



Innovative Models for University-Led Community Service: Strategies for Sustainable Development and Societal Empowerment

Busara Niyomves

Faculty of Education, Ramkhamhaeng University, Thailand

¹E-mail: busara_09@hotmail.com, ORCID ID: <https://orcid.org/0000-0002-3434-9310>

Received 26/05/2025

Revised 29/09/2025

Accepted 30/09/2025

Abstract

Background and Aim: Universities have increasingly expanded beyond their traditional responsibilities of teaching and research to embrace a “third mission” focused on community engagement, social responsibility, and sustainable development. In alignment with global frameworks such as the United Nations Sustainable Development Goals (SDGs), higher education institutions are now recognized as important agents of social transformation capable of addressing inequality, promoting sustainability, and strengthening community empowerment. This study aims to explore and synthesize innovative models of university-led community service implemented in different global contexts. The research seeks to identify effective strategies that generate sustainable societal impact and to propose guiding principles for institutionalizing community engagement within higher education systems.

Methodology: This study employed a qualitative documentary research design. Secondary data were collected from peer-reviewed journal articles, institutional reports, national higher education policies, and international case studies. Key sources included reports from UNESCO and the Talloires Network, as well as case studies from institutions such as the University of Cape Town, Ateneo de Manila University, and Michigan State University. The collected data were analyzed thematically and organized using a comparative matrix that focused on engagement strategies, community outcomes, institutional support mechanisms, and sustainability practices.

Results: The analysis identified four major models of innovative university-community engagement: community-based learning and service-learning integration, university social enterprise incubators, research-to-impact translation centers, and digital community service platforms. Across different regions and institutional contexts, successful initiatives demonstrated several common characteristics. These included the institutionalization of civic engagement within university missions, long-term partnerships with community stakeholders, multidisciplinary collaboration, and the establishment of dedicated funding and evaluation systems. The findings also revealed that these initiatives contributed positively to educational access, economic empowerment, public health improvement, and environmental sustainability. Universities that integrated community engagement into strategic planning and academic practice achieved stronger and more sustainable social impact outcomes.

Conclusion: This study concludes that universities can function as powerful catalysts for sustainable development when community engagement is embedded within institutional missions, policies, and operational structures. Effective university-led community service requires strategic partnerships, interdisciplinary collaboration, and long-term institutional commitment. The findings provide valuable insights for higher education institutions seeking to strengthen their societal contributions and align with global sustainability agendas. Future research should further examine these models through longitudinal, cross-cultural, and participatory studies to validate their effectiveness and scalability. In addition, policy support and institutional reforms are recommended to strengthen sustainable university-community partnerships and maximize their long-term social impact.

Keywords: University-Community Engagement; Sustainable Development; Service-Learning Models; Societal Empowerment

Introduction

Universities have always been tied to the communities in which they are located. Serving the public interest, whether in practice or theory, has been part of the intrinsic identity of academic institutions. However, the understanding of this role has changed over time. Traditionally, universities were valued as spaces of teaching and research—sources and transmitters of knowledge. In the 21st century, universities are seen as actively participating in the development of society. This notion of civic engagement as the “third mission” of higher education has gained increasing prominence (Laredo, 2007). In an era of growing expectations from governments, civil society, and international agencies, the third mission seeks to connect the economic and social capacities of universities to community development and global sustainability (Zomer & Benneworth, 2011).



As anchor institutions, universities of the 21st century embrace the ideals and responsibilities of civic engagement in new ways. Local, regional, and global challenges are addressed through the application of academic knowledge and the generation of contextually relevant solutions. Universities are acting in response to their ‘social license to operate’ (Ballet, 2012). They are proactively building reciprocal and strategic relationships with their publics in the spirit of co-creating a more democratic and equitable future (Putnam, 2000).

Key to this progressive interpretation of civic engagement is an emphasis on mutualism or reciprocity. Universities are increasingly expected to go beyond episodic volunteerism or disconnected outreach and to build sustained, bidirectional partnerships (Flaster et al., 2019). In this sense, reciprocity marks an expansion of the spirit of cooperation beyond the community towards the community itself. Universities of the 21st century seek mutually beneficial relationships with all relevant stakeholders. This means greater inclusivity and diversity in engagement partners and agendas. Universities are becoming more open to exploring and building relations with government, municipalities, NGOs, civil society, grassroots, industry, and commerce.

Community engagement can take many forms, including formal and informal partnerships. Universities are increasingly working in diverse fields and sectors, responding to community needs while creating synergies with research and learning. This could mean outreach in public health, environmental sustainability, digital inclusivity, youth development, poverty reduction, economic innovation, community development, etc. Engagement is fully integrated into the academic work of the institution, often through established offices or centers for community engagement (Bringle & Hatcher, 2002). This often blurs the line between the inside (academic) and the outside (community) of the university. This expansion of the university’s social space has been driven by a number of factors. First, there is an appreciation of the untapped potential of academic knowledge, social capital, and infrastructure to serve society (Goddard, 2009). Universities have resources that are needed and can be productively and strategically harnessed in collaboration with communities. Engaging the university also offers a level of sustainability to grassroots initiatives because it can help them leverage institutional human resources and structures (Saltmarsh et al., 2010). For these reasons, community engagement increasingly cuts across different areas of the academic enterprise. This understanding of the third mission of higher education resonates closely with the United Nations Sustainable Development Goals (SDGs).

SDGs are a set of 17 targets that address issues of poverty, health, education, gender equality, climate change, biodiversity, and sustainable communities (United Nations, 2015). Endorsed in 2015 by the 193 member states of the United Nations, the SDGs have been translated into the civic missions of many universities. The goals of sustainability and equity are increasingly reflected in teaching, research, and service activities (Leal Filho et al., 2018). As part of the global development agenda, the SDGs have become powerful objectives that align and guide the third mission of higher education. The new academy is a transformative force that is concerned with the future, the environment, and social change.

Transformation requires new thinking, and this has had implications for the design of university policies and procedures. Engaged scholarship and public impact are rewarded, alongside traditional scholarship. Professors are evaluated and recognized for their contributions to knowledge and society. The pedagogies are also expanding to recognize the imperatives of community engagement. Community-based participatory research, service-learning courses, action research, and collaborative knowledge creation are seen as high-impact teaching strategies (Hart & Northmore, 2011). The university of the future is not merely content with understanding the world; it is also concerned with changing it. For this reason, universities are more like institutions rather than loosely joined parts. They are increasingly integrated around a holistic purpose of knowledge, community engagement, and social action.

The global movement towards sustainable development has gained momentum since the adoption of the United Nations Sustainable Development Goals (SDGs) in 2015. The 17 goals, which range from ending poverty and hunger, achieving universal health coverage, quality education, and gender equality, to combating climate change and environmental degradation, highlight the aspiration of a world where no one is left behind (United Nations, 2015). The breadth and universality of the SDGs are a testament to the remarkable consensus they have garnered. At the same time, their universal nature has limited local ownership of the goals and, by extension, their potential success. Achieving SDGs at the global level and in diverse national contexts will require a tailored approach that considers unique socioeconomic, environmental, and cultural differences (Leal Filho et al., 2019).



In the early years of SDG implementation, one important lesson is that global action begins with local implementation. National-level policymaking and global cooperation are important for meeting SDGs, but the real work begins at the grassroots level. This is where communities are empowered to take ownership of and design their own interventions (Pretty et al., 2010). This is also where local communities use their social capital, influence, and cooperation to drive positive change. For example, water conservation or sustainable agriculture strategies in one context will differ from another. To be successful, they must be informed by the local environment and sometimes traditional knowledge systems. In this way, community-driven strategies are as important as the universal goals they seek to achieve.

Universities and local institutions have a crucial role to play in this local action. As critical development actors and socially-embedded organizations, universities have particular epistemic capabilities. Because they are grounded in local contexts, universities can play the dual role of knowledge brokers and partners. They can mediate between the global goals and community realities, co-developing sustainable solutions and translating lofty targets into concrete, locally-informed strategies (Sachs et al., 2019). Universities have developed multiple models for this type of engagement, which can range from capacity-building initiatives, community-based participatory research, outreach and service to the public, or work-integrated learning, among other models.

While the benefits of localized and context-sensitive approaches are clear, they are not without their challenges. The tensions between global and local agendas and the complex dynamics of top-down and bottom-up approaches (McCowan, 2019). In some cases, local contexts may lack the capacity or autonomy to implement sustainable policies, especially in resource-constrained environments (McCowan, 2019). To address this, there is a need for multi-scalar governance mechanisms that facilitate dialogue and negotiation between different levels and sectors (McCowan, 2019). This includes creating spaces for collaboration, co-design, and shared decision-making between global, national, regional, and local actors. Such mechanisms can help ensure that policy frameworks are both flexible enough to accommodate local diversity and inclusive enough to allow for meaningful participation and representation of marginalized voices. At the same time, they can also maintain coherence and alignment with broader global goals and priorities. In this way, sustainable development can be both globally coordinated and locally grounded, responsive and responsible, and effective and equitable.

Despite a growing recognition of the importance of the university's engagement with the community in addressing social challenges and advancing public goods, there is a significant gap in the literature on concrete models that are institutionalized, long-lasting, and impact-oriented. While the "third mission" of universities, community service, and outreach has gained traction in higher education policy and practice, many universities lack a clear, strategic, and systemic framework to integrate service with their core functions and structures (Benneworth & Cunha, 2015). In addition, there is a lack of evaluation mechanisms and evidence base to inform and improve these models over time. Moreover, while there is a substantial body of literature on various initiatives related to outreach, volunteerism, or community engagement among students and staff in universities, many of these are not sustainable or transformative in nature. They are often short-term, isolated, ad hoc, or donor-dependent projects with limited reach or impact on the most pressing issues of inequality, development, and empowerment in society. Despite the growing interest and investment in community engagement, there is a lack of institutionalized, long-lasting, and impact-oriented models of university-community partnerships. The literature tends to focus on individual case studies and experiences rather than building a synthesized and systematic framework or best practices that can inform policy and practice across different contexts. The question is, what does a sustainable and impactful model of community service and outreach look like in a university setting, and what are the principles, strategies, and structures that can make it successful and scalable?

Research Questions:

1. How have universities designed innovative models for community engagement?
2. What strategies have proven effective in promoting sustainable development and empowerment?

Objective

This paper aims to explore and synthesize existing models and strategies documented globally. And to propose guiding principles for replication or adaptation.



Literature Review

1. Related Concepts

First is the Triple Helix model (Etzkowitz & Leydesdorff, 2000), which is an innovation systems framework that posits university-industry-government interactions as key drivers of societal advancement. The model visualizes universities as entrepreneurial and proactive agents that, alongside the government and industry sectors, co-create knowledge and contribute to economic and social development (Etzkowitz, 2008). In terms of community service, the Triple Helix approach stresses institutional collaboration and multi-sectoral partnerships in designing, implementing, and scaling sustainable and community-driven solutions. Universities serving the community within the Triple Helix context would have their service-learning or civic engagement activities deeply integrated within this relational dynamic to enhance local development outcomes and co-creation capacity through innovation, resource allocation, and cross-sector partnerships (Ranga & Etzkowitz, 2013).

Second, the Community-Based Participatory Research (CBPR) framework (Israel et al., 1998) is another useful resource for grounding the university-community service debate. CBPR is a collaborative research approach that centers on building equitable partnerships between academics and the community. It moves away from the traditional extractive or prescriptive research paradigms to embrace reciprocity, mutual respect, and shared ownership of the research endeavor. In a CBPR approach, the community's voice is central in co-identifying problems, co-creating methodologies, and co-designing solutions (Israel et al., 1998). In the university-community service relationship, a CBPR lens can enhance trust-building, cultural competence, and contextually relevant outcomes. CBPR also facilitates capacity-building within the community, as community stakeholders become co-researchers rather than mere subjects or passive beneficiaries. CBPR resonates with ethical considerations and social justice objectives by explicitly addressing power dynamics and working towards equitable partnerships.

The third major frame of reference in the article is the United Nations Sustainable Development Goals (SDGs). Adopted in 2015, the SDGs are a universal call to action for people, planet, and prosperity. The 17 global goals aim to address a wide range of social, economic, and environmental challenges by 2030, and universities have emerged as essential partners in this endeavor (UNESCO, 2021). Universities have increasingly mainstreamed the SDGs in their mission and operations, and they view community service as one of the primary vehicles for localizing and actualizing these global priorities (Leal Filho et al., 2019). In serving communities, universities can help advance SDGs by integrating them into civic engagement programs, interdisciplinary research, and public outreach. For example, universities can address Quality Education (Goal 4), Reduced Inequalities (Goal 10), and Sustainable Communities (Goal 11) through various community-engaged teaching, research, and service activities. The SDGs provide a common language, conceptual framework, and a set of quantifiable targets that universities can use to benchmark their societal contributions. The SDGs also help to connect localized community service activities with global development discourses, thereby contextualizing both (Sachs et al., 2019).

In summary, these three bodies of knowledge, in different but sometimes overlapping ways, provide a rich theoretical base to understand the complexities of university-community engagement activities, especially in terms of sustainability. The Triple Helix model anchors the role of universities in the larger system of knowledge production and socio-economic development, the CBPR framework emphasizes respectful and equitable partnerships, and the SDGs provide a common language and a set of quantifiable targets to measure and monitor universities' contributions to societal advancement. These different approaches also dovetail into one another, creating new analytical opportunities for unpacking the ways in which university-community service could be effective. The lenses also guide civic engagement actors for planning, assessing, or reforming service activities so that they are more collaborative, scalable, and socially responsive.

2. Previous Research on University Engagement:

The past three decades have seen a growing body of research examining how universities engage with their surrounding communities through various institutional mechanisms and pedagogical models.



One of the most well-documented forms of engagement is service-learning, which integrates academic instruction with meaningful community service. Research shows that service-learning not only enhances students' academic learning but also promotes civic responsibility and social awareness (Eyler & Giles, 1999). Universities have implemented service-learning across disciplines to create experiential opportunities that align with curricular goals while responding to local needs. Scholars argue that these experiences cultivate critical thinking, empathy, and a deeper understanding of complex social issues (Butin, 2006).

In parallel, social innovation labs have emerged as a dynamic platform within universities to address systemic challenges through interdisciplinary collaboration and community co-creation. These labs operate at the intersection of research, entrepreneurship, and public service, enabling students and faculty to develop, prototype, and implement innovative solutions for real-world problems (Westley et al., 2011). Research on university-hosted innovation labs highlights their capacity to mobilize local stakeholders and build adaptive solutions, particularly in urban development, environmental sustainability, and youth employment (Mulgan, 2006). However, scholars caution that without institutional commitment and policy support, the outcomes of such labs may remain episodic rather than structural.

University outreach centers have also been studied as critical sites for institutional-community partnerships. These centers often serve as hubs for continuing education, health clinics, legal aid, and community workshops—offering direct services while also serving as spaces for applied research and training (Weerts & Sandmann, 2008). The literature emphasizes the importance of mutuality and sustained engagement in such initiatives, noting that trust-building and cultural sensitivity are essential for long-term success (Bringle & Hatcher, 2002). Outreach centers are particularly impactful when their operations are aligned with the university's academic mission and are supported by stable funding and strategic leadership.

Despite these positive outcomes, previous research also points to persistent challenges in embedding engagement within university structures. Studies report that many engagement efforts remain marginalized or peripheral, lacking formal integration into tenure systems, budgets, or strategic plans (Furco & Miller, 2009). Furthermore, the metrics for evaluating community impact are often underdeveloped, limiting the capacity to document and communicate success. Overall, while the body of research affirms the transformative potential of service-learning, social innovation labs, and outreach centers, it also underscores the need for systemic reforms that elevate engagement to a core institutional function within higher education.

3. Gaps in the Literature:

While the literature on university-led community engagement has grown over the last two decades, it remains heavily concentrated in case studies from North America, Europe, and parts of Australasia. There is a noticeable lack of comparative documentation across geographic and cultural regions, particularly from the Global South, where universities face distinct socio-political and resource-related constraints (McIlrath et al., 2012). The absence of cross-contextual analysis limits the transferability of best practices and hinders the development of globally adaptable service models. For example, service-learning frameworks in U.S. institutions may not be directly applicable in contexts where universities are burdened by political instability or infrastructural deficits. This geographic asymmetry in the literature results in a partial understanding of how university-community engagement can be designed to reflect diverse regional needs and values (Hall, 2011).

In addition, much of the existing research focuses on short-term outputs—such as student reflections, individual projects, or semester-based service initiatives—rather than evaluating long-term sustainability outcomes. Studies often highlight immediate educational or social impacts but seldom address whether such community interventions persist or evolve meaningfully over time (Bringle et al., 2009). Without longitudinal data or robust evaluation frameworks, it becomes difficult to determine the durability and systemic impact of these initiatives. This undermines efforts to institutionalize community engagement as a sustained practice embedded in the university's mission and operations (Furco, 2010).

The lack of outcome-oriented research also affects policy development, as decision-makers are left without clear evidence of which models generate scalable, enduring benefits for communities.

Another underexplored area is the institutional infrastructure that supports sustainability in engagement. Few studies have analyzed the role of administrative structures, funding mechanisms, or faculty incentive systems in maintaining long-term partnerships with communities (Sandmann et al., 2008). As a result, recommendations for making engagement sustainable often remain at the level of individual goodwill or informal networks rather than being grounded in organizational change strategies. This limits the potential for replicability and scalability across institutions, particularly in resource-constrained settings.

Finally, the absence of comparative metrics and impact indicators across regions further complicates the development of a global evidence base. While some universities have begun to align their engagement outcomes with frameworks like the Sustainable Development Goals (SDGs), there is limited consensus on how to measure such contributions meaningfully and consistently (Leal Filho et al., 2019). Addressing these gaps requires more coordinated research efforts that adopt interdisciplinary, cross-national, and longitudinal approaches to evaluate not only how universities engage with communities, but also how well, for how long, and to what transformative effect.

Conceptual Framework

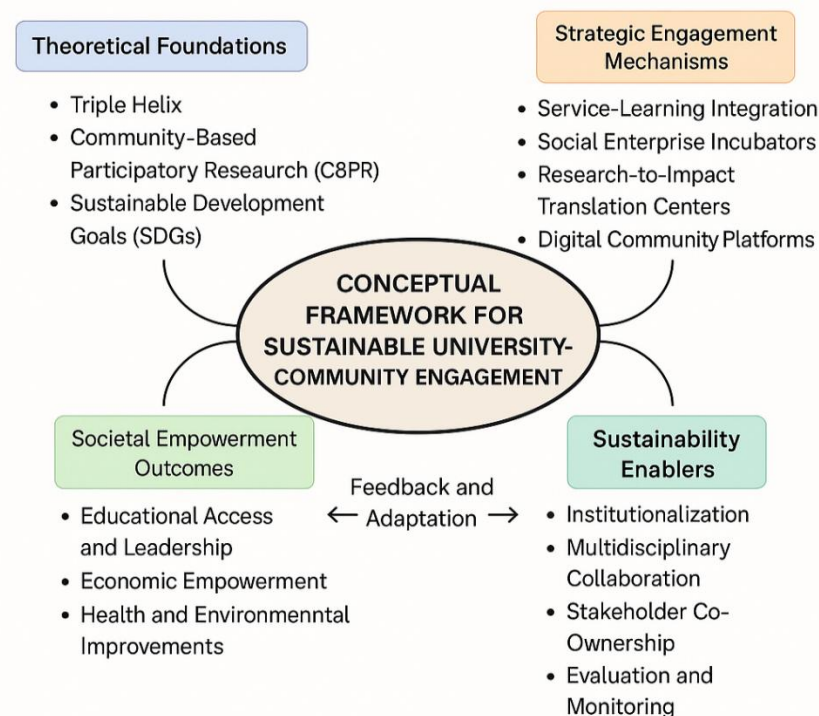


Figure 1 Conceptual Framework

Methodology

Research Design

This study adopts a qualitative documentary research design to examine innovative models of university-led community service that contribute to sustainable development and societal empowerment. Documentary research, as a methodological approach, allows the systematic collection, evaluation, and interpretation of existing textual materials to derive patterns, themes, and frameworks (Mogalakwe, 2006).



This approach is particularly suitable for the present study, which aims to synthesize diverse institutional practices and policy orientations as captured in pre-existing, publicly available documents. By using qualitative content analysis, the study emphasizes the interpretive depth and contextual meaning embedded within institutional narratives, policy texts, and research findings.

Data Sources

The documentary data set comprises multiple source types selected for their relevance, credibility, and representativeness. First, peer-reviewed academic journal articles were reviewed to understand theoretical and empirical developments regarding university-community engagement. These articles were identified using scholarly databases such as Google Scholar, JSTOR, and Scopus, with keywords including “university-community engagement,” “service-learning,” and “sustainability in higher education.” Second, institutional reports from international organizations—such as the Talloires Network, UNESCO, and the United Nations Development Programme (UNDP)—were included to incorporate global policy perspectives and practical frameworks guiding higher education's civic mission. Third, the study reviewed national policies and white papers on higher education reform and community engagement from a range of countries, particularly those with active civic-oriented higher education sectors.

Finally, the core of the analysis involved the comparative examination of documented case studies from select universities known for their exemplary community engagement practices. These included the University of Cape Town (South Africa), which integrates community engagement into its curriculum and research through its Social Responsiveness Policy; the Ateneo de Manila University (Philippines), recognized for embedding social development into its Jesuit educational mission; and Michigan State University (United States), a leader in engaged scholarship through its Office of University Outreach and Engagement. These cases were chosen based on regional diversity, accessibility of documentation, and the institutionalization of engagement practices.

Analytical Framework

The documentary data were analyzed using a two-tiered analytical framework. The first phase involved thematic coding to identify recurring strategies, models, and impact narratives across the sources. Codes were developed both inductively from the data and deductively based on the study's conceptual framework, including terms such as “institutional support,” “community reciprocity,” “sustainability mechanisms,” and “capacity building.” In the second phase, a comparative matrix was constructed to assess variations and commonalities in models across different regional and institutional contexts. The matrix categorized cases by geographic region, method of engagement (e.g., service-learning, outreach centers, innovation hubs), sustainability orientation (short- vs. long-term), and documented societal outcomes. This approach allowed for a systematic comparison of institutional strategies and provided the basis for developing an integrated typology of university-community engagement for sustainable development.

Results and Discussion

1. Types of Innovative Models

One of the most prevalent and well-documented models of university-led service is community-based learning, including in the form of service-learning integration. Service-learning refers to a pedagogical model that involves students in planned community service experiences with an emphasis on active learning through civic responsibility (Eyler & Giles, 1999). This approach upends the traditional university-classroom paradigm by creating space for real-world social issues to be situated in academic contexts and for students to co-produce knowledge with community members. When designed and implemented well, service-learning has been shown to enhance students' critical thinking and ethical reasoning, as well as their civic consciousness and agency, while responding to local development needs in particular contexts (Butin, 2006).

Connected to CBL has been the proliferation of discipline-specific service-learning models, in which students from the engineering, health science, or education faculties, for example, work directly



with communities to provide services using their technical skills and expertise. These may take the form of public health students participating in immunization drives or environmental science students partnering with local people to co-create waste management systems. In both cases, the lived experience of local problems may deepen learning outcomes for students while also building local problem-solving capacity (Bringle & Hatcher, 2002). There remain, however, questions around the long-term sustainability of these efforts, particularly in ensuring semester-to-semester continuity and an equitable balance of power in the university-community partnership.

A second model that has gained considerable traction, especially in recent years, is that of university-based social enterprise incubators, which focus on promoting entrepreneurship as an approach to social innovation. Social enterprise incubators typically offer students, faculty members, and local entrepreneurs a space, mentorship, and access to networks and resources to co-create marketable solutions to social problems (Tracey & Phillips, 2007). In practice, this may mean university-based social enterprise incubators—such as the Cambridge Social Ventures (UK) or the Bertha Centre for Social Innovation at the University of Cape Town—hosting ventures with mandates that cut across the spectrum of local and global social issues, from youth unemployment and financial inclusion to gender-based violence and environmental degradation. Miller and Bound (2011) also describe the functions of such centers as a space of innovation and social problem-solving, as well as one of co-creation between universities and communities through the coupling of research capacity with entrepreneurial action.

The third model is that of research-to-impact translation centers, which are aimed at supporting and operationalizing research-to-impact or research-to-action, ensuring that the fruits of research efforts are effectively and efficiently translated into demonstrable impact on society. Such centers are positioned as intermediary spaces and aim to act as catalysts for partnerships, networks, and knowledge translation between and among theory-based research on the one hand and policy and action on the other. The Office of University Outreach and Engagement at Michigan State University (2013) is one example. According to Weerts and Sandmann (2010), it has functioned as a cross-disciplinary space for faculty and staff who want to extend their teaching or research into community spaces, connecting to state and county agencies, local businesses, and nonprofit organizations. These centers are informed by and must embody principles of reciprocity and two-way knowledge exchange. They are anchored in partnerships with an orientation to community assets and often rely on the principles and mechanisms of Community-Based Participatory Research (CBPR) (Israel et al., 1998) and associated ethical and equity principles. These centers are also often instrumental in helping universities orient their research agendas and activities around global goals such as the SDGs.

Related to, and often overlapping with, these research translation or research-extension centers are knowledge mobilization networks that turn research outputs into tools, programs, policy, or practice. They have been instrumental in, for example, circumventing the catch-22 that a lot of university research can find itself in, which is that most scholarly publications are inaccessible to busy or rural practitioners, policymakers, or community members. In some contexts, these platforms also offer real-time data-sharing systems, community co-mapping, or community advisory boards that ensure knowledge moves in two directions between universities and communities and not just one way (Lomas, 2007).

The recent surge of digital tools and online platforms has created another exciting and relatively new space for university-community service: digital community service platforms. These platforms provide space for virtual volunteering, e-consultation, online service-learning, and digital collaboration using online portals or apps. As such, they allow students, faculty, and researchers to work with community partners to provide services without necessarily being co-located or even working during “regular” business hours. Virtual volunteering has been on the rise in general in recent years and has become, for many institutions, the main form of service during the COVID-19 pandemic. Digital community service platforms such as GivePulse, Collaboratory, and other such platforms have become important, especially for young people, in tracking volunteer hours, impact, and engagement, as well as serving as a space for community-university partnership management. Digital tools also support new



modes of engagement and can be used to support access and inclusion of non-traditional students or hard-to-reach communities that may not have easy physical access to campus.

Digital platforms, moreover, open space for data-informed service design, as analytics, feedback mechanisms, and impact indicators can be used to identify communities or issues of high need, efficiently match volunteer skills or service needs, and track project deliverables and outcomes. They can also enable innovative asynchronous and flexible service models, which can increase student engagement and community access. At the same time, however, scholars are quick to caution that digital services, like other forms of engagement, are not inherently good and must be carefully designed to avoid replicating digital divides or eroding relational aspects of service (Greenhow & Lewin, 2016). In this way, while the promise is there, digital engagement models require thoughtful embedding in broader engagement approaches that are inclusive and equitable.

In conclusion, we discussed four of many models of university-led service, namely, community-based learning, social enterprise incubators, research-to-impact translation centers, and digital engagement platforms, each of which responds to different aspects of the goals of sustainable development and civic engagement. Each is an entry point with varying assumptions, costs, and availability of resources that an institution or an individual may want to consider in choosing an appropriate model. Moreover, the spectrum of models described in the paper is by no means exhaustive, but it has attempted to capture a sense of innovation in university-community service and emerging practices that point to a promising shift away from traditional, unidirectional service toward models that are structured around principles of reciprocity, mutuality, and co-learning and are more focused on systems change and long-term societal impact.

2. Strategic Approaches for Sustainability

In addition to fostering community engagement and impact, universities need to consider how to sustain their engagement efforts beyond sporadic projects or individual initiatives. This requires not only dedicated resources but also strategic integration into the university's mission, academic programming, and governance structures. One of the most critical strategies is curriculum integration or institutionalization of civic engagement, which can be done in various ways. This could involve formally recognizing and rewarding service-learning or community-based research as an integral part of the academic program, faculty responsibilities, and student learning outcomes (Furco, 2010). Institutions such as Portland State University in the United States and the University of Cape Town in South Africa have adopted models where civic engagement is treated as a learning outcome rather than an extracurricular activity, which contributes to sustainability through academic legitimacy (Bringle & Hatcher, 2009).

Curriculum integration not only ensures continuity across semesters and years but also creates positive feedback loops between classroom learning and community practice. Students can bring their disciplinary knowledge and skills to address community challenges while also benefiting from the knowledge and experience of community partners. Longitudinal research has demonstrated that when civic learning is scaffolded across students' entire academic journey, from entry-level courses to capstone projects, it results in more robust civic identity formation and long-term community engagement (Finley, 2011). Faculty engagement and buy-in are also higher when promotion and tenure policies value and incentivize engaged scholarship (Saltmarsh, Giles, Ward, & Buglione, 2009).

Another important strategy is to build long-term partnerships with local stakeholders, such as municipal governments, NGOs, community leaders, grassroots organizations, and others. These partnerships should be based on mutual benefit, trust, and co-governance rather than a transactional or extractive relationship (Bringle, Clayton, & Price, 2009). Long-term engagement allows for the co-creation of programs that are relevant, adaptable to changing needs, and informed by continuous feedback. The Talloires Network and the Carnegie Foundation have also emphasized the centrality of long-term partnerships in achieving sustainable developmental impact, as opposed to one-off projects (Hart & Northmore, 2011).



Sustainable partnerships also provide platforms for joint capacity building—for example, training workshops, co-authored publications, and evaluation reports—that build both university and community capacity. Moreover, a long-term relationship helps avoid the pitfalls of community fatigue, mistrust, or skepticism that can arise from short-term interventions, especially if they are led by students with little institutional continuity. They create avenues for continuity and ownership, even when individual students or faculty members change, by institutionalizing relationships at the organizational level.

An often-overlooked but critical aspect is multidisciplinary collaboration. The social and environmental challenges faced by communities today, whether poverty, climate change, or public health disparities, are complex and multifaceted, requiring holistic approaches that cut across disciplines (Bammer, 2013). Universities that create spaces for collaboration between different faculties and departments, such as engineering, public health, social sciences, and humanities, are better positioned to design comprehensive, systems-oriented solutions. For example, a university program to provide clean water to a community could involve civil engineers for infrastructure, public health professionals for disease prevention, and anthropologists for community engagement.

Interdisciplinary models not only increase the relevance and effectiveness of interventions but also improve the educational experience for students by exposing them to diverse perspectives, methods, and worldviews. Universities such as the University of British Columbia and Stellenbosch University have experimented with “living lab” models where multiple faculties collaborate with communities to co-design solutions and projects that align with the SDGs (Leal Filho et al., 2019). These models challenge the siloed nature of academic departments and foster a culture of collaboration and innovation.

Finally, a critical yet often neglected pillar of sustainability is funding. Many universities and colleges rely heavily on grants, philanthropy, or student volunteerism to support their engagement work, making them vulnerable to disruptions or changes in the funding environment. Sustainable programs require institutional budget lines, endowments, or revenue-generating social enterprises to ensure long-term viability (Buys & Bursnall, 2007). Financial sustainability also enables the support infrastructure needed for data collection, impact assessment, and reporting, which are essential for building credibility and attracting new partners.

Impact assessment is a related and underappreciated component of sustainability. Without mechanisms to track, measure, and report on the outcomes and impacts of university-community partnerships, engagement can become more symbolic than substantive. Rigorous impact assessment tools, such as logic models, participatory evaluation, and outcome mapping, enable universities to demonstrate their value to stakeholders and refine their strategies over time (Preskill & Jones, 2009). Moreover, data collection and reporting support more than just accountability. They can also be used for academic research, learning, and innovation, further strengthening the case for sustainability.

3. Societal Empowerment Outcomes

University-community engagement seeks not only to share knowledge but to enable society. Among the concrete societal outcomes of engagement are improved access to education and skills development. Universities have enhanced education access through initiatives such as community-based tutoring programs, adult literacy campaigns, and vocational education (McIlrath & Lyons, 2012). These initiatives often target underserved and marginalized communities, including rural youth, women, and out-of-school individuals, filling the gaps in formal education. Additionally, universities have also played a significant role in digital literacy, offering information and communication technology (ICT) training programs that prepare learners for the digital age (Leal Filho et al., 2018).

Another empowerment outcome in the area of education is increased youth leadership and civic participation. Many universities promote youth leadership development through service-learning and civic engagement programs. These initiatives empower young people not only to serve the community but to take on leadership roles in addressing social issues. Youth-led projects may include activities such as climate activism, public health awareness campaigns, or advocacy for better local governance (Finley, 2011). When young people are engaged as equal partners in the co-creation of community solutions, rather



than as passive beneficiaries, they gain critical soft skills, such as communication, negotiation, and collaborative problem-solving. By investing in young leaders, universities are helping to build a more empowered and responsible generation of citizens.

Economic empowerment and job creation are among the most critical outcomes, especially in communities with high unemployment or underemployment. Universities can establish business incubators and entrepreneurship training centers that support community members in starting and growing sustainable businesses (Tracey & Phillips, 2007). The University of Nairobi's Chandaria Business Incubation Centre, for example, or Michigan State University's entrepreneurship programs provide community entrepreneurs with mentorship, microfinance support, and access to markets. These initiatives are particularly effective when they prioritize social entrepreneurship, which not only creates jobs but also addresses specific community needs.

Besides entrepreneurship, universities have been known to empower communities through skills training that is linked to available jobs and income-generating opportunities. Technical skills workshops, agricultural innovation centers, and vocational schools run by universities help equip individuals with in-demand skills that can translate to livelihoods (Buys & Bursnall, 2007). For instance, training community members in aquaculture, artisanal crafts, or solar panel installation not only builds human capital but also aligns with the local economy's realities. These programs are particularly effective when co-designed with community partners and local businesses to ensure relevance. This type of empowerment builds both individual and social capital and contributes to more resilient local economies.

Public health is another area in which university-community outreach has led to measurable outcomes in health education, disease prevention, and health access. Community clinics, health fairs, and mobile health units run by medical schools and public health departments bring essential health services to underserved areas while training students in practical settings (Israel et al., 1998). The university-supported community health worker programs in sub-Saharan Africa and Southeast Asia are well-documented examples of initiatives that have played an essential role in managing diseases like malaria and HIV/AIDS. By providing essential health services and building health system capacity, universities help to reduce health disparities and increase overall community health.

The partnerships between universities and communities in the field of environmental sustainability and protection have led to significant positive outcomes as well. These include community-led waste management programs, reforestation projects, and clean energy initiatives (Leal Filho et al., 2019). Such projects often incorporate both scientific expertise and indigenous or traditional knowledge, resulting in culturally appropriate and ecologically sound solutions. Environmental stewardship also offers cross-generational education and empowerment opportunities as young people and elders alike work together to protect their natural resources.

Improved education and health literacy; reduced health disparities; environmental protection and awareness; food security; economic empowerment; and community resilience are all empowering outcomes that are interconnected, reinforcing, and mutually amplifying. Education, for instance, leads to better health literacy; environmental protection supports food security; and economic empowerment leads to greater community resilience. The holistic and interconnected nature of these empowerment outcomes further illustrates how university-community engagement, when planned and implemented with a view to sustainability, can be a catalyst for broader development (Sachs et al., 2019). The transformational power of these interventions is amplified when the communities involved have a voice in decision-making processes to ensure the authenticity and equity of empowerment.

However, institutions need to be intentional about and have robust systems for monitoring and evaluating these empowerment outcomes and impacts to capture both immediate outputs and longer-term, often indirect, effects. Universities must invest in participatory monitoring and evaluation tools that engage community members not only as beneficiaries but as co-evaluators (Preskill & Jones, 2009). This investment in accountability and responsiveness mechanisms not only strengthens the interventions



themselves but also provides much-needed evidence and documentation of societal empowerment outcomes to support further institutional buy-in and policy advocacy.

4. Case Comparisons

To understand how universities operationalize community service for sustainable development, this section presents a comparative analysis of five institutions. The comparison reveals both commonalities and context-specific innovations across geographies.

1. University of Cape Town (UCT), South Africa

- **Objectives:** UCT aims to embed social responsiveness into its core academic mission, emphasizing equity, transformation, and social justice within South African post-apartheid society.
- **Strategies:** The university's Social Responsiveness Policy encourages departments to develop community-based research, service-learning, and collaborative public service projects (Hall, 2011).
- **Community Impact:** Projects such as the Health Sciences Faculty's community clinics and environmental sustainability education have improved local health literacy and ecological practices.
- **Sustainability Mechanisms:** UCT institutionalizes engagement through faculty reporting requirements, funding allocations, and integration into academic promotions.

2. Ateneo de Manila University, Philippines

- **Objectives:** Guided by Jesuit principles, Ateneo seeks to promote "faith that does justice" by embedding social transformation within its educational and community engagement models.
- **Strategies:** Through the Gawad Kalinga partnership, service-learning programs, and the Ateneo Center for Educational Development, the university co-develops solutions with marginalized communities.
- **Community Impact:** Initiatives in education reform and disaster resilience have reached thousands of public school teachers and vulnerable communities (David, 2019).
- **Sustainability Mechanisms:** Engagement is anchored in core curriculum requirements, long-term NGO partnerships, and an Office for Social Concern and Involvement (OSCI).

3. Michigan State University (MSU), United States

- **Objectives:** MSU prioritizes engaged scholarship as part of its land-grant mission, seeking to create knowledge with public relevance.
- **Strategies:** Through the Office of University Outreach and Engagement, MSU supports faculty-community research partnerships, civic engagement fellowships, and service-learning integration (Weerts & Sandmann, 2010).
- **Community Impact:** Projects include agricultural support for Michigan farmers, K-12 STEM education, and urban renewal collaborations.
- **Sustainability Mechanisms:** Institutional policies tie civic engagement to tenure and promotion; funding is provided through internal grants and endowments.

4. University of British Columbia (UBC), Canada

- **Objectives:** UBC integrates sustainability and community well-being into its strategic vision, with a focus on climate action and Indigenous reconciliation.
- **Strategies:** UBC's Community Engagement Office facilitates initiatives like Campus as a Living Lab, Indigenous research collaborations, and sustainability partnerships (UBC, 2020).
- **Community Impact:** The university has co-developed renewable energy solutions with local First Nations and piloted urban planning tools for municipal governments.
- **Sustainability Mechanisms:** Engagement is funded through multi-year strategic allocations and embedded in UBC's Climate Action Plan and reconciliation commitments.

5. Universidad Veracruzana (UV), Mexico

- **Objectives:** UV seeks to strengthen social cohesion and regional development through community-university collaboration.



- **Strategies:** The University Social Service Program requires students from all faculties to engage in year-long service projects focused on health, environment, and education (Jaramillo & Melgarejo, 2013).
- **Community Impact:** Projects have included rural dental clinics, ecological agriculture initiatives, and women's empowerment workshops.
- **Sustainability Mechanisms:** Mandatory student participation, state funding, and partnerships with regional governments sustain engagement initiatives across campuses.

Table 1 of Comparative Elements

University	Objectives	Strategies	Impact Domains	Sustainability Mechanisms
UCT (South Africa)	Equity & social justice	Service-learning, responsive research	Health, environment	Faculty policies, funding, promotion criteria
Ateneo de Manila (Philippines)	Faith-driven transformation	NGO partnerships, curricular integration	Education, disaster resilience	Curriculum embedding, NGO ties, social concern office
MSU (USA)	Engaged scholarship, public service	Outreach office, research collaborations	Agriculture, K-12 education	Tenure policy, internal funding, long-term vision
UBC (Canada)	Sustainability & reconciliation	Living labs, Indigenous partnerships	Climate, governance	Strategic funding, institutional plans
UV (Mexico)	Regional development, cohesion	Mandatory student service	Health, environment, women's rights	Policy mandates, public funding, and regional partnerships

These cases demonstrate that while strategies differ based on institutional identity and regional context, successful community engagement models share several traits: alignment with institutional missions, multi-stakeholder collaboration, embedded evaluation mechanisms, and sustained resourcing. Importantly, institutionalization—whether through curriculum, governance, or policy—is essential to ensuring long-term community impact.

Conclusion

This study examined various innovative models of university engagement with communities, which were organized and assessed based on documentary research. It has been found that community-based learning, social enterprise incubators, research-to-impact centers, and digital platforms for service, which have been implemented in cases from various countries, have the potential to effectively support the learning outcomes of students and ensure the development of communities. The models, which incorporated a continuity of civic engagement into academic curricula, a long-term partnership with the community, a multi-faceted collaboration with various stakeholders, and a funding and evaluation system, generated sustainable impact in the empowerment of communities. The cross-case analysis of university engagement in South Africa, the Philippines, the United States, Canada, and Mexico demonstrated that with appropriate adaptation to the local context and a well-structured approach, civic engagement can generate measurable impact in various development fields, including access to education, economic empowerment, public health, and environmental sustainability.

For higher education institutions striving to contribute to their civic mission and goals, the results of this study indicate the necessity of going beyond one-off activities and sporadic community engagement, and shifting to more strategically embedded models of engagement. University leaders can



begin by institutionalizing engagement by including it in the teaching, research, and faculty assessment and reward systems. The institutionalization can be further established by creating a university office or center for community engagement, as has been done at Michigan State University and Ateneo de Manila University, which will provide the necessary infrastructure and capacity for engagement. The policymakers can provide institutional support to the universities by including a regulatory incentive and a funding and reward system for socially impactful work. The national higher education policies can be further aligned with the global frameworks for sustainable development, such as the SDGs, to support the public purpose of universities and further innovation at the local level (Sachs et al., 2019).

Knowledge Contribution

Based on a synthesis of findings, the following new conceptual contributions emerge. These build on established models (e.g., Triple Helix, CBPR, SDGs) but offer refined perspectives for advancing university-led community service in sustainable and scalable ways.

1. The Institutional Triad for Sustainable Engagement

Building upon the Triple Helix model (university–industry–government), this research introduces a refined “Institutional Triad”, which emphasizes the coordinated role of:

- University structures (academic units and outreach offices),
- Community actors (NGOs, local governments, grassroots organizations), and
- Internal policy systems (funding, incentives, curricular integration).

This triad focuses less on economic innovation (as in the original Triple Helix) and more on social sustainability and empowerment, positioning civic engagement not only as a byproduct of collaboration but as a strategic institutional imperative.

2. Contextualized Reciprocity Model

While CBPR emphasizes reciprocity in partnerships, this study identifies the lack of culturally and geographically contextualized frameworks as a recurring barrier. Thus, it proposes a Contextualized Reciprocity Model, which integrates:

- Local cultural norms,
- Historical trust dynamics,
- Regional governance challenges.

This model aims to shift away from generalized notions of “community participation” and instead build ethnographically informed engagement blueprints that better align with diverse settings, especially in the Global South.

3. Multi-Modal Innovation Ecosystems

The study conceptualizes universities not as single nodes of service delivery, but as ecosystems of innovation comprising four interlinked engagement platforms:

- Service-learning programs (student-centered),
- Social innovation incubators (entrepreneurship-centered),
- Outreach/research-to-impact centers (faculty-centered),
- Digital platforms (technology-centered).

Together, these form a multi-modal engagement system that balances curricular integration, entrepreneurial solutions, knowledge transfer, and accessibility. This integrative approach helps universities diversify their community service portfolio while reinforcing their development role.

4. Sustainability Anchors in University Engagement

Drawing from empirical gaps noted in the literature, the research defines four sustainability “anchors” necessary to ensure long-term impact:

- Institutionalization of engagement in strategic plans and curriculum,
- Continuity funding (beyond ad hoc grants),
- Evaluation and impact metrics aligned with SDGs, and
- Stakeholder co-ownership of projects.

These anchors convert temporary outreach efforts into enduring societal partnerships, with embedded structures for adaptation and growth.

5. Localized SDG Translation Framework

Universities often declare alignment with the Sustainable Development Goals, but practical translation remains vague. This study proposes a Localized SDG Translation Framework, which maps:

- Global SDG targets local community issues,
- University research strengths to SDG domains (e.g., health, education),
- Evaluation tools that capture both quantitative impact and qualitative community narratives.

This framework bridges the macro–micro divide and enhances accountability in impact measurement.

6. Cross-Context Adaptability Index

To address the lack of transferability across regions, the study recommends developing a Cross-Context Adaptability Index. This diagnostic tool assesses community engagement models based on:

- Political/institutional stability,
- Resource availability,
- Cultural coherence,
- Implementation scalability.

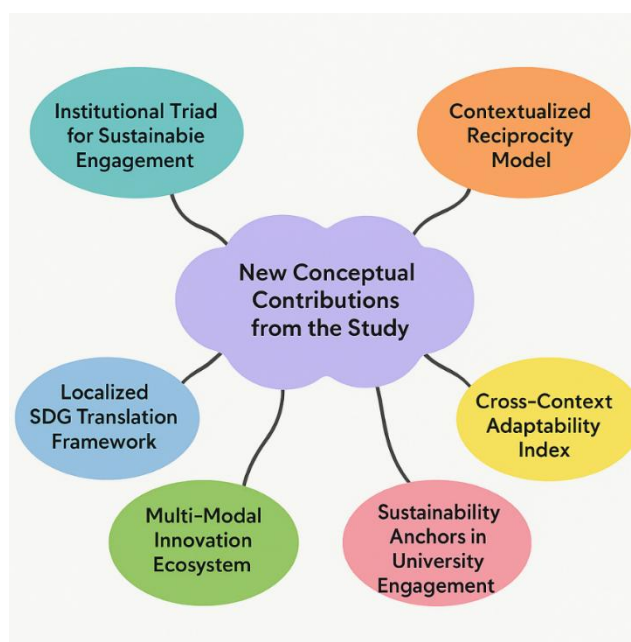


Figure 2 Models for University-Led Community Service

Recommendation

The primary limitation of this study is its reliance on documentary data, which can only provide a partial view of the dynamic processes involved in university-community engagement. Secondary data, while extensive and cross-contextual, may not capture nuances of lived experiences, real-time updates, or local community perspectives as direct fieldwork or primary data collection methods could. Furthermore, official institutional documents and reports may be selectively curated to present a positive image and may underreport challenges or failures, leading to reporting bias. While this study provides a rich data set to inform global trends and benchmarks in university-community engagement, the findings should be interpreted with these considerations in mind.



Future research should aim to empirically validate and expand on the models presented in this study. This can be achieved through case studies, surveys, and participatory evaluations involving both university actors and community members. Longitudinal studies would also be highly beneficial to understand how engagement efforts change over time and what factors (institutional, cultural, and financial) contribute to their sustainability. Cross-cultural comparative research can also provide valuable insights into how different values, governance systems, and historical legacies impact university-community partnerships. Such research would significantly contribute to the field of civic engagement and help build a global evidence base for effective policy and practice.

References

- Bammer, G. (2013). *Disciplining interdisciplinarity: Integration and implementation sciences for researching complex real-world problems*. ANU Press. <https://doi.org/10.22459/DII.10.2013>
- Benneworth, P., & Cunha, J. (2015). Universities' contributions to social innovation: Reflections in theory and practice. *European Journal of Innovation Management*, 18(4), 508–527. <https://doi.org/10.1108/EJIM-10-2013-0099>
- Bringle, R. G., & Hatcher, J. A. (2002). Campus–community partnerships: The terms of engagement. *Journal of Social Issues*, 58(3), 503–516. <https://doi.org/10.1111/1540-4560.00273>
- Bringle, R. G., & Hatcher, J. A. (2009). Innovative practices in service-learning and curricular engagement. *Journal of Higher Education Outreach and Engagement*, 13(1), 37–46. <https://openjournals.libs.uga.edu/jheoe/article/view/566>
- Bringle, R. G., Clayton, P. H., & Price, M. F. (2009). Innovative practices in service-learning and curricular engagement. *New Directions for Higher Education*, 2009(147), 37–46. <https://doi.org/10.1002/he.356>
- Butin, D. W. (2006). The limits of service-learning in higher education. *The Review of Higher Education*, 29(4), 473–498. <https://doi.org/10.1353/rhe.2006.0025>
- Buys, N., & Bursnall, S. (2007). Establishing university–community partnerships: Processes and benefits. *Journal of Higher Education Policy and Management*, 29(1), 73–86. <https://doi.org/10.1080/13600800601175797>
- David, C. C. (2019). Higher education and community engagement in the Philippines: Lessons from the Ateneo de Manila University. *Asia Pacific Journal of Education*, 39(3), 352–365. <https://doi.org/10.1080/02188791.2019.1616753>
- Etzkowitz, H., & Leydesdorff, L. (2000). The dynamics of innovation: From national systems and “Mode 2” to a Triple Helix of university–industry–government relations. *Research Policy*, 29(2), 109–123. [https://doi.org/10.1016/S0048-7333\(99\)00055-4](https://doi.org/10.1016/S0048-7333(99)00055-4)
- Eyler, J., & Giles, D. E. (1999). *Where's the learning in service-learning?* Jossey-Bass.
- Finley, A. (2011). *Civic learning and democratic engagement: A review of the literature on civic engagement in post-secondary education*. Association of American Colleges and Universities.
- Furco, A. (2010). The engaged campus: Toward a comprehensive approach to public engagement. *British Journal of Educational Studies*, 58(4), 375–390. <https://doi.org/10.1080/00071005.2010.527656>
- Furco, A., & Miller, W. (2009). Issues in benchmarking and assessing institutional engagement. *New Directions for Higher Education*, 2009(147), 47–54. <https://doi.org/10.1002/he.357>
- Goddard, J. (2009). *Re-inventing the civic university*. NESTA.
- Greenhow, C., & Lewin, C. (2016). Social media and education: Reconceptualizing the boundaries of formal and informal learning. *Learning, Media and Technology*, 41(1), 6–30. <https://doi.org/10.1080/17439884.2015.1064954>
- Hall, B. L. (2011). Towards a knowledge democracy movement: Contemporary trends in community–university research partnerships. *Rhizome Freirean*, 9(2), 7–22. <https://www.rizoma-freireano.org/articles-0909/towards-a-knowledge-democracy-movement-contemporary-trends-in-community-university-research-partnerships-budd-l-hall>



- Hart, A., & Northmore, S. (2011). Auditing and evaluating university–community engagement: Lessons from a UK case study. *Higher Education Quarterly*, 65(1), 34–58. <https://doi.org/10.1111/j.1468-2273.2010.00466.x>
- Israel, B. A., Schulz, A. J., Parker, E. A., & Becker, A. B. (1998). Review of community-based research: Assessing partnership approaches to improve public health. *Annual Review of Public Health*, 19(1), 173–202. <https://doi.org/10.1146/annurev.publhealth.19.1.173>
- Jaramillo, R., & Melgarejo, M. (2013). Experiences in student-led community engagement in Mexico: The Universidad Veracruzana model. *Journal of Higher Education Outreach and Engagement*, 17(3), 49–66. <https://openjournals.libs.uga.edu/jheoe/article/view/1054>
- Laredo, P. (2007). Revisiting the third mission of universities: Toward a renewed categorization of university activities? *Higher Education Policy*, 20(4), 441–456. <https://doi.org/10.1057/palgrave.hep.8300169>
- Leal Filho, W., Salvia, A. L., Brandli, L., & Rayman-Bacchus, L. (2019). Advancing the implementation of the SDGs: Presentation of a comparative model. *International Journal of Sustainable Development & World Ecology*, 26(6), 536–546. <https://doi.org/10.1080/13504509.2019.1627686>
- Leal Filho, W., Shiel, C., & Paço, A. (2018). Implementing and operationalising integrative approaches to sustainability in higher education: The role of project-oriented learning. *Journal of Cleaner Production*, 172, 4357–4366. <https://doi.org/10.1016/j.jclepro.2017.05.119>
- Leal Filho, W., Shiel, C., & Paço, A. (Eds.). (2018). *Sustainable development and higher education institutions: Acting with a purpose*. Springer. <https://doi.org/10.1007/978-3-319-47868-5>
- Leal Filho, W., Shiel, C., & Paço, A. (Eds.). (2019). *Integrative approaches to sustainable development at university level: Making the Agenda 2030 a reality*. Springer. <https://doi.org/10.1007/978-3-030-15864-4>
- Lomas, J. (2007). The in-between world of knowledge brokering. *BMJ*, 334(7585), 129–132. <https://doi.org/10.1136/bmj.39038.593380.AE>
- Mawonde, A., & Togo, M. (2019). Implementation of SDGs at the University of South Africa. *South African Journal of Higher Education*, 33(1), 276–290. <https://doi.org/10.20853/33-1-2910>
- McCowan, T. (2019). *Higher education for and beyond the Sustainable Development Goals*. Palgrave Macmillan. <https://doi.org/10.1007/978-3-030-26157-3>
- McIlrath, L., & Lyons, A. (Eds.). (2012). *Higher education and civic engagement: Comparative perspectives*. Palgrave Macmillan. <https://doi.org/10.1057/9781137074829>
- Miller, P., & Bound, K. (2011). *The startup factories: The rise of accelerator programmes to support new technology ventures*. NESTA. https://media.nesta.org.uk/documents/the_startup_factories_0.pdf
- Mogalakwe, M. (2006). The use of documentary research methods in social research. *African Sociological Review*, 10(1), 221–230. <https://www.jstor.org/stable/24487630>
- Mulgan, G. (2006). The process of social innovation. *Innovations: Technology, Governance, Globalization*, 1(2), 145–162. <https://doi.org/10.1162/itgg.2006.1.2.145>
- Preskill, H., & Jones, N. (2009). *A practical guide for engaging stakeholders in developing evaluation questions*. Mathematica Policy Research. <https://www.mathematica.org/publications/a-practical-guide-for-engaging-stakeholders-in-developing-evaluation-questions>
- Pretty, J., Adams, B., Berkes, F., de Athayde, S. F., Dudley, N., Hunn, E., ... Pilgrim, S. (2010). The intersections of biological diversity and cultural diversity: Towards integration. *Conservation and Society*, 8(2), 100–112. <https://www.jstor.org/stable/26393079>
- Ranga, M., & Etzkowitz, H. (2013). Triple Helix systems: An analytical framework for innovation policy and practice in the knowledge society. *Industry and Higher Education*, 27(4), 237–262. <https://doi.org/10.5367/ihe.2013.0165>
- Sachs, J. D., Schmidt-Traub, G., Mazzucato, M., Messner, D., Nakicenovic, N., & Rockström, J. (2019). Six transformations to achieve the Sustainable Development Goals. *Nature Sustainability*, 2(9), 805–814. <https://doi.org/10.1038/s41893-019-0352-9>



- Saltmarsh, J., Giles, D. E., Jr., Ward, E., & Buglione, S. M. (2009). Rewarding community-engaged scholarship. *New Directions for Higher Education*, 2009(147), 25–35.
<https://doi.org/10.1002/he.355>
- Sandmann, L. R., Thornton, C. H., & Jaeger, A. J. (2008). Institutionalizing community engagement in higher education: The first wave of Carnegie-classified institutions. *New Directions for Higher Education*, 2008(147), 1–9. <https://doi.org/10.1002/he.326>
- Tan, E., Chu, H.-C., & Tsai, C.-C. (2020). Technology-supported community service learning in higher education: A systematic review. *Educational Technology Research and Development*, 68(6), 3457–3482. <https://doi.org/10.1007/s11423-020-09783-w>
- Tracey, P., & Phillips, N. (2007). The distinctive challenge of educating social entrepreneurs: A postscript and rejoinder to the special issue on entrepreneurship education. *Academy of Management Learning & Education*, 6(2), 264–271. <https://doi.org/10.5465/amle.2007.25223465>
- University of British Columbia. (2020). *UBC strategic plan: Shaping UBC's next century*.
<https://strategicplan.ubc.ca>
- United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*.
<https://sdgs.un.org/2030agenda>
- Weerts, D. J., & Sandmann, L. R. (2008). Building a two-way street: Challenges and opportunities for community engagement at research universities. *The Review of Higher Education*, 32(1), 73–106.
<https://doi.org/10.1353/rhe.0.0027>
- Weerts, D. J., & Sandmann, L. R. (2010). Community engagement and boundary-spanning roles at research universities. *The Journal of Higher Education*, 81(6), 702–727.
<https://doi.org/10.1353/jhe.2010.0011>
- Westley, F., Zimmerman, B., & Patton, M. Q. (2011). *Getting to maybe: How the world is changed*. Vintage Canada.
- Zomer, A., & Benneworth, P. (2011). The rise of the university's third mission. In J. Enders, H. de Boer, & D. Westerheijden (Eds.), *Reform of higher education in Europe* (pp. 81–101). Sense Publishers.
https://doi.org/10.1007/978-94-6091-555-0_6