















#### **Foreword**

Rural and regional students have the same right to a job outcome as metropolitan students, but don't always get the same opportunities. The tyranny of distance creates a series of compounding obstacles for remote students:

- Few choices when it comes to study options, including in relation to technology
- Limitations on the industry experiences they are exposed to
- Limited access to people who actually work in industry

All of these obstacles can be overcome when leading edge technology is combined with thoughtful, user-centred design. The Regional Partnership Showcase held at Innovation Central Canberra at the University of Canberra provided an opportunity to see and experience what's possible. The event provided an opportunity to hear from students, industry and mentors that participated in projects funded under the CreatEquity grant; a

Commonwealth Government's Higher Education Participation and Partnerships Program (HEPPP).

The program was supported by strategic industry partner Cisco and the broader National Industry Innovation Network (NIIN) and was living proof that positive change does not have to involve multi-million dollar budgets and protracted timeframes. In less than 12 months the team was able to design, develop and deliver interventions that will go a long way towards helping to inform students' aspiration when it comes to studying digital technology but also to build their capability and confidence when it comes to learning through technology.



#### **Professor Janine Deakin**

Executive Dean, Faculty of Science & Technology

**University of Canberra** 















# The Skills Challenge in Regional and Rural Australia

Many regional and rural areas of Australia face severe skills shortages alongside high unemployment. For example, in Outback Queensland, job vacancies increased by 25% year-on-year in 2022, while the unemployment rate remained above 10%.<sup>1</sup>

A primary factor contributing to regional workforce shortages is the disparity in educational attainment. Educational attainment decreases with remoteness. In major cities, 43% of people hold a Bachelor's degree or higher, while in inner and outer regional areas, 29% have Certificate III or IV as their highest qualification. In remote and very remote areas, the majority—42% and 53% respectively—have only completed Year 12 or lower.<sup>2</sup>

The disparity between metropolitan and regional Australia has the potential to further

grow as digital technology reshapes the workforce. Digitalisation is not only transforming traditional roles—making digital proficiency essential in fields like agriculture, healthcare, and retail—but is also creating new jobs that can be performed remotely, theoretically accessible to anyone with the right skills and connectivity.

The challenge lies in uplifting skills and building capabilities in areas without easy access to traditional educational infrastructure. In addition to being a focus for future skills development, digital technology is becoming a key platform for delivering skills training and educational opportunities to remote and regional communities. By leveraging digital solutions, regional Australia can bridge the gap in skills access and ensure that all communities have the opportunity to thrive in a digitally-driven economy.

















## **CreatEquity collaborations**

The event provided an opportunity to hear from students, industry and mentors that participated in projects funded under the University's CreatEquity grant scheme, made possible by the Commonwealth Government's Higher Education Participation and Partnerships Program (HEPPP).

Focused on individuals from underrepresented backgrounds, CreatEquity initiatives are designed to boost digital literacy and foster aspirations for higher education. In 2024, six projects were developed to support students at various stages, from pre-access to transition, helping to bridge educational and skills gaps in regional areas.

## **Project Snapshots**



#### **Holiday Tech Workshops**

#### **Description:**

A hands-on tech workshop series, held in school holidays, developed to introduce high school students to essential skills in cybersecurity and app development.

#### Problem it Solved:

Addressed the gap in practical digital skills training for ACT and regional students, providing exposure to key tech areas.

#### Results:

Students gained foundational knowledge in Python for app development and participated in simulated hacking experiences for cybersecurity. Program expansion is planned for 2025, with future sessions targeting broader digital literacy.



## Gamification platform for learning using VR

#### **Description:**

An immersive learning tool using Virtual Reality (VR) to engage regional high school students (Years 9–12) in digital literacy and problem-solving. The platform integrates gamified scenarios to encourage critical thinking and teamwork.

#### **Problem it Solved:**

Helped bridge the digital divide by offering a technology-driven learning experience for remote students.

#### Results:

The VR module created an authentic and interactive learning environment, fostering interest in emerging technologies like AI and cybersecurity, while enhancing students' readiness for the digital economy.



#### **ICT School Immersions**

#### **Description:**

Sessions designed to inspire students to consider careers in technology. Brokered by industry specialists the sessions are designed to expose students to emerging technologies and increase interest in technical careers.

#### Problem it Solved:

The sessions aim to arm students with a more accurate picture of technical professionals and inspire them to re-consider a career in tech.

#### Results:

Feedback has been overwhelmingly positive from students including many participants that are now actively pursuing studies in technology.















## The role of ICC

Innovation Central Canberra (ICC) has played an essential role in bringing the CreatEquity collaborations to life, providing a platform for students, researchers, and external collaborators to co-create impactful digital solutions.

Established by Cisco and the University of Canberra, ICC de-risks the innovation process. Participants get to explore and develop actual prototypes and solutions, not just talk about what's possible.

For students, ICC provides real-world work experience. Through hands-on involvement in ICC projects, students gain valuable experience in developing solutions that drive digital transformation across sectors like healthcare, education, and regional development. The unique ICC model accelerates innovation for partners while building critical skills for future workforce leaders.

## National Industry

ICC is part of the National Industry Innovation Network (NIIN), a collaborative vehicle for digitally transforming industries and accelerating innovation to generate large-scale economic and societal impact. The NIIN has evolved to become one of the largest innovation networks in Australia and includes six Innovation Centrals, eight Research Chairs, five specialised technology centres and dedicated skills development programs.

Each Innovation Central has its own unique focus. ICC's focus areas include:



Defence



Cyber security



Critical infrastructure



Digital skills

#### **How Innovation Central Canberra works**

## Industry bring in real-world challenges

## ICC helps to solve them

















## The role of Cisco's Networking Academy in addressing rural skills gaps

An important element of the partnership between Cisco and the University of Canberra is the Cisco Networking Academy Program, a global IT and cybersecurity education initiative. Networking Academy offers industry-leading courses, tools, and resources that equip people from diverse backgrounds with essential digital skills for the modern economy.

At the University of Canberra, Networking Academy provides students with hands-on training in high-demand areas such as cyber threat management, network defence, endpoint security, and cloud security. This specialised curriculum equips students with industry-relevant skills and connects them to real job opportunities and mentors.

Through Networking Academy, the University of Canberra is helping to build a digitally skilled workforce, preparing students to meet the demands of Australia's rapidly evolving digital and cybersecurity landscape.



## Snapshot: the Cisco Academy For the Vision Impaired (CAVI)

CAVI was established to provide a unique learning experience tailored specifically for vision-impaired students interested in ICT / networks. CAVI's curriculum is designed to incorporate cutting-edge technology and adaptive learning methods, ensuring all students have equal opportunities to succeed.

## NetAcad's global impact

20.5M

3.7M

190

11,700

Total students since inception

Students in FY23

Countries

**Academies** 

**27%** 

3.75M

95%

Female participation since inception

New jobs since 2005

of students completing certification-aligned courses attribute their participation in Networking Academy to obtaining a job and/or education opportunity





ICTeach specialises in developing technology-based lesson plans tailored to the unique needs of regional students. By collaborating with educators and institutions, ICTeach delivers engaging, curriculum-aligned digital education modules. Its programs include hands-on tech days and tailored digital literacy workshops, aimed at enhancing digital skills and inspiring students to pursue techrelated fields.



Virtulane is an innovative organisation dedicated to transforming education through immersive technologies. By leveraging tools such as virtual reality, Virtulane bridges the educational divide for students in regional Australia, offering them access to advanced learning experiences typically reserved for urban centres. Virtulane's mission is to inspire curiosity, foster digital literacy, and equip students with the skills needed to thrive in emerging technological fields.



The Country University Centre
Snowy-Monaro supports students
in rural and regional areas by
providing dedicated learning
spaces, technology, and resources
to pursue tertiary education locally.
Through a supportive and
connected environment, CUC
Snowy-Monaro enables students to
access high-quality education
without needing to relocate.

## How to find out more



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