, 6 days per year paid, rest in kind)	3000	6000	9000	3000	6000	9000
UNSW-ADFA - statistics and survey development (CSU Level 10 equiv, 6 days/year salary support, rest in-kind)	3000	6000	9000	3000	6000	9000
Sub total	29000	18000	47000	29000	18000	47000
20% on-costs (rounded)	5000		5000	6000		6000
Sub total (rounded)	34000	18000	53000	35000	18000	53000
ESA Project Manager level 2 - 60% FTE for 4 months in set up phase and 30% FTE for remainder of two year project, inc 20% on-costs	22000		22000	22000		22000
ESA Senior Officer L1 - 60% FTE for 4 months and 30% FTE for remainder of project) - inc 20% on-costs	15000		15000	15000		15000
ESA Technical Support Officer (3 hours per month for two years) - inc 20% on-costs	3000		3000	3000		3000
University of Wollongong (Reference Group member, in-kind support of 3 days per year)		1000	1000		1000	1000
Macquarie University (Reference Group member, in-kind of 3 days per year)		1000	1000		1000	1000
ACODE: managing and facilitating focus groups, input into survey, member on project team - staff time		20000	20000		9000	9000
CAUDIT: managing and facilitating focus groups, input into survey, member on project team - staff time		20000	20000		9000	9000
Seven universities for trial - staff time					21,000	21000
University staff participation in focus groups - staff time		36000	36000			
Sub total	74000	96000	171000	75000	59000	134000
PROJECT SUPPORT						
Travel: three f2f meetings of project team	6,000		6,000	4000		4000
Sub total	80000	96000	176000	79000	59000	138000
PROJECT ACTIVITIES						
Survey software	20,000		20,000			
Hosting (in-kind support)		20,000	20000		20,000	20000
Project evaluation				8,000		8000
Sub total	100,000	116,000	216,000	87000	79,000	166000
ATTENDANCE AT ALTC EVENTS	3,000		3,000	0		
Sub total	103,000	116,000	219,000	87000		
INSTITUTIONAL OVERHEAD LEVY (10%) rounded	11000		11000	8000		8000
Sub Total	114,000		230,000	95000	79,000	
Total per Stage/Year	125,000	116,000	241,000	95000	79,000	174000
	ALTC	Other	Total	ALTC	Other	Total
TOTAL PROJECT BUDGET	125000	116000	241,000	95,000	79,000	170000

Budget justification

The project has a total budget of \$415,000 of which \$195,000, as a minimum, will be provided as non-remunerated time contributions from some of the project team members, their organisations, and the Reference Group. A total of \$220,000 is sought from ALTC.

Personnel This is a complex across-sector project involving all Australian universities and requiring significant non-remunerated support from the project partner organisations' members. Funds are requested for paid staff to facilitate the leadership, management and activities of the project. The request for funding includes the CSU project director at CSU Level 10 for salary of \$12,000 plus 20% on-costs to provide intellectual leadership to the project and oversight of the project based on 5% of their time for the two year project as well as institutional management of the conduct of the survey within CSU across multiple campuses. While this is not the 20% recommended in the guidelines the CSU Level 7 (below) will undertake much of the day-to-day administrative work for the project as much of this project is ensuring engagement of the sector in the project, organisational and management tasks, and facilitation and an additional 5% will be provided as in-kind support.

Thus \$34,000 plus 20% on-costs at CSU Level 7 is requested for 10% of FTE for a research assistant/project coordinator for the project term for project administration, project support, reporting, organisational and finance tasks as well as support the survey development. The CSU Level 7 is expected to be a research assistant who will be mentored by the CSU project leader.

\$44,000, which includes 20% on-costs, is sought to support an ESA Project Manager Level 2 for 60% FTE in the intense start up and focus group stage and 30% FTE for the remainder of the project to manage the complex liaison and coordination between the project partner organisations, develop materials for the focus groups, develop and implement the project plan, schedule, risk management plan, coordinate the technical tasks and ensure deliverables are met. \$30,000, which includes 20% on-costs is requested for an ESA Senior Officer for 60% FTE for months at the commencement of the project and 40% FTE for the remainder. Their role is to support focus group organisers, support the project team meetings, collate findings, data analysis, support the project wiki and online meetings and ongoing communication. \$6,000, which includes 20% on-costs, is requested to support an ESA Technical Officer to provide initial set up services for the Checkbox software and for 3 hours per month technical support.

In-kind Generous in-kind support has been committed by ACODE and CAUDIT on their members' behalf to ensure that each university has the opportunity to contribute to the development of the survey tool and also to participate in conducting the survey in either trial mode or when implemented across the sector. The amounts listed in the accompanying budgets are conservative estimates of the non-remunerated contributions based on each ACODE and CAUDIT member contributing 15 hours at \$50 per hour to facilitate the university focus groups, and ACODE and CAUDIT members participating in the ACODE and CAUDIT workshops. While Victoria University and UNSW-ADFA project team members are being paid for some of their time, it is expected that they will contribute additional in-kind support through non-remunerated staff time of an additional 10 days per year each.

Macquarie University and University of Wollongong providing non-remunerated in-kind support of staff time through their participation in the Reference Group.

Project support While collaboration and communication is key to the effectiveness of this project, travel costs have been kept to a minimum by relying on technology to conduct regularly required meetings, and by using the existing formal meetings of CAUDIT and

ACODE members to progress the project. Three face-to-face meetings of the project team are, however, essential components of the project. The first is to establish the format, structure and content of the focus group activities to ensure that useful information is gathered, and the second face-to-face meeting is to review and work through the focus group outputs and develop core questions for the survey. These two activities take place in Stage 1 of the project. The third meeting takes place in Stage 2, Part B of the project, bringing together the project team members to develop an implementation plan and sustainability model for the project across the whole sector. The cost of \$10,000 covers transport to Canberra for six project team participants for the three meetings, as well as transfers and catering. Venues will be provided by project team partners as in-kind contributions.

Project activities \$20,000 is requested to purchase a licence for the Checkbox survey tool to be used to conduct the survey and provide both reports and data in a form that can enable further queries to be conducted by individual universities which may have specific needs. \$8,000 is requested to have an external, independent evaluation of the project undertaken. \$20,000 in in-kind support is being provided via hosting of the Checkbox survey tool by project team member organisations.

Attendance at ALTC Events As required by the guidelines \$3,000 is requested to support attendance at ALTC events.

High level project plan

The establishment of the study will occur over two years.

Year 1 (1-12 months): Stage 1, Parts A & B Consultation, collaboration and dissemination, Development of the survey instrument

This stage provides the mechanism for the consultation and collaboration which are key to this project to ensure that the data gather is relevant to individual institution's information needs as well as having sector-wide relevance. It also focuses on supporting the development of relationships and collaboration within and between institutions in relation to student diversity.

Activities

- Development and provision of a project plan, project schedule and communication plan.
- Initial face-to-face meeting of project team to plan the focus group content and structure, identification of survey methodology
- Establish communications framework including project wiki for collation of content from focus groups
- Development of schedule for focus group consultation, Focus groups undertaken, Focus group content gathered and posted on Project wiki
- Collaboration workshops at ACODE and CAUDIT meetings to bring together findings of focus group activity
- Survey questions developed and refined.
- Second meeting of project team to identify first draft of survey questions for review by stakeholders
- Purchase and test Checkbox survey software
- Input survey questions
- Identification of 10 Australian universities interested in participating in the trial in Stage 2

Outcomes

- Stronger cross-sector and within-institution linkages, relationships and collaboration between key groups making ICT decisions
- Stronger cross-sector engagement with issues to do with the management of student diversity
- Survey software deployed
- Survey questions developed and tested in survey software
- Survey methodology identified
- Ten universities identified to participate in the trial

Year 2, 13-24 months, Stage 2 (Parts A & B)

Stage 2 takes the work of Stage 1 and implements it in the sector. The focus is on trialling, refining and evaluating the survey to ensure that it meets the sector's information needs. It focuses on establishing a sustainability model for the ongoing implementation of the survey as well as the processes and procedures for undertaking the survey across the whole sector in the following year.

- Survey trialled at 10 Australian universities
- Three students focus groups conducted to validate (or otherwise) the survey's findings
- Data from the trial reviewed
- Report reviewing the survey data and other relevant surveys written
- Sustainability model(s) developed and reviewed and approach agreed by stakeholders
- Implementation plan for whole-of-sector roll out developed
- Evaluation of the project and survey undertaken
- Dissemination of findings disseminated throughout the sector via CAUDIT, ACODE, ESA networks and through presentations and conference papers

Outcomes

- Stronger cross-sector and within-institution linkages, relationships and collaboration between key groups making ICT decisions
- Stronger cross-sector engagement with issues to do with the management of student diversity
- Benchmarking data about students' ICT-capability with ten participant Australian universities to support evidence based decision making
- Implementation plan for whole of sector survey developed and agreed by project partners
- Sustainability models developed and agreed by project partners
- Evaluation of the project undertaken

Appendix 2: Qualifications and experience of project leader and project team

Project leader: Dr Philip Uys, Charles Sturt University (5% plus 10% in-kind)

Dr Uys is currently the Director, Strategic Learning and Teaching Innovation in the Division of Learning and Teaching Services at Charles Sturt University, Australia. He has University-wide responsibility for strategic innovation in university learning and teaching, the development of learning and teaching computer systems and evaluating new educational technologies in terms of their impact on learning and teaching.

He was Manager, Education Design & Educational Technology at Charles Sturt University, Australia from February 2005 to December 2008 where he had University-wide responsibility for evaluating new educational technologies in terms of their impact on learning and teaching and played a leading role in adoption and implementation of new technologies and methods. He led and managed a team of educational technologists and educational designers based on various campuses of the University.

He is an international consultant in the field of elearning and educational technology. He was the lead consultant and team leader for the British Council in doing a 5 month, European Union funded, feasibility study as a first step towards creating a national strategy and structure for eLearning in Botswana during National Development Plan 9, which is 2003 to 2008 (July 2003 to February 2004).

Uys, P.M. (2010, June). Blended Learning in the ICT-Enabled Learning and Teaching Community of Practice at Charles Sturt University. To be presented at the ED-MEDIA 2010-World Conference on Educational Multimedia, Hypermedia & Telecommunications. 28 June to 2 July 2010, Toronto, Canada: AACE

Uys, P.M. (2009, November). Critical Reflections on Building a Community of Practice about ICT-enabled Learning and Teaching at CSU. CSU Educational Conference "Leading and Learning In Higher Education". 25th - 27th November 2009. Charles Sturt University, Thurgoona, Australia.

Buchan, J & Uys, P.M. (2009, September). Full day change management workshop. Strategies for the Widespread Uptake of Sakai in Tertiary and Higher education. 2009 AuSakai Conference, "Sakai as a Scholarly Environment: Pedagogy, Systems, Processes and Outcomes", 16 - 18 September 2009. Charles Sturt University, Bathurst, Australia.

Uys, P.M. (2009, April). Change and innovation strategies during the implementation of an open source LMS: an Australian case study. Paper presented at the V International Conference on Multimedia and ICT in Education (m-ICTE2009). Lisbon, Portugal.

Uys, P.M. (2009, May). Using change management, professional development and communication strategies to support an open source LMS implementation. eLearning and Instructional Design Conference. Ark Group. 13 - 14 May 2009. Melbourne, Australia

Uys, P.M. (2007). Enterprise-Wide Technological Transformation in Higher Education: The LASO Model. International Journal of Educational Management (ISSN: 0951-354X), Emerald, UK.

Project team members

Education Services Australia: Jenny Millea (60% for four months, then 30%)

During 2008/2009 she worked with Education.au's Strategic ICT Advisory Service (SICTAS) team investigating collaboration in teaching and learning and was responsible for authoring two reports: Collaboration in Teaching and Learning and Emerging Technologies: Planning for Change.

Jenny was the lead writer for Education.au's submissions to the Australian Government Consultation Blog Discussion Paper, the Review of the National Innovation System and the Bradley Review of Australian Higher Education.

She was project director for the ALTC Exchange (formerly Carrick Exchange) during 2006/7 in which she undertook the preliminary research and conceptual work in developing the scenarios that were the basis for the RIN (Resource Identification Network) demonstrator and the subsequent core functionality of the ALTC Exchange service. She managed the consultation processes with the higher education sector for the rights management investigation and the metadata investigation.

Victoria University: Dr Ewa Sztendur (6 days per year plus 6 days in-kind)

Dr. Ewa Sztendur is a Research Fellow in the Centre for Innovation in Learning and Teaching at Victoria University in Melbourne. Ewa has a PhD in statistics for which she received the Vice Chancellor's Peak Award for excellence in research. She has consulted and lectured in statistics at the University of Melbourne, Monash University and Victoria University. Together with her research collaborator, Iwona Miliszewska, Ewa recently produced a research report ('Australian transnational education programmes in South East Asia: The student perspective') for The Observatory on Borderless Higher Education. The report is based on the findings of a comprehensive study involving offshore students from Hong Kong, Malaysia, Singapore and Vietnam.

In February 2010, Ewa completed a program of educational research and development in the Centre for Teaching and Learning (CTL) at the University of Windsor (UWindsor), Canada; the four-week visit was supported by Windsor University's internationally competitive Visiting Fellowship program.

Sztendur, E.M. & Miliszewska, I. (2010, June). *Interest in ICT studies and careers: Perspectives of secondary school female students from low socioeconomic backgrounds* (refereed paper). To be presented at the Informing Science and information Technology Education Conference (InSITE 2010), Cassino, Italy.

Milne, L. & Sztendur, E.M. (2010, forthcoming). *Portfolio Partnership Program Evaluation*, Centre for Innovation in Learning and Teaching (report). Victoria University, Melbourne, Australia.

Sztendur, E.M. & Milne, L. (2009). *Understanding student use of technology* (report). Centre for Innovation in Learning and Teaching, Victoria University, Melbourne, Australia. (available from <http://pandora.nla.gov.au/tep/104942>)

UNSW-ADFA: Dr Henk Eijkman (6 days per year plus 6 days in-kind)

Dr Henk Eijkman is currently working as a higher education learning solutions specialist at the University of New South Wales at the Australian Defence Force Academy (ADFA) Campus. He is also a Visiting Professor of Academic Development at Annasaheb Dange College of Engineering and Technology in India.

Henk's academic background is in the social sciences and post-school educational innovation and leadership with a focus on social inclusion and Web 2.0+ digital technologies. Innovation in the service of social inclusion is the common thread of his work throughout his professional career. Henk publishes widely in international journals and serves on three Conference Committees. He is the incoming editor of 'The Learning Organisation', and is a founding co-editor of the new International Journal of Quality Assurance in Engineering and Technology Education (IJQAETE).

His research currently focuses on the strategic role of social technologies, especially Web 2.0+, social theories of learning and non-western, post-colonial, perspectives in enhancing social inclusion.

Eijkman, H. (in press) Dancing with Postmodernity: Web 2.0 as a new epistemic learning space. In Lee, M.W. & McLoughlin, C. (Eds) *Web 2.0-Based E-Learning: Applying Social Informatics for Tertiary Teaching*. Hershey: IGI Global

Eijkman, H., Kayali, O., Yeomans, S. (2009) Achieving continuous quality improvement in engineering education: using soft systems thinking to confront the politics of curriculum change. In Patil, A, & Gray, P. *Engineering Education Quality Assurance: A Global Perspective*. New York: Springer Science + Business Media, pp. 223-234.

Eijkman, H. (in press) 'Academics and Wikipedia: Reframing Web 2.0+ as a disruptor of traditional academic power-knowledge arrangements' *Campus-Wide Information Systems*

ACODE - Gordon Suddaby (in-kind of 12 days per year)

Gordon Suddaby is the Director of the Centre for Academic Development and eLearning (CADEL) at Massey University. He has extensive experience and expertise in the development and implementation of institutional quality enhancement initiatives and strategies and his Centre is responsible for quality enhancement and assurance of Massey's distance education offerings. He is in his second term as the President of ACODE (Australasian Council on Open, Distance and E-Learning). He is an executive member of both HERDSA (New Zealand) and DEANZ, (Distance Education Association of New Zealand). Over the past three or four years Gordon has led more than \$2000,000 of externally funded eLearning projects including the development and implementation of eLearning guidelines, a project investigating academic development for of staff involved in eLearning, and a major project investigating the impact of academic development on student learning outcomes.

He led the Massey University consortium which won the contract to host Ako Aotearoa (New Zealand's National Centre for Tertiary Teaching Excellence). He is an auditor with both the Australian University Quality Agency (AUQA) and the Institutes Technology and Polytechnics Quality (ITPQ) organization in New Zealand.

CAUDIT – Peter Nissen (in-kind of 12 days per year)

Peter Nissen is the Manager, Strategic Initiatives for the Council of Australian University Directors of Information Technology after three years as the National Broadband Adviser for Education – a role under the Australian Government's National Broadband Strategy. Prior to 2002, Mr Nissen was the Director, Information Technology Services at the University of Adelaide. He was a member of the Australian ICT in Education Bandwidth Sub-Committee and the National Collaborative Research Infrastructure Platforms for Collaboration Working Party. He was co-author of the Higher Education Bandwidth Advisory Committee Report titled "[A framework for an Australian research and education network](#)" that led to funding for the Australian Research & Education Network. Mr Nissen has served on the boards of the Internet Society of Australia (ISOC-AU), the Australian Domain Authority (auDA) and education.au limited. Before entering the education sector, Mr Nissen worked for companies in Australia, Europe and the US in mining, transportation planning, defence, IT consulting and telecommunications. He has a BSc (Queensland), Dip.Comp.Sc. (Adelaide) and an MBA (Adelaide).