AUSTRALIAN COUNCIL OF DEANS OF
INFORMATION & COMMUNICATIONS TECHNOLOGY

ALTA small grants scheme 2022 - Terms

The purpose of the ALTA small grants scheme is to aid the creation and dissemination of knowledge and evidence-based good practice in higher education for information and communications technologies. The grants are intended to support projects in current challenging areas of practice and theory in ICT higher education. Each application must show involvement from two or more universities.

Area of interest:

There are no themes for 2022 grant applications, however inspiration for projects could focus on addressing the challenges highlighted by the keynotes at the ACDICT 2021 Annual Council Meeting on Friday 1st October 2021 (Appendix A) with tangible/material outcomes and impact (e.g., tested tool, framework, etc.).

Selection criteria:

Selection will be made by an ALTA working party appointed by ALTA chair and the ACDICT executive, according to the following selection criteria:

1) How well the topic addresses a relevant challenge in practice and theory in ICT higher education;
2) Novelty of the project or methods;
3) Feasibility and quality of methods;
4) Importance of question and quality of the proposed solution;
5) Impact of the output to ACDICT community;
6) Quality of the artefact produced by the ALTA grant.

Funds available: Total available funding for all 2022 ALTA grants is $50,000. The expectation is to support 3 to 5 projects from this funding pool.

Activities not funded:

- Teaching buy-out;
- Conference expenses;
- Travel, software and hardware infrastructure unless justified based on the project output (must directly align to the project goals);
- Professional development.

Forms of grant suggested (but not limited to):

- Study to explore a new issue or concern in ICT higher education, with a report on outcomes.
- Prototype of tool or framework designed to demonstrate capability or suitability of proposed approach/solution.
- Active workshop.

Grant applications are free form, however must address the following criteria:

- Problem statement;
- Project participants - there must be a minimum of two universities for each submission;
- Summary of proposed project work, and relationship to a relevant challenge in practice and theory in ICT higher education;
- Indicative costing - include a statement regarding how the proposed project will support a sustainable ongoing initiative, if applicable.

Expected outputs:

Tangible forms of output or outreach activity, and dissemination based on the outcome of the grant. For example:

- Workshop based on the outcome of the grant (e.g., tool, framework, etc. can be paid for as a cost within the grant).
- Best practice guidelines publication, such as TEQSA Guidelines collection.
- Peer-reviewed journal or conference papers.
- Apps, websites [without maintenance, on-going funding or work].

Application timeline / period of work:

Applications to be submitted to the ACDICT Executive Officer (eo@acdict.edu.au) by 5pm (AEST) Friday 18th March 2022.

Successful applicants will be notified by 5pm (AEST) on Thursday 14th April 2022.

Successful applicants are to present an overview of their project proposal to the ACDICT Learning and Teaching Academy (ALTA) (Date and venue TBA) as guests of ACDICT.

Project work to be completed between April 2022 to June 2023, with quarterly progress updates provided to the ACDICT Executive Officer (July / Oct / Jan / April).

Grant recipients will be invited to present their work at the 2023 ALTA or 2023 ACDICT Annual Committee Meeting (Dates and venues TBA).

ACDICT contact: Teresa Cheong, Executive Officer via eo@acdict.edu.au

APPENDIX A: HIGHLIGHTS OF THE KEYNOTES AT ACDICT 2021 ANNUAL COUNCIL MEETING, FRIDAY 1 OCTOBER 2021

"Translating research outcomes for impact" - Dr Cathy Foley, Australia's Chief Scientist

<u>The way we do research is changing:</u>

- New capability to assist:
  - AI/ Machine learning/ Quantum information
- Future labs, field work and infrastructure.
- New ecosystems in science and technology:
  - Open science, Open innovation, Tokenisation, Publication and Peer Review

<u>The funding and metrics problem:</u>

- Current research funding and metrics miss great work (the fish net example)

<u>The accelerating road to progress:</u>

- Universities, government labs, industry, state governments need to move from a siloed system to ecosystem.
- Translation components - "science +":
  - Science also includes engineering, design and user interface, correct business models, policy and regulation, social license, and marketing

<u>What we work on is changing:</u>

- Future industries:
  - Australian hydrogen industry, space, AI and machine learning, quantum technology sector
- Future workforce issues:
  - having the right skilled work force
  - attracting more young people to STEM education, training and careers
  - industry PhDs
  - embracing full human potential and increasing women's participation in the work force
  - transitioning workers impacted by the transition to low greenhouse emission economy
  - being able to access research information
- Quantum computing is going to trigger a computational paradigm shift. Our efforts need to be part of a quantum ecosystem standing together.
- Space will attract 20,000 jobs over a decade. 319 skills are needed, of which 310 are in short supply.
- Career beyond the server room:
  - PhD students can aspire to any career, e.g., industry, science policy fellowships, government

Conclusions:

- Change is afoot
- Great opportunity
- Role of the Dean is critical
- Diversity results in better teams and outcomes
- The modern researcher role is changing
- We need clear career pathways for STEM

“Australia’s digital future” - Rupert Grayston, CEO, Australian Computer Society

Australia’s future needs:

- New skills
- Reskilling existing workers
- Public Sector Professionalism
- Changed directions for policy, industry and education

Digital Pulse Report 2021 – tracking the ICT workforce

- Forecast 60,000 shortfall in ICT workers
- Growth in ICT enrolments

Barriers

- Gender gap is holding technology sector back
- Young Australians are still reluctant to study STEM and ICT subjects
- COVID restrictions on overseas students

State strengths

- SA – space industry and defence
- VIC – games and medtech
- NSW – fintech and government services
- WA – mining
- QLD – agtech

Emerging fields

- AI
- Quantum computing
- Robotics
- Growing push for startups

Industry needs:

- AI experts
- Data scientists
- Cybersecurity
- Cloud engineers
- Coding disciplines

Reskilling workers:

- Boost female participation
- AI capabilities
- Cybersecurity
- Legislative requirements
- Reskill executives

Conclusions:

- Changing role of universities
- Evolving workforce
- Slow and steady reopening of borders
- Future tech workers coming from reskilling as much as skilled migration
- Increasing demand for specialist courses and skills