CONNECTING PEOPLE and PLANET for a SUSTAINABLE FUTURE

The EcCoWell 3 approach to a sustainable future

for learning cities

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CONTENTS

Executive Summary

This paper examines how PASCAL EcCoWell 3 could be further developed as a path to a sustainable future in a turbulent period of disruptive change.

The paper draws on the 2021 UNESCO *Reimagining the Future Together* report in its assessment of the critical situation confronting humanity and the planet requiring transformation of the world towards "a more just, equity, and sustainable future".

In assessing how the PASCAL EcCoWell approach to integrated holistic development could be taken further as a response to the critical situation identified by UNESCO, the paper discusses the three stages of EcCoWell development since 2012 leading to the 2020 EcCoWell Community Recovery Program which identified several ways in which the EcCoWell concept could be further developed as an approach for learning cities to a just sustainable future.

In examining possible future directions for EcCoWell, the paper considers the relevance of the following approaches to a sustainable future:

- strengthening systems perspectives;
- circles of sustainability;
- doughnut economics.

This analysis led to the following conclusions:

- sub-domains or perspectives should be added to each of the EcCoWell domains;
- culture should be added as a sixth domain with a focus on creativity;
- the conditions require rethinking learning as a driver of change;
- local learning neighbourhoods should be further developed as a key aspect of the EcCoWell approach;
- the expanded concept of EcCoWell 3 can be seen as an approach to building a learning culture through a creative learning process.

These developments should lead to a revitalisation of the EcCoWell approach to holistic sustainable development in cities and communities.

1. The challenge for learning cities

Learning cities everywhere are confronted by a disruptive context of turbulent change. While the impact of the COVID-19 pandemic attracts most attention, this impact is shaped by a context of multiple mega revolutions across demographic, technological, and economic sectors.

These changes include the impact of the technologies of the fourth industrial revolution, particularly artificial intelligence with its impact on jobs, ageing populations, and the transition to a longevity society, while poverty remains endemic and socio-economic inequality has worsened everywhere since around 1980 after some progress before 1980 (Picketty, 2014).

Beyond these social crises, there is the critical ecological crisis with the planet and its systems at risk. This involves not only climate change, but danger to the other life-giving resources of the planet through exploitation in the human dominated age of the Anthropocene.

This critical situation was summed up by UNESCO in its major 2021 report on the futures of education in the following terms.

> *The interwoven futures of humanity and our planet are under threat. Urgent action, taken together is needed to change course and reimagine our futures* (UNESCO, 2021)

It is clear that learning cities are confronted by a situation requiring transformation of the world towards "a more just, equitable, and sustainable future".

In addition to the work of the UNESCO Institute for Lifelong Learning (UIL) thematic networks and the Global Network of Learning Cities' (GNLC) new strategy for 2021-2023 (UIL 2021a), there is PASCAL experience that can be drawn on in the evolution of the EcCoWell approach over a decade since 2012 with a shift in focus during this period from the initial focus on integration of the EcCoWell pillars towards a focus on progressing a just sustainable future.

This orientation emerged from the EcCoWell 2020 Community Recovery Program, and has been explored since then by a few papers directed at aspects of EcCoWell 3 development, as the latest iteration of the EcCoWell concept has been named (Kearns 2021a, 2021b).

In this context, this paper is directed at the question of how the EcCoWell 3 concept can be developed further as an approach for learning cities that addresses "the interwoven futures of humanity and the planet" by finding ways in which the historic objectives of EcCoWell can be strengthened so as to facilitate connecting up the pillars of a sustainable future.

In doing this, the paper looks at several "circular" approaches to a sustainable future that connect the pillars of a sustainable future to see if there are insights that could be incorporated in the further development of the EcCoWell 3 concept. These are the circles of sustainability approach and Doughnut Economics. Both point to ways in which EcCoWell could

be further strengthened. Overall, the paper looks at how systems perspectives could be further developed in the work of learning cities.

Ecology has always been the first word in the EcCoWell concept, so that there is considerable EcCoWell experience over the decade in connecting ecological objectives with social objectives. While this has usually taken the form of connecting community and environment objectives, other aspects have been touched on from time to time.

2. Evolution of the EcCoWell experience

I discuss below the three phases of EcCoWell experience since 2012.

Origins and Stage 1

I developed the EcCoWell concept for PASCAL in 2012 following my participation in a conference directed at planning a Taipei Learning City. I was impressed by the broad approach being taken in the planning which ranged across domains such as health, welfare, environment, and learning.

This raised for me the question of how we integrate such a range of domains in a holistic approach that added value through integrating the strands. I was aware from past consultancy work that there were points of connection between the objectives of Learning Cities, Healthy Cities, and Green Cities, which could be seen as a convergence of objectives across these domains. These perspectives were brought together in the paper I wrote for PASCAL in 2012 titled *Living and learning in sustainable opportunity cities* (Kearns 2012, 2013).

The EcCoWell concept set out in the 2012 paper, and revised in 2013 ranged across the following five domains:

Ecology, economy, community, well-being, and lifelong learning.

The title of the paper conveyed the core EcCoWell theme that this approach was concerned to bring together sustainability objectives, and the traditional learning objective of opportunity.

The EcCoWell approach took off when the Cork learning city became interested and invited me to lead a seminar on this subject during the 2013 Cork Learning Festival. Cork then convened an international conference to discuss these ideas, and took steps to develop as an EcCoWell Learning City.

It is not surprising that this initial phase of EcCoWell had a focus on developing relationships between learning, health, and environment with the Cork Healthy City Committee and the Cork Environment Forum having important roles in developing these relationships

A further important initiative taken by Cork was to test EcCoWell ideas on local learning neighbourhoods through several pilot projects, initially in Ballyphehane and Knocknaheeny in

2016. Further pilot projects were later added with this aspect of the Cork learning city promoted by University College Cork which developed a research base on the initiatives.

Cork's work on EcCoWell was given an international exposure in 2017 when Cork hosted the UNESCO Third International Conference on Learning Cities. Some EcCoWell ideas were reflected in the *Cork Call to Action on Learning Cities* resulting from the conference.

EcCoWell 2 development, 2017-2020

PASCAL reviewed the EcCoWell experience in 2017 with the review leading to an overview paper on EcCoWell being published the Centre for Research and Development in Adult and Lifelong Learning (CR&DAL) at the University of Glasgow in 2019 (Kearns & Reghenzani-Kearns 2019).

The PASCAL review led to happiness and entrepreneurship being added to the EcCoWell objectives in a general strengthening of the well-being objectives of EcCoWell. The 2019 EcCoWell paper also continued the EcCoWell interest in sustainable development with discussion of how EcCoWell could be used to progress the UN Sustainable Development Goals (Kearns & Reghenzani-Kearns 2019:8).

A new aspect taken up in the 2019 EcCoWell paper was the question of adapting EcCoWell to the fourth industrial revolution, particularly the growing influence of artificial intelligence. The need to strengthen human capacity in the emerging "machine age" included broadening the forms of human intelligence developed through learning and experience (Schwab 2016).

Overall, the themes brought into the 2017 and 2019 reviews of the EcCoWell experience since 2012 introduced ideas that needed to be integrated in a fresh articulation of the EcCoWell concept in a world of turbulent change.

This rethinking of EcCoWell was attempted in the 2020 EcCoWell Community Recovery Program which became the foundation for ideas to progress the EcCoWell concept to a third phase of development directed at a sustainable future in a turbulent world of disruptive change.

EcCoWell Community Recovery Program 2020

Cork, Limerick, Wyndham, ad Wolverhampton learning cities participated in the program, along with the Harlem and Datong learning neighbourhoods/districts, Glasgow University and Beijing Academy of Educational Sciences.

To support rethinking EcCoWell, a series of background papers were prepared for participants on subjects such as mental health, environment, rethinking sustainable development, arts, spirituality, and transformative learning, rethinking lifelong learning.

While the reports by participants showed a range of responses in fostering community recovery, there were several general themes that pointed to ways in which EcCoWell could

be develop further to support a sustainable future for learning cities (Kearns & Reghenzani-Kearns 2020). I have named this new stage of development: EcCoWell 3.

1. The value of a systems approach in connecting the strands of the EcCoWell model, and in fostering relational consciousness. This is particularly in building connections between people and planet objectives.

This aspect led to consideration of the role of learning ecosystems, and approaches such as circles of sustainability and Doughnut Economics that apply systems approaches. Their relevance to EcCoWell is discussed below.

2. The growing importance of imagination, empathy, and creativity in a world of "permanent transition" where fresh ideas and innovation in adapting to change is increasingly important. This recognition led me to suggest culture as a further pillar in the EcCoWell approach. This is also discussed below.

3. The Wyndham Learning City in their 2020 EcCoWell report proposed "a new model of partnership with empathy". This sums up a key finding from the 2020 EcCoWell program. Building empathic civilizations across the globe with require broader models of partnership as the Wyndham Learning City recognised.

4. Demographic change in an ageing population with the transition to a longevity society will require that we rethink and broaden the concept of learning so that people are supported through all stages of the longevity life. (Kearns & Reghenzani-Kearns 2020; Makino 2021). The further impact of ageing populations will make this an imperative in reconceptualisation of the longevity "hundred year life (Gratton & Scott 20; Kearns & Reghenzani-Kearns 2021).

These outcomes are taken up in this paper within our discussion of the EcCoWell 3 approach to a sustainable future. Changes in approaches to learning in the emerging context of the longevity society will require much research and testing as longevity impacts on society.

Strengthening systems perspectives in EcCoWell 3

The centrality of ecology in EcCoWell development has meant that systems perspective has always been involved in EcCoWell discussions. This was brought out in a 2012 paper on learning cities as healthy green cities which drew on World Bank and OECD developments (Kearns 2012b). However, the growing recognition of the critical importance of the spectrum of planet issues, and the need to connect people and planet aspects of sustainable development, requires a further look at how global systems perspectives can be strengthened in EcCoWell development.

We discuss below three tools that can be used in this way. These are:

1. fostering learning ecosystems;

2. the circles of sustainability concept as a tool in connecting the pillars (domains) in EcCoWell development;
3. Doughnut Economics as a further tool in connecting these domains for a sustainable future.

Fostering learning ecosystems

It has not been usual to view learning cities in terms of learning ecosystems. While learning ecosystems are implicit in the EcCoWell approach and have been applied to some extent in areas such as learning, health, and environment, these have usually had a local focus, and have seldom extended to global systems. This is now the challenge to find ways to extend the EcCoWell approach to both local and global ecosystems. We discuss the contributions that the circles of sustainability and Global Economics as tools for EcCoWell learning cities could make.

The circles of sustainability approach to sustainable development

Recognition of the need to connect the fundamental domains that support a sustainable future has led to interest in the circles of sustainability approach. as an integrated approach to urban development for a sustainable future.

This is often seen in terms of a triple bottom line to sustainability where economics, ecology, and politics are considered in circles of sustainability (James 2015). Sometimes culture is added as fourth domain.

The interesting aspect of this model from an EcCoWell framework is that it is tripartite with levels at domain, sub-domain (perspective) and aspect levels. Each domain is divided into seven sub-domains so that important perspectives in each domain are identified. The other aspect of interest is assessment with assessment undertaken at nine levels from vibrant to bad and critical.

Participants in EcCoWell up to now have decided what the perspectives are within each domain (pillar) that are most significant for their development. This has led to variable applications of EcCoWell between cities. While there is merit in this, some important aspects of the EcCoWell pillars have been neglected. While I don't think a prescriptive set of sub-domains is needed in EcCoWell, I do think a set of say five perspectives in each domain would have value for cities in consulting and discussing their approach to each EcCoWell domain, particularly in the critical need to connect local and global aspects of each domain.

A suggested set of perspectives (sub-domains) for the EcCoWell domains is set out below. While these could have value in enabling communities to see connections that might have been ignored, I repeat that EcCoWell is an integrated and holistic approach to sustainable development so that it is the overall impact rather than sectoral development in particular domains that matters. More experience is needed in finding ways to retain the holistic

perspective while also finding good ways to connect local and global dimensions of each domain.

I have highlighted culture as a specific EcCoWell domain, and discuss below the reasons for doing this.

Suggested perspectives for each of the EcCoWell 3 domains

Ecology	Economy
• Systems perspectives applied in planning • Learning ecosystems are well developed • Local and global learning systems are well connected • Global warming is being addressed • Ecology objectives are well connected to all other pillars	• Circular economy concept is well applied • Economy is well connected with ecology • Key competences are being taught and applied • There is an active program of renewable energies • Business leaders are active in the learning city
Community	**Culture**
• Inclusion and social justice objectives are being progressed • Social cohesion and resilience are objectives for community • Active citizenship is being implemented at both local and global levels • Partners are fostering empathy • Community is developing national & international links	• Policies exist to build a just culture of lifelong learning • Curiosity, imagination, empathy, and creativity are progressed in a range of ways • Cultural institutions have important roles in the learning city • Global and local perspectives are harmonised in the development of the learning city • Human rights are promoted.
Wellbeing	**Lifelong Learning**
• Health and learning objectives are being integrated • Mental health is being addressed • Wellbeing in all stages of the longevity life is an objective with active ageing policies and practices in place • Inclusion and social justice are connected to well-being • Education policies promote well-being	• Learning strategies are connected to all other domains • Inclusion and social justice are key practices • Transformative learning supports people in adapting to change • Learning in later life is a key objective • Broad partnerships support learning throughout the city

Doughnut Economics

Another circular holistic approach to a sustainable future that might have lessons for learning cities is the Doughnut Economics approach developed by Kate Raworth, initially for Oxfam. Doughnut Economics shares the humanistic orientation of learning cities in seeking to go beyond GDP as a single narrow metric of socio-economic progress to a more balanced and holistic view of objectives for a sustainable future.

Like the Circles of Sustainability approach, the Doughnut views connections between planetary and social domains "as part of a complex-economic system and hence addressed within a greater whole" (Raworth, 2018:50)

While Doughnut Economics has value in clarifying the role of economic aspects in holistic sustainable development, and in pointing to the range of ecological and social perspectives that need to be considered in strategies for a sustainable future, it is overall sending the same messages as Circles of Sustainability on the need to connect the range of life-supporting systems to human socio-economic activity.

The range of planetary supporting-life systems shown in the Doughnut provide examples for useful community project activity in developing awareness of the critical task in moving from "endless grow to thriving in balance" (Raworth,2018:53).

Assessing progress

James assesses progress in his Circle of Sustainability model with a nine-point scale ranging from vibrant and good down to bad and critical. There would be value in regular assessment of progress in the perspectives set out in figure1 with a similar scale.

However, nine grades are not needed for learning cities, so I suggest a five-point scale on the following basis:
    5. *Excellent progress*, 4. *Good progress*, 3. *An established component in learning city/community*, 2. *Some progress*, 1 *No progress*.

The addition of 5 perspectives for each EcCoWell domain will enable a more precise assessment of progress in the EcCoWell objectives to be made. It would be useful if cities and communities adopting the EcCoWell approach to their development as learning cities were to undertake an assessment of their situation across all the proposed perspectives. This should enable strategic planning for the future to proceed in more precise terms.

The question of culture

While cultural objectives have up to now been included in the community domain of EcCoWell, there are now reasons why culture should be included as a sixth domain in the

EcCoWell approach. The critical challenges to cities discussed above require responses that will bring about cultural change towards a just sustainable future.

In a context of "permanent transition" cities to be sustainable will require a flexible learning culture that is able to adapt to change while also supporting the values that support a just, sustainable future.

The UNESCO Institute for Lifelong Learning (UIL) addressed this question in a paper as a contribution to the UNESCO Futures of Education initiative titled Embracing a culture of lifelong learning. The *"learner-centred demand driven" vision in this paper would contribute much in building a learning culture if supported by "a collectively built learning ecosystem integrating the various forms and modalities of learning"* (UIL, 2021b:8). This vision fits well with the circular holistic approach to a sustainable future discussed above, and the directions EcCoWell 3 is taking.

I would, however, add curiosity, imagination, and creativity as drivers of cultural change in the process of building a sustainable learning culture. I set out this approach in a paper responding to the UIL paper titled *Building a culture of lifelong learning as a creative learning process* (Kearns, 2021b). This paper ranges across ways in which learning cities could be made more creative with broadened partnerships and, desirably a strong government role.

An example of such an approach exists in the action taken by the Irish Government in their Creative Ireland initiative. This government led five-year plan over 2017-2022 involved large-scale collaborative action, led by government, to build the foundations of a creative nation (Government of Ireland, 2022).

When the Creative Ireland Programme was launched in 2017 it comprised five pillars:
- Creative youth.
- Creative communities
- Cultural investment.
- Creative industries
- Global reputation.

Large scale collaborative action was undertaken across these areas. For example, there were 5,350 community initiatives, and 652 school projects.

It is also evident that the program shared several common objectives with learning cities. Examples include inclusion and well-being of people and their communities as in a case from Ireland:

Creativity is being put at the heart of public policy because we understand that participation in cultural and creative activity promotes the wellbeing of the individual, the community and the nation at large. (Government of Ireland, 2022).

Here the Creative Ireland Programme has initiated collaboration between the creative sector, social care, and health care, and the nature of this programme points to the need to explore the symbiotic relationships that exist between learning and creativity, and then to explore ways to develop the learning city concept to build on these relationships. Building a learning culture as a creative learning process may be a path to a sustainable future.

While the initial phase of EcCoWell was progressed by exploring relationships between learning, health, and environment, EcCoWell 3 may be driven by symbiotic relationships between creativity and learning in building a creative learning culture.

There is also much that can be drawn from UNESCO work on culture and creativity over many years, including the UNESCO Creative Cities Network and UNESCO work on culture for sustainable development. The 2016 UNESCO report *Culture urban futures: Global report on culture for sustainable development provides examples from around the world, while also sharing conceptual ideas on the role and significance of culture.*

> *Culture lies at the heart of urban renewal and innovation. The Report provides a wealth of insights and concrete evidence showing the power of culture as a strategic asset for creating cities that are more inclusive, creative and sustainable (Bokova, 2016:5).*

> *A human-centred city is a culture-centred space. We must translate this reality into more effective policies and sustainable urban governance. Cities have become living laboratories for determining how some of the most pressing challenges we face are negotiated, managed and experienced. WE must strengthen the cultural assets of cities (Bokova,2016:5).*

In equal measure, we must strengthen the learning assets of cities and find ways to build symbiotic relationships between learning and culture/creativity in building cities that are just and sustainable.

The critical importance of values in developing such relationships was noted by Kearns and Papadopoulos (2000) in a study of policies adopted by five OECD countries in building a learning and training culture (Germany, UK, USA, Sweden, Netherlands) particularly in the case of Sweden.

> *Sweden in most respects illustrates the key features of a learning culture with the maturing over time of a value system that encourages and supports continuous learning throughout society in what has been termed "social individualism between raging horses".* (Kearns & Papadopoulos, 2000:82)

Rethinking learning

Building on symbiotic relationships between learning and creativity will require rethinking learning and our approach to lifelong learning.

Ageing populations and the emergence of longevity societies is one driver in this process, with countries most affected (such as Japan) providing leadership (Kearns & Reghenzani Kearns 2021. Makino (2021) wrote about "Inventing the new concept of learning for the era of the hundred year life".

UNESCO in their 2021 report on *Futures of Education* was clear on the need to rethink education systems at all levels.

> *A new social contract for education needs to allow us to think differently about learning and the relationships between students, teachers, knowledge, and the world*. (UNESCO, 2021:3)

With ageing populations needing to keep learning throughout life to maintain employability, old ideas such as the OECD concept of recurrent education are being revived in new ways.

A key aspect of rethinking learning in an emerging longevity society is to develop in learners what Rifkin has called "a relational sense of consciousness."

> *How, then, will we choose to use our newfound relational consciousness? Interestingly, just as we are beginning to develop a relational sense of consciousness, we are beginning to understand the relational nature of the forces that govern life on the planet.* (Rifkin, 2009)

The "circular" tools discussed in this paper, circles of sustainability, Doughnut Economics, and ecosystems, are intended to foster this relational sense of consciousness needed in connecting the local and global objectives of learning cities, and the overall goal of connecting people and planet.

EcCoWell 3 stands to gain tis relational sense of consciousness from the developments I am suggesting in this paper, adding to the thrust towards a sustainable future.

This will require changes in the way we learn. This was an issue brought into the 2020 EcCoWell Community Recovery Program with a paper by Wong and Watson (2020) providing leadership in this area. This paper illustrated how transformative learning could be used in combination with the arts in a community program to drive cultural change.

The impact of the COVID 19 pandemic has given a boost to innovative applications of learning technologies, such as the Global Learning Festival initiated by the Wyndham and Melton Learning Cities.

The process of rethinking learning for a sustainable future will be advanced by broadened partnerships that share information and experience. This will require strengthened partnerships between learning cities and business, as a key aspect.

Chamorro-Premuzio and Bersin note how the impact of technology on business is bringing a shift in demand for skills and expertise

> *Technology is disrupting every industry and area of life, and work is no exception. One of the main career implications of the digital revolution is a shift in demand for human expertise (Chamorro-Premuzio & Bersin, 2018).*

Addressing the technology challenge together will bring mutual benefits to business and learning cities with developments shared in such areas as implementing transformative competences that support learning throughout life in an era of turbulent change.

The significance of local learning neighbourhoods

The importance of local learning neighbourhoods in progressing learning and building community has been a key theme in EcCoWell development. This role has been tested by pilot projects in Cork and Limerick learning cities.

In the case of Cork, the program of learning neighbourhoods has been developed by University College Cork (UCC). Publications from UCC have provided further insights into the role and value of local learning neighbourhoods in learning city development (O' Tuama, 2020; O'Sullivan & Kenny 2017; Nash 2020) The relationships between community building and learning city ideas have been brought out in these UCC papers.

Local learning communities are particularly important in driving cultural change towards a sustainable future. There is a case to view learning cities as federations of local learning neighbourhoods with creativity triggered by interactions between the two levels.

In view of the significance of local learning neighbourhoods in building a creative learning culture, there would be value in a further round of EcCoWell local learning neighbourhoods directed at strengthening the creative aspects of these developments.

EcCoWell experience also shows that learning neighbourhoods can be developed outside the framework of learning cities. The Harlem New York learning community provides an example where the leadership of a seminary provides a useful model. The EcCoWell experience also points to the importance of diversity in enhancing the creativity of a network of learning cities and neighbourhoods.

4. Putting it together: EcCoWell 3 for a sustainable future

While innovations such as circles of sustainability and Doughnut Economics have much value in initiatives to connect people and planet for a sustainable future, they do not sufficiently allow for the key roles of learning and creativity in driving change towards a sustainable future. The centrality of learning strategies in learning cities brings an additional factor as a catalyst in bringing about the necessary cultural change.

For this reason, learning cities continue to have much value in the quest for a just sustainable future, particularly when they are connected in information sharing national and international networks such as the UNESCO GNLC. The PASCAL EcCoWell experience over a decade since 2012 demonstrates how learning cities can evolve to address new changes. In a similar way, the new UNESCO GNLC *Strategy for 2021-2023* shows a similar evolution based on experience since 2013.

The development of EcCoWell 3 as a third phase of EcCoWell development brings a stronger focus on harnessing learning and creativity to build a creative learning culture able to adapt to change in a turbulent and uncertain context.

The key developments are the following:

1. The addition of sub-domains to the five EcCoWell domains to facilitate building connections across the EcCoWell domains, and monitoring progress.
2. The addition of culture as a sixth domain in the EcCoWell concept with a particular focus on building a creative learning culture.
3. The importance of curiosity, imagination, and empathy in supporting the capacity of people and their communities to adapt to changing circumstances and develop a global relational consciousness.
4. The significance of developments at the local neighbourhood level in supporting inclusion and cultural change with learning cities seen as interacting networks of local learning neighbourhoods. While pilot projects have connected community and learning ideas, EcCoWell 3 will gain from creativity being a further objective of local learning neighbourhoods.
5. The significance of government leadership in supporting a national program along the lines of the Irish Creative Ireland program run between 2017-2022. Insights gained from this program have the potential to add much to learning cities with the Irish EcCoWell learning cities Cork and Limerick well positioned to serve as intermediaries.
6. The concept of a new model of partnership with empathy developed by the Australian Wyndham learning city in the 2020 EcCoWell program points to broader and stronger partnerships supporting learning city development, with stronger participation in such areas as business and government authorities, the arts and cultural institutions.

7. The expanded concept of EcCoWell 3 can be seen as an approach to building a learning culture for a sustainable future through a creative learning process.

Adding culture as a sixth domain in EcCoWell, with a focus on creativity, brings a significant area for further EcCoWell development, The Irish EcCoWell cities (Cork and Limerick) should be well placed to draw on insights from the 2017-2022 Creative Ireland Program of the Irish Government, including insights relevant to the further development of Learning Neighbourhoods.

The other "big" objective in the further development of the EcCoWell 3 concept is progressing the connections between people, planet, and technology in terms advocated by the 2021 UNESCO *Reimagining our futures together.* While ecology has always been a key pillar in the EcCoWell approach, the addition of five perspectives to each of the EcCoWell domains should facilitate making connections between pillars across the EcCoWell domains. There may be value in a further EcCoWell 3 program that drew on these additions in finding ways for EcCoWell 3 to contribute to a sustainable future for learning cities.

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