Charles Sturt University

Online Learning Innovation & Incubation Strategy

u!magine

!ncubate

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Executive Summary

This document describes CSU's Online Learning Innovation and Incubation Strategy designed to underpin the work of the u!magine Digital Learning Innovation Laboratory in establishing a culture of innovation in online learning technologies and teaching practices. Key stakeholders in the strategy include u!magine, online teachers, learning designers, learning technologists, researchers, learning and teaching leadership staff and students (both as beneficiaries of innovation and as innovators in their own right).

The Strategy identifies a range of innovation and incubation activities designed to achieve the following four key objectives:

COMMUNITY OF INNOVATION

Foster a **Community of Innovation** in online learning that involves our staff and students, businesses, education providers and local communities. Create a **network** for various stakeholders from within CSU and external partners to create a community around innovation that **engages** our talented community of staff and students which make them part of an innovation process within CSU that creates opportunities to harness their skills and knowledge.
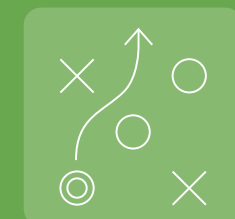
CREATIVE SOLUTIONS

Establish processes to develop our own **Creative Solutions** to the issues faced in online learning and teaching. Provide opportunities and methods of **stimulating**, capturing and seeking out new ideas around online learning within CSU. **Identify** the kinds of problems in online learning that need to be solved to improve student learning and teaching experience.

ADAPTION & ADOPTION

Promote the **Adoption and Adaption** of new technologies and practices in online learning. **Nurture** and support new ideas and technologies for possible uptake by a broader audience. **Evaluate** ideas by creating opportunities to pilot and trial new technologies and practices.
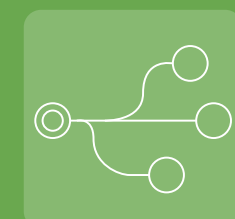
FUTURE PATHWAYS

Develop **Future Pathways** for projects beyond the incubation stage. **Promote** ideas and practices developed within CSU to a broader audience and provide channels for communicating and sharing ideas. **Scale Up** ideas by developing pathways for future development, mainstreaming, commercialisation and growth of viable technologies, systems and practices

The following diagram illustrates the activities being planned in this Strategy which underpins the operational planning for u!magine innovation and incubation activities during 2017 and 2018. The specifics of these activities and timing of activities and events will be determined following furtherc onsultation with stakeholders and in the context of available time and resources.
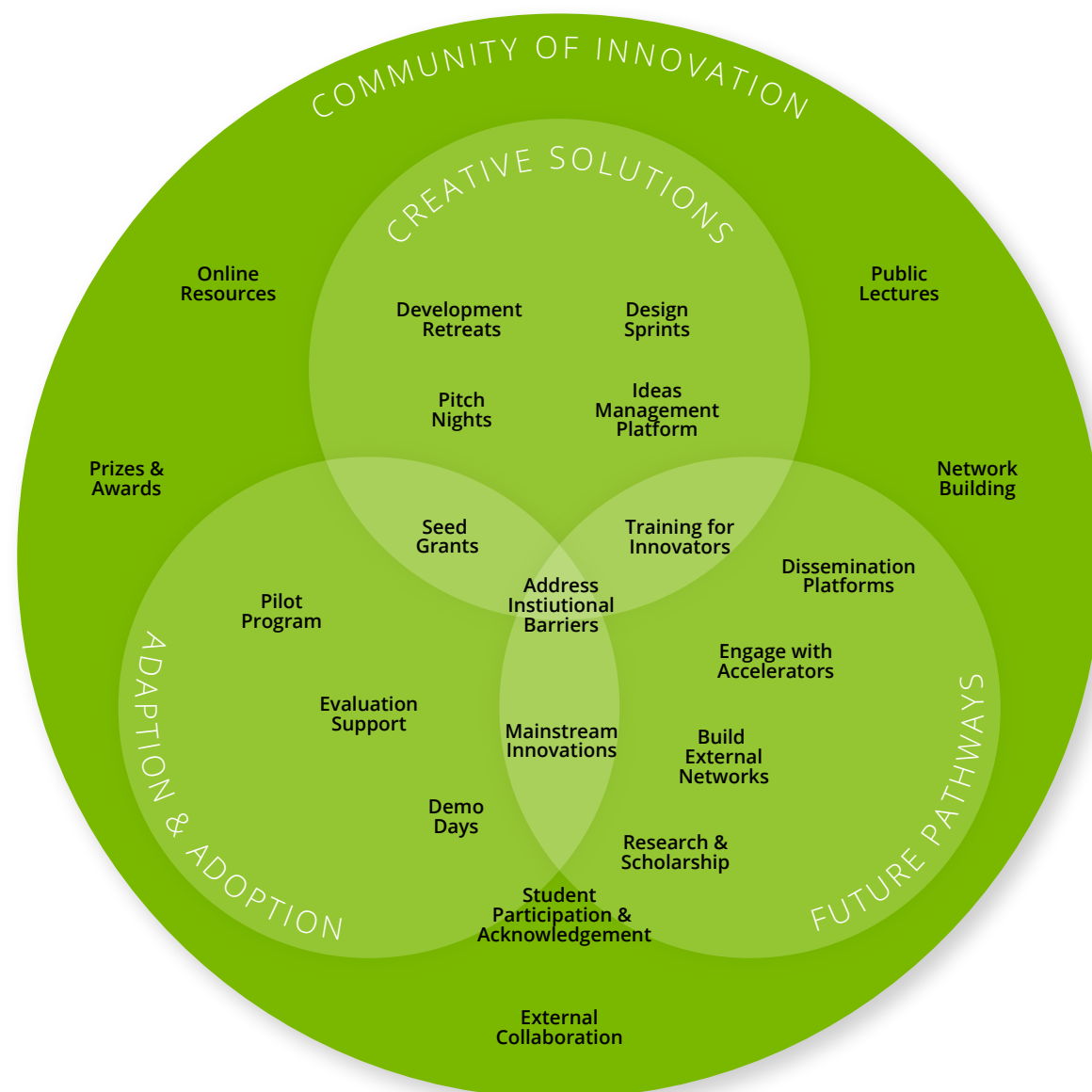
Background and Scope

> The focus of this strategy is on incubating innovation in Online Learning to ensure that CSU maintains leadership and competitive edge in the sector. The strategy aims to stimulate a culture of innovation that allows CSU to embrace an incremental learning approach, recognise and reward students and staff who are willing to take risks to develop new ideas, connect innovative approaches and increase engagement with the broader community. Staff involvement might be through their work as online learning designers, teachers or online learning technology innovators, while students could be involved as innovators in their own right in relation to technology and learning and also as key stakeholders in the pilot implementation of new innovations.

This Incubation Strategy aims to help develop the foundations from which CSU can build its' future processes and platforms to deliver quality online learning and teaching. This will take a two-pronged approach that seeks to develop our own capacity for developing innovative technologies & practices as well as supporting the adoption and adaptation of innovations externally developed. The strategy aims to support the vision for online learning outlined by the Online Learning Model which seeks to increase student engagement with their teachers, peers and profession, subject content, and the institution itself. The model provides a guide for this strategy, the evaluation of projects and identifying areas that need to be targeted.

The Incubation Strategy is intended to address the needs and support requirements of stakeholders involved in projects at a number of stages of development. Eight specific stages have been identified and the support requirements of stakeholders working across these stages have been grouped into four areas of focus as shown in the following table.

NEED	STAGE	AREA OF FOCUS
I have this idea …	*Stimulate*	**Creative Solutions**
I have this problem …	*Identify*	
Who can I talk to?	*Network*	**Foster Community**
Who can I work with?	*Engage*	
We'd like to build out this idea …	*Nurture*	**Adopting & Adapting**
How do we refine/improve our idea?	*Evaluate*	
How do we share what we've done?	*Promote*	**Future Pathways**
Can we go global with this idea?	*Scale Up*	

Each of the areas of focus overlap to create an environment that encourages innovation and provides the necessary support to incubate ideas, practices and technologies to a state where they are ready for broader adoption.

OBJECTIVES

1. Foster a **Community of Innovation** in online learning that involves our staff and students, businesses, education providers and local communities. Create a **network** for various stakeholders from within CSU and external partners to create a community around innovation that **engages** our talented community of staff and students which make them part of an innovation process within CSU that creates opportunities to harness their skills and knowledge.

2. Establish processes to develop our own **Creative Solutions** to the issues faced in online learning and teaching. Provide opportunities and methods of **stimulating**, capturing and seeking out new ideas around online learning within CSU. **Identify** the kinds of problems in online learning that need to be solved to improve student learning and teaching experience.

3. Promote the **Adoption and Adaption** of new technologies and practices in online learning. **Nurture** and support new ideas and technologies for possible uptake by a broader audience. **Evaluate** ideas by creating opportunities to pilot and trial new technologies and practices.

4. Develop **Future Pathways** for projects beyond the incubation stage. **Promote** ideas and practices developed within CSU to a broader audience and provide channels for communicating and sharing ideas. **Scale Up** ideas by developing pathways for future development, mainstreaming, commercialisation and growth of viable technologies, systems and practices.

STAKEHOLDERS

The key Stakeholders for this strategy are:

- » CSU Teaching Staff
- » CSU Professional Staff
- » CSU Students and Potential Students
- » EduGrowth Community
- » Educational Technology Businesses and Investors
- » Our local campus communities and businesses
- » The wider Educational Technology scholarly and practice community

Activities & Initiatives

u!magine plans to conduct a range of simultaneous activities aimed at addressing each of the Objectives. While many of the activities outlined will be directly facilitated by u!magine, it is also understood that there are many opportunities for u!magine to act as a conduit and facilitate access to external events and establish partnerships and engagement with external services. The activities outlined in the Online Learning Incubation Strategy aims to achieve the establishment of a broad Community of Innovation - one that is sustainable, connected and creative.

COMMUNITY OF INNOVATION

To foster a Community of Innovation u!magine aims to utilise its experience in bringing together parts of the CSU community to work together and exchange ideas. We recognise that there is already plenty of existing innovation but there is a need to provide a conduit for staff to connect and share their work. Visibility is an issue so the actions within this area are aimed at building capacity in publicly accessible ways. Working more publicly will allow CSU to extend this community outside the institution and engage with our local communities and the broader education & technology sectors.

Public Lectures Series

Establish a public lecture series as a way to provide greater visibility in the community of the work being done at CSU and with CSU including topics from research and teaching practice.

These kinds of events provide a forum to expose and engage the broader community with new ideas. Guest speakers visiting CSU, including entrepreneurs, educational technology researchers, innovative practitioners, and members of the EduGrowth community, could be integrated to create a broader audience and recording and broadcasting these events can provide global channels for communication and dissemination.

Online Resources

Create a single web resource that provides public access to the work being done at CSU as part of the Community of Innovation.

The site can provide access to media generated at events, act as a knowledge base for the network to build, provide a contact point to ask questions and provide feedback and act as a publishing channel to promote our work.

Prizes and Awards

Establish Prizes and Awards to provide a way to recognise the efforts of staff and students, expose them to greater number of people, and draw attention to CSU.

These awards can provide incentives for innovation, offer encouragement and provide an opportunity to invite sponsorship and industry collaboration with CSU.

Network Building

Develop collaboration opportunities for staff and students to meet and potentially work together around shared interests.

Create events and communication channels to connect groups with common interests and practice. These networks can extend beyond our community to engage and develop networks with local businesses and educators as well as the independent and entrepreneurial technology communities.

External Collaboration

Create opportunities for CSU to engage with emerging communities involved in online learning and educational technology.

One of these communities is the Indie Ed-Tech community of practitioners who are adopting a non-vendor approach to Educational Technology. Rather than pursue innovation with a commercial imperative, the Indie movement is seeking to develop more sustainable applications and infrastructure driven by improvements to the learning experience not the bottom line. This alternative to commercial products and vendor systems may act as a way to encourage home grown solutions and for CSU becoming part of this community could provide an opportunity to collaborate with educators, students and institutions around the world who are engaged in exciting online learning activities and practices.

CREATIVE SOLUTIONS

CSU needs to develop our own capacity to address the challenges we face and develop technological solutions. Rather than expect external vendors to recognise and provide solutions we need to develop a pathway for us to do this ourselves or in partnership with others. The value in generating potential solutions often emerges through what is learnt in the process along the development journey. In other words we need to acknowledge the iterative steps towards successful solutions and that the first attempt may not necessarily lead to a successful outcome but building on the learnings and evolving the solution may eventually lead to the intended outcome or other initially unanticipated outcomes. This will ensure that we are able to drive innovation and steer it in the direction that is in tune with our strategic direction and is more responsive to the diversity in our student and staff communities.

Ideas Management Platform

Develop a platform to capture issues, ideas and suggestions and connect people interested in engaging with these problems.

The platform will provide a single point of contact that allows student and staff to raise issues and suggest ideas across the Student, Teaching and Support spaces in online learning.

Design Sprints

Involve staff and students in a workshop approach to designing solutions and working on prototypes.

Utilising Design Thinking tools and methodologies teams will work together in a "problem space" to work on solutions to real identified problems. Run over a couple of days, these events can help build community and tackle some of the challenges we face in online learning.

Pitch Nights

Initiate a series of Pitch Nights to enable staff and students to present their ideas and innovations to a broader audience, create buy in and progress towards implementation.

These events are an opportunity to engage with the broader community as a public event, allows innovation to come from anywhere and facilitate a way to progress good ideas. Events can be structured with a prize that may take different forms from cash to scholarships or a even "Shark Tank" approach where a panel, or through audience voting, chooses where to invest funds. These events could easily be open to our local communities as a - way of engaging with schools, teachers, TAFEs and a much broader range of student population across the K-12 and higher education sector.

Seed Grants

Provide Seed Grants that provide funds to develop Proof of Concept designs and test early iterations of a Minimum Viable Product.

These grants could be offered as prizes or incentives for participating in the Design Sprints and Pitch Night events. Used in conjunction with these events ideas can be curated and those with the most merit be fleshed out and progressed to the next stage, creating a pipeline and pathway for future innovation. These grants would aim to enable an idea to move beyond the early stages and progress to a point where it is able to be implemented and tested.

Development Retreats

Host a Development Retreat to gather staff and students together for in depth development work.

Taking time out from their normal jobs and constraints, teams are able to take time out to focus on developing an idea through to a prototype or beyond. While similar to Design Sprint they are more focussed on development and coding they are an opportunity for regular staff to get away from the "normal" distractions and "business as usual" to encourage creativity and personal development.

ADOPTING & ADAPTING

Key to the Incubation Strategy is supporting the adoption and adaption of new innovations. u!magine will be seeking to augment existing practices by coordinating a small number of events that will allow more interaction between divisions and units within CSU to enable more knowledge sharing and offer better support. This will be done in conjunction with a dedicated pilot program that will provide staff with access to support resources to conduct small scale trials of new and emerging technologies. In addition to facilitating the reuse or repurposing of innovations emerging from within CSU, the strategy will also establish mechanisms for ideas emerging from outside of CSU, such as from within the EduGrowth community, to be adopted or adapted for use within CSU.

Demo Days

Host Demo Days to provide an opportunity for educational technology vendors to pitch their products or prototypes to our community of staff and students.

Quite often decisions about Educational Technology are not made directly by students or teaching staff, but are filtered through professional staff who are not actively involved in teaching or learning. These events would provide a way for vendors to interact directly with their potential users. For early stage startups involved in the EduGrowth programs this may be an important opportunity to get feedback to test and shape development of their product. For established vendors a way to market their wares and for CSU an opportunity to see what interests our staff and students. These events could travel across the campuses and include educators from the whole Education sector in our local communities. We could invite local entrepreneurs those in the EduGrowth community and local businesses and include in the program opportunities for Questions and Answers, debate and discussion.

Pilot Program

Initiate a Pilot Program with a small number of targeted trials and establish a community of staff and student innovators.

This group could become a useful resource for our engagement with EduGrowth and a way to fast track evaluation, adaption and adoption of new technologies and practices. Those involved in the program could have vendors pitch to them, provide essential feedback, conduct beta testing, market tests and could act as an advisory group. Staff could be compensated for their time or incentivise

with access to gear and gadgets. Having a small Pilot group would allow more focussed technical support and ensure a common point of contact to help outsource the risk that some academics and students may face in the innovations process.

Evaluation Support

Support quality evaluation of innovative practices.

Key to the adoption and adaption of new technologies and practices is quality evaluation data that can inform decision making. This would ensure that scholarship is incorporated and supported right from the outset and that valid and useful data is being collected, managed and evaluated. There is also an opportunity to develop a robust Pilot Evaluations Framework for pilots of educational technology. This framework would assist in ensuring that decisions are made based on good evidence and that there is consistency from one project to the next. The framework could simplify the ethics process, feedback methods and inform the research questions within the constraints of the Pilot Program.

FUTURE PATHWAYS

This component will cover a number of activities and consultative efforts to provide a way to progress projects beyond the incubation stage. These would include:

Engage with Accelerators

Explore the opportunities made available through CSU's membership of EduGrowth and other Accelerators.

Accelerators like EduGrowth (a national educational technology accelerator of which CSU is a founding partner) provide pathways for further development and commercialisation of ideas, practices and technologies developed within CSU. While the focus of u!magine is in online learning, other ideas may surface during our community fostering that might be suitable for the range of accelerators that are popping up. This work can be done with Research and Industry to develop a commercialisation path for work done within CSU.

Build External Networks

Connect with external networks of providers, practitioners and enthusiasts.

One of the key benefits of our participation with groups like EduGrowth is that we are already in the development of a broader external network of providers, practitioners and participants. These networks are key to developing future partnerships and collaboration opportunities that serve the university's best interests, but also create a new role for the university in acting as a conduit and facilitator of connections within our regions. Our regional footprint and infrastructure provide CSU with a unique opportunity to connect our communities, and connect them with the world. These connections could allow CSU access to information, knowledge and potential funding that isn't currently available or accessible. CSU should also explore opportunities for collaboration around independent educational technologies and those developed by institutions that do not have a commercial imperative. Embedding CSU in these networks can help facilitate broader adoption of what we develop but also may work to spread the cost and risk for larger and more expansive projects.

Address Institutional Barriers

Identify and address institutional barriers to innovation.

There are a number of barriers to innovation within CSU, in particular a number of policies that impede development of innovations that can be commercialised as well as those they could benefit from being made open or community source. Our current Intellectual Property policies, licensing structures and lack of investment capabilities are all limits that have already been encountered in the work conducted by u!magine. These policies are there for a reason, but there is a need to review, amend, make exceptions and provide different options and channels if projects meet certain criteria. This would include exploring various options such as equity investments in emerging technology, different IP arrangements that encourage innovation, exploration of more suitable licensing for open and community development. Bringing projects under u!magine banner would help manage and provide the necessary oversight required to resolve any outstanding issues and set limits.

Research & Scholarship

Facilitate research and scholarship aligned to online learning innovation.

There are a number opportunities for innovative technologies, their use and associated practice to inform and support a range of research and scholarship activities within CSU. This could also include collaboration with the other universities within the EduGrowth network that would allow broader data collection, different applications.

Student Participation & Acknowledgement

Develop ways to recognise students' work and participation in innovation projects to acknowledge their contribution and increase student participation.

The planned activities in this strategy could provide support and evidence for the areas covered in the AHEGS/GLOs statements as well as provide portfolio evidence and records of their professional practice and community engagement.

Mainstream Innovations

Establish clear pathways to mainstreaming new technologies with support from DIT and the Learning Technologies Unit.

This will include the development of clear channels and processes for transitioning projects into the main body of CSU's technology suite.

Dissemination Platforms

Develop processes and channels to support publishing and broadcast of the work being done at CSU.

Dissemination strategies might include the development of online networks but also opportunities to utilise conferences and symposiums as ways of communicating and disseminating information.

Training for Innovators

Explore skill development opportunities for staff and student innovators

These could include entrepreneur programs or online courses run through professional providers like IDEO or accelerators such as EduGrowth. Such programs typically cover how to pitch, protecting IP, building a team, analysing the market, analysing your competitors, getting seed funding, what resources are available at CSU & how to access them, prototyping, running trials etc.

Outcomes & Actions

The following key Outcomes from this strategy have been mapped to their Objectives and will be delivered through the actions outlined in the Activities and Initiatives outlined above:

Community of Innovation

Creation of publicly available resources that capture the knowledge developed and generated that can be shared and used for promotional and scholarly purposes.

Through Public Lectures Series, Online Resources & Prizes and Awards

Development of a rich network of learners, educators and technology providers from which to base collaborative partnerships into the future.

By establishing Network Building and External Collaboration

Creative Solutions

Capacity building within CSU in terms of process, resources and methodology for incubating ideas into tangible projects.

Creating an Ideas Management Platform, and establishing Design Sprints and Pitch Nights processes.

Development of a number of home-grown initiatives and technologies to support online learning and community development.

Through Seed Grants and Development Retreats

Adopting & Adapting

Completion of a number of pilot projects that will explore, trial and evaluate a range of new technologies and practices towards potential widespread use within CSU.

By establishing and supporting Demo Days, Pilot Program and Research & Scholarship

Space for research into evaluation processes in educational technology and the potential to develop a framework with other higher education institutions.

Developing Evaluation Support and External Collaboration

Future Pathways

Pathways for further development capitalising on research and commercialisation opportunities as well as contribution towards policies and practices that encourage and support innovation within CSU.

By working to Engage with Accelerators, Build External Networks, Address Institutional Barriers, Research & Scholarship, Student Participation & Acknowledgement of students, Mainstream Innovations, Dissemination Platforms and providing Training for Innovators

Challenges to be Addressed

A number of challenges related to innovation have been identified and will need to be addressed. These include:

» Genuine buy-in and support for the idea that the majority of innovations will initially be seen as failures or ahead of their times and often the value is in the learning along the way.
» A clear process for managing negative feedback and strategies to mitigate the consequences and effect.
» Creating a safe environment for students and staff to participate in innovative trials.
» Ensuring that the proper amount of resources are allocated to a project to ensure success and that projects remain viable within any limitations.
» Getting student involvement in events and identifying students available to work with staff. This can be challenging in terms of logistics, funding and timing.

Conclusion & Implementation Process

This document has described an Incubation Strategy which will underpin CSU's ongoing innovation in Online Learning towards ongoing leadership in the sector. The Incubation Strategy seeks to both develop CSU's capacity for developing innovative technologies & practices as well as supporting the adoption and adaption of innovations externally developed and aims to support the vision for online learning outlined by the Online Learning Model. Four overlapping aspects to the Strategy have been described: development of a community of innovation, incubation of creative solutions, adoption and adaption of innovative ideas, and future pathways towards scaling up or commercialising innovation. A series of actions addressing these broad aspects have been described.

It is intended that this Strategy underpins operational planning for u!magine during 2017 and 2018. The specific activities and timing during 2017 and 2018 will be determined following further consultation with stakeholders and in the context of available time and resources. The Strategy will be placed on the u!magine website and will be cross referenced in other documentation such as action plans and documents relating to specific activities. As well as underpinning detailed operational plans the Strategy aims to stimulate a culture of innovation that allows CSU to embrace an incremental learning approach, recognise and reward students and staff who are willing to take risks to develop new ideas, connect innovative approaches and increase engagement with the broader community.