Living Labs and Future Narratives

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Authenticity, originality, lived human experience. How much value is being placed on these qualities in a world facing challenges such as AI, climate change and economic breakdown, rapid reconfigurations in the future of work? How can cross curriculum experiences and partnership pedagogies support students and universities navigating these challenges? In this paper, I reflect on innovations in learning and teaching, research, and scholarship in an age of seismic uncertainty. Specifically, I address the intersections between Screen Media, STEM, design thinking and storytelling for sustainability as part of the student and university experience. Citing case studies and examples, I consider some of the co-creation methodologies, the role of appreciative enquiry, and cross-curriculum partnership pedagogies, in the form of living labs. These have demonstrably enabled us to learn from each other and contribute to a wider landscape of scholarship and work that values original thinking and authentic creative expression.

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Introduction

Building on the work already established and articulated in the paper on Sustainability, Living Labs and Repair: Approaches to Climate Change Mitigation, I hope to explore through further case studies, ways in which cross collaborations, partnership pedagogies, cross disciplinary projects and methodologies have been undertaken and developed further with Western Sydney University and partners, both internally and externally. I consider learnings from these approaches, and point to signposts for future activities, whether for learning, teaching, research and further collaborations in this space. I consider another project initiated at Western Sydney University in 2022 coming from the science research space: "Lively Labs. Enlivening the University’s humanities and science research through design and creative practice. Lively Labs is a collaboration between the Science, Technology, Engineering and Maths (STEM) and Humanities and Social Sciences (HASS) clusters to produce creative artefacts and design engaged research addressing the pressing environmental and social challenges facing the Western Sydney area." (Kuch et al., 2022)

Lively Labs and Living Labs; both draw on the idea that a project can bring together people from various disciplines, creating a sense of a living laboratory. A laboratory which draws upon living inputs, coming from different perspectives, involving academics, students and partners who may be external to the University and yet are able to exchange knowledge relating to identified problems. In the case of the Living Labs projects at WSU, they are often projects sited on one of the university campuses. One beneficial characteristic is that they can be used to support ongoing engagement over longer periods of time with particular points of focus, such as locations with biodiverse ecosystems, or projects that demonstrate decarbonisation on campus. By drawing on the accessibility and breadth of campus resources, academics, researchers and professional staff can utilise the values embedded in living social contexts for engagement, learning and research; characteristics that are ecological, cultural, institutional, technical. Many of the Lively Labs strategies can be used very effectively with a wide range of stakeholders (Attwater, 2020; Cerretta & Panaro, 2022; Fam et al., 2020; Kier et al., 2023; Rădulescu et al., 2021). The value of this approach was recognised when WSU’s Living Lab received highly commended in the Australasian Green Gowns awards for a program that is “extremely flexible, replicable and has a very strong environmental focus with potential to grow applauding the real-life examples of curriculum” (Attwater et al., 2020). These can also build capacity for initiatives such as ‘Nature Positive’ goals for the university and community more widely.

These approaches were recognised also for how they are being applied in humanities teaching, especially around concepts of sustainability and environmental awareness. The areas that I have been involved in, address the need for communication in this space, and as Roger Attwater notes, my work with students on videography also allows for critical conversations to be part of this process. (Attwater, 2020). There is great value to be had in humanities, communications and screen media students undertaking field work and engaging with scientists and sustainability professionals. Not only does some of the work undertaken with students in screen media, occur in
documentary and non-fiction storytelling, but they can also include narrative and fictional forms in short film storytelling, across a range of genres, such as science-fiction, romantic comedy or a blend of diverse genres. This allows scope for imaginative exploration of possibilities in sustainable thinking and creative expression of ideas with an emotional range that addresses many of the issues that scientists face in dealing with issues such as climate change. (Gergis, 2023). In the latter section I hope to reflect and explore possible future research methodologies that may capture the benefits of this approach to teaching, but also ways in which they can enrich research methods in this space. Capturing a sense of the learning process & growing awareness of the environment & issues being faced on a societal level may lead into further understandings of transformational processes and offer signposts for future work in this space.

**Collaborative working methods**

Collaborative working methods are essential for students going on to work in the media industries and until recently, have been comparatively underestimated. Dooley et al. highlight the significance of collaboration as a work-ready skill, emphasising that being able to work collaboratively requires its own specific skills development. They argue that in the past, the emphasis in screen media education has been on technical and production skills, but with a growing awareness of the importance of collaboration, there has been more focus on the need for graduates to have more specific experience and knowledge in areas such as emotional intelligence, having a greater ability to negotiate from within teams, to listen and exchange ideas from differing perspectives (Dooley & Sexton-Finck, 2017). It may seem obvious to the outsider, that these things are axiomatic, but from the experience of the projects that I articulate in this paper, with the return to face to face teaching after COVID, there has been an even greater need to focus attention on specific skills in how to work in groups, with respectful approaches, the ability to participate in seemingly simple activities such as active listening exercises, in organising scheduling for projects and other requirements of group work. In working with people from other disciplines, students need access to skills in how best to do this in a respectful and appreciative manner. Collaboration can also involve working in spaces that are less familiar to students. The pandemic period has seen many students not going outdoors as much as usual, so encouraging them into nature spaces, working in groups has been important to counter the sense of isolation that many expressed they had felt. Recent research on young people and perceptions of the natural world have indicated that a lack of experience of nature can lead to biophobia, or fear of nature, which can lead to further reluctance to experience natural spaces. Without that experience, re-experiencing nature can lead to biophobia, or fear of nature, which can lead to further reluctance to experience natural spaces. Without that experience, re-experiencing nature can lead to biophobia, or fear of nature, which can lead to further reluctance to experience natural spaces. Without that experience, re-experiencing nature can lead to biophobia, or fear of nature, which can lead to further reluctance to experience natural spaces. Without that experience, re-experiencing nature can lead to biophobia, or fear of nature, which can lead to further reluctance to experience natural spaces. Without that experience, re-experiencing nature can lead to biophobia, or fear of nature, which can lead to further reluctance to experience natural spaces.

**Partnership projects in teaching: Communicating for Sustainability**

In the undergraduate subject *Communicating for Sustainability* several partners have been involved. They are either invited to participate or have offered themselves to participate. Some of these include:

- *The Reconnect Project* (a mobile phone re-use project)
- *Repair culture: Rehoming the Bower* (a project alerting the community to the relocation of a re-use and repair centre)
- *1 Million Turtles and Turtlesat* citizen science programs aimed at increasing awareness of turtles and wildlife. (Spencer, 2022, 2023)
- *Living Labs* (a project aimed at giving students lived experience of ecological sites and projects within the University). South Vineyard Creek, a bush area situated to one side of the campus with ecosystems zones from mangroves to dry sclerophyll eucalyptus trees, provides precious habitat to diverse species in the middle of a busy urban area with the university and railway tracks on one side, and an industrial area on the other. (Attwater, Hatfield & Tay 2020; Hatfield, 2021)
- *The Painted River Project* - working with artist and academic Dr. Leo Robba and scientist Dr. Ian Wright. (Robba et.al. 2020)
- *Planetary Health Leadership Centre* proposal

Students have valued the opportunity to interact with external partners, to respond to briefs and to work towards proposals or finished work that may be taken up in a real-world situation. As a result of this subject being available for the past few years, it was proposed by Ass. Prof Ricky Spencer to be the capstone subject for a minor in the university’s Urban Development Program, which students can take from across a range of disciplines including STEM subjects as well as Economics, Social Sciences, the Humanities.
The subject is currently being co-taught in a team format with Alison Gill, Tanya Notley and the author, Maryella Hatfield. Part of the design of the minor included the development of a ‘Curiosity Pod’ or micro-credential on Storytelling for Sustainability developed with Hatfield and WSU student partners. (Hatfield, 2022). This was a good example where;

“Partnership pedagogy involves a genuine purposeful relationship with a partner or partners to co-design, co-develop, co-deliver or co-credential curriculum” (Barrie & Pizzica, 2019).

This C-Pod is also being adapted to an Open Learning format and is currently being used by ‘study abroad’ agriculture students visiting WSU from India, to communicate their experiences of sustainability. The benefit of having worked on the C-Pods with student partners is in the collaborative working process to produce materials tested with young people and adapted accordingly. Another benefit of developing these C-pods is seeing how the materials can also be used with partners such as scientists who are keen to gain experience in how best to document and communicate their work.

**Integrating science and sustainability awareness in humanities, communications, screen media, creative industries.**

In two Screen Media subjects, the first; Documentary: Factual Screen Media, the second; Narrative: Fictional Screen Media, it was proposed that for their projects (short documentaries and short fiction films), students focus on the themes of the environment. This could include the human relationship with the natural world, sustainability, climate change or any related aspects that appealed to them. They could work in the formats or genres of their own choice. In documentary, students were encouraged to identify characters working within the space, whose stories they could tell, potentially using interview formats illustrated with cutaway footage. Some students reached out to work with scientists at WSU, one being Ass. Professor Julie Old, an expert in Wombats with a unique citizen science project; Womsat. (Old, 2022). Others found a range of local stories ranging from people working in local government, to local ‘heroes’ cleaning up local waterways, working on regeneration projects. One of these short documentaries, Our Local Water (Fleming & Blackman, 2022) was invited to be showcased on the Western Sydney University Sustainability Showcase, (Dollin, 2022) to illustrate how students are encouraged to undertake community learning and partnership pedagogy projects. (cited with permission from students) In another project, Sydney’s Green Lungs (Warouw et al., 2023), students identified engineers, architects and councillors who designed a major restoration project in Sydney Park. This came about from students undertaking personal observation of their local areas, asking questions about how the water features came about, and what effect they were having on water purification systems and peoples’ usage of the park. They interviewed the designer and a councillor who had worked on the project for approx. 20 years. It was a good example of looking at how green infrastructure can often be taken for granted, until an enquiry is conducted, and the work is made transparent. Documentary technique can be an excellent way to conduct an enquiry. Using visual communication techniques to illustrate key points of the story can also be very effective in imparting complex ideas in a multi-layered way. In the case of the Narrative: Fictional Screen Media subject, students explored a range of fictional genres from satire, parody, cli-fi (or climate fiction), solar-punk, romantic comedy, speculative fiction. One of the films Hello My Name is Mother Nature. (Carroll, 2022) won the Audience Choice Award at the Made in the West film festival in 2022. It could be described as a blended genre of romantic comedy and speculative fiction. The film has the logline: “Hello, My Name is Mother Nature follows Mother Nature attending a terrible speed dating event: all her potential matches are man-made catastrophes. Will Mother Nature be able to find her forever match?” It was a good example of students exploring key ideas in dealing with environmental challenges, but doing so in a way that appeals to young people and audiences more broadly. (film cited with permission from students)

**Space for imaginative explorations**

Students in Screen Media when given tasks to brainstorm ideas on environmental issues, and potential concepts, can tend towards articulating dystopian and apocalyptic narratives. However, when students were exposed to not only a broader range of narrative possibilities, but also exposed to scientists working on solutions in this space, they tended to be more willing to explore narratives beyond dystopian and bleak futures. Having access to scientists working on issues like solutions to climate change, and people with expertise on land management and ecosystems restoration such as Dr Roger Attwater, was very valuable in exposing humanities students to people and topics outside their day-to-day experience. Site visits are key to living labs. Taking students into an environment such as South Vineyard Creek, gave them the embodied learning experience of a location with it a distinct and complex flora and fauna profile. Site visits here endow students with a sense of the value of this ecosystem as habitat for wild animals in the middle of a busy urban environment. Many students had an ‘A-ha’
moment, exclaiming; ‘Why didn’t we know this was here?’ To answer that question, the area is tucked away, it is not visible from the top of the campus, and one would only know it was there, if directed to the site. But most of the students expressed appreciation for the opportunity to go to a location that had unique environmental features so close to the campus, nearby areas where they may have been studying for some time. It also gave them a springboard to look for their own tucked-away local green spaces that may otherwise have gone unnoticed or unappreciated, and to attempt to identify people who might have perspectives or expertise on the areas.

**Figure 1: Students filming at South Vineyard Creek**

**Signposts for the future**

What are some of the methodologies that can support better transdisciplinary interactions? Participatory practices can encourage greater exchanges between people from diverse disciplines and backgrounds. With screen media students, one kind of methodology that could be particularly useful is Photovoice. This could be a promising way to capture their experiences over time, reflecting on how they’ve learnt from the experience of participating in projects with given focal points, such as environmental themes or transitions from one source of energy to another (such as the Lithgow coal and research project). They can offer significant insights that can be shared widely. Whilst many of these students may be visually literate, their projects thus far would have been conducted mainly as group projects. Photovoice would give a specific opportunity for participants to express their personal experiences, observations and learning over a period, outside the teaching subject’s timeframe.

Currently students have a reflective component as part of their coursework, but for research purposes, we would need to return to such cohorts for additional insights, once the teaching program has finished. Until many of these projects, most of the screen media, design, journalism or humanities students will not have been exposed to specialist areas such as biology, ecology, the study of trees, turtles, wombats within their degrees, so they may be faced with a steep learning curve via these opportunities. Again, being able to consider their experiences and reflections over time would be a valuable next step in considering how best to support these initiatives into the future. They can also give insights into better transitions for more sustainable futures, for citizen science initiatives, and cross collaborative processes more widely. In addition to student work, there is much value to be had from collaborations with colleagues from the sciences and across the university, and many ideas for future work are already being proposed. This is just the start of some promising directions in research, teaching and practice that can have wider applications and benefits to many.

**References**

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