

ESSAY

Towards a Collaborative Approach and Structure for Engaged Research

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Abstract

The evolving relationship between research and its impact on communities has sparked ongoing discussions. Traditional research methods are criticized for having limited societal influence due to their restricted accessibility. Engaged research emerges as a transformative methodology, emphasizing collaboration with communities in research design and knowledge production. This paper advocates for the integration of engaged research into higher education curricula to foster civic and social responsibility. This paper explores four cases of integrating engaged research into teaching, drawing on examples from University College Cork in Ireland, Koç University in Türkiye, and the University of Oulu in Finland. At University College Cork, a three-part approach combines lecturer presentations and class discussions, interactive class activities, and student-led engaged research projects. Koç University’s Social Impact Forum in Türkiye emphasizes social impact through engaged research initiatives. In Finland, the University of Oulu incorporates research-based pilot projects in land-use planning, alongside a research and development course that empowers children to take an active role in the learning process. The authors argue that such integration enhances the impact of research, nurturing engaged citizens for transformative initiatives.

Keywords:

community-based research, engaged research, teaching in higher education, transformative teaching

The discrepancy between the outputs of the academic field and the communities that they consider the subject of study has been an issue for some time. Academic studies have been criticized for needing to engage with the communities they truly aim to impact. Research papers and books in libraries and databases are reached by a small percent of the public who have the privilege to access scientific output, thus having only a limited impact on societies. Traditional methods are appraised for approaching the communities as objects of study only, not as equal subjects who could participate in research design and knowledge production. These traditional approaches so far have led to a paradoxical consequence, limiting science within the scientific community while claiming to be producing solutions to societal problems. Meanwhile, higher education institutions are expected to contribute to system-level changes and innovations that could accelerate local transformations for sustainability (Pontikakis et al., 2022). Why are “the resources of universities and colleges not being used to improve the

Collaborative Approach and Structure for Engaged Research *continued*

lives of citizens in the surrounding communities or in communities nationally and globally?” (Fontaine, 2006, p. 46).

In order to address this paradox, various methodologies are being developed. In engaged research, city and community engagement in research design and knowledge production is the basis. Engaged research is an overarching term that describes a wide range of comprehensive research approaches and methodologies that share a common interest in collaborative engagement with and within society. These methodologies include community-based participatory research (CBPR), participatory action research (PAR), and similar methods that aim to create social impact. Engaged research is conducted collaboratively with community partners rather than for them, involving active and meaningful input from all stakeholders throughout the research process (Campus Engage, 2019, p. 2). This partnership involves planning and conducting research together with community members and stakeholders who, as co-researchers, can shape the priorities and methods of the research (Banks et al., 2013; Bergold & Thomas, 2012). The significance of engaged research and its benefits to both academia and society can be summarized as follows: Fundamentally committed to academic freedom and the public good, engaged research aims to improve, understand, or investigate issues of public interest where societal partners are active collaborative participants in the research process. It nurtures democratic competencies through participation—from defining research needs to the co-creation of knowledge and equitable and reciprocal knowledge translation to and with society. Committed to sustainability and inherently transdisciplinary, it explicitly builds awareness of the interconnectedness of the social-ecological systems. Imbued with different knowledge traditions (expertise, practice, experience, and wisdom), it is manifestly impactful research that has an emancipatory and transformative social justice orientation—consistently pursuing intersectional understanding towards greater social solidarity, diversity, inclusion, and equity.¹ This approach to engaged research not only fosters collaboration but also ensures that the outcomes contribute meaningfully to societal change and address global challenges.

This paper argues that engaged research methods should be integrated with teaching and learning at

undergraduate and postgraduate levels in higher education institutions. Engaged research, which brings about civic and social responsibility in higher education, is recommended because it improves both the quality and impact of research (Holliman & Warren, 2017; Van De Ven, 2018). Hence, community, stakeholder, and practitioner engagement and participation are essential in engaged research. The integration of research into the life of a community, especially in formal and informal educational contexts, requires training its members in the knowledge, skills, and values that empower their position with respect to the professionalized scientific community. Citizens, in their different roles and functions, are the key to processing committed research, knowledge generation, and the implementation of transformative initiatives (San Salvador del Valle, 2023). Indeed, there is a growing interest in embedding engaged research into teaching practices at higher education institutions. Campus Engage (2019), the national platform for community engagement in Irish higher education, expresses concern that the “insufficient integration of engaged research methodologies into undergraduate and postgraduate education” is one of the challenges to advancing engaged research (p. 3). Thus, there is a need to develop curricula around this understanding. This paper aims to share four cases of embedding engaged research into teaching and envisaging a way forward for engaged research in higher education curricula from the University College Cork, Ireland; Koç University, Türkiye; and the University of Oulu, Finland. These institutions are connected to each other within the UNIC European University of Cities in Post-Industrial Transition and have been learning from and collaborating with each other to enhance engaged research since 2021.

Case 1 presents a threefold model for integrating engaged research into education based on the experiences in Ireland. The three levels by which engaged research can be integrated into teaching and learning move from lesser to greater degrees of student involvement in the learning process: a. lecturer presentation and class discussion, b. class activities, and c. students conducting engaged research. Case 2 focuses on Koç University Social Impact Forum (KUSIF), which supports experiential learning and engaged research to develop students’ skills related to social impact issues in Türkiye. Case 3 presents two research-based pilot projects at the University of Oulu in Finland, focused on interactive land-use planning

Collaborative Approach and Structure for Engaged Research *continued*

teaching and learning based on authentic learning and aimed at fostering engaged research. The fourth case, again at the University of Oulu, presents experiences from a research and development project course that aims to empower children in Finland.

Case 1: University College Cork (UCC), Cork, Ireland

Reflecting on efforts in the School of Applied Social Studies, University College Cork over several years, this case presents a threefold model for integrating engaged research into higher education. The argument is that engaged pedagogy, or active, participatory teaching methods, lies at the core of teaching engaged research. This necessitates de-centering oneself as a lecturer in the classroom, embedding student participation to complement lectures, and integrating multiple pedagogical methods to accommodate multiple learning styles (Saltmarsh, 2010). The three levels by which engaged research can be integrated into teaching and learning move from lesser to greater degrees of student involvement in the learning process—from lecturer presentation of research and class discussion (Level 1), to in-class student activities (Level 2), to students conducting engaged research (Level 3).

In **Level 1**, the lecturer presents and discusses with the class aspects of research relevant to the syllabus. In subject-specific modules, findings, graphs, and participant quotations from engaged and community-based participatory research (CBPR) are integrated to bring an issue to life and develop students' research understanding. Some classes incorporate detailed case studies of engaged research projects. The use of case studies as a teaching tool brings real-world examples to the classroom, provides opportunities for students to think critically, and increases their depth of understanding (Holmes et al., 2022). The case studies explore methods of working with communities, project findings, and impacts. They also explore the theoretical paradigms in which engaged research is situated and the values of participatory research, which Etmanski and Pant (2007) argue are as important to communicate as the process of doing research (p. 277). Guest speakers from the community are also invited and publications are shared on the UCC virtual learning platform.

Level 2 entails a more sustained participatory pedagogical design involving student activities, research exercises, and inquiry/problem-based learning, which may include minor assessment. For example, in an undergraduate research methods class, students read methodology excerpts from engaged research articles, reflect on the methods and steps (including how to build and maintain trusting relationships), compare the approaches and how they differ, and discuss them in small groups, otherwise known as “pair and share.” In another class, students conduct a creative research exercise by listening “as a researcher” to rap music produced by young people during research on regeneration (Byrne et al., 2020), considering what the lyrics mean, and discussing it in groups. In a different class, students explore participants' experiences of the research process through recorded audio/video from public events and discuss the impacts, benefits, challenges, and ethics of engaged research (O'Sullivan et al., 2023). At the graduate level, students conduct reflective exercises as “professionals in training”, e.g., considering how public policy could or should respond to community concerns.

In **Level 3**, students conduct community-based research and project-based learning, working on projects designed by, or in collaboration with, community partners. This work is usually supervised and assessed through the Community/Academic Research Links initiative (CARL), UCC's Science Shop that was established in 2006. CARL invites non-profit voluntary or community organizations (Civil Society Organizations [CSOs]) to suggest potential research topics that can be pursued by students on their behalf across a wide range of academic disciplines in UCC. CARL's mission is to provide independent, participatory research support in response to concerns experienced by civil society. There are four phases or steps in a CARL project. The first phase involves identification of the research question, whereby community and voluntary organizations (who are non-governmental, non-profit, and not representing commercial interests) develop research ideas that matter to them and send a project proposal form to CARL. In the second pre-planning phase, projects are reviewed by an Advisory Community. If accepted, these projects are placed on a database and can be researched by students who apply to undertake a CARL project. The students must meet a high-grade average and have a

Collaborative Approach and Structure for Engaged Research *continued*

letter of recommendation from a tutor to be eligible. If accepted, they are matched to a community organization by the CARL coordinator. In the third phase, project management gets underway with an initial planning meeting between the organization, student, CARL coordinator, and academic supervisor. The student then undertakes research with regular support and input from their supervisor and the community organization. In the fourth dissemination phase, the student's report is presented to the community organization after the examination process. If it reaches a particular grade threshold, it is placed on the public CARL website. A follow-up meeting is also held with the community organization to discuss recommendations and how to implement findings.²

Projects are wide-ranging; for example, an undergraduate social science student undertook a project with the Eating Disorder Centre Cork where she surveyed General Practitioners (GPs) to gain greater insight into their understanding of eating disorders. Her project resulted in a follow-up study with the School of Dentistry, and the organization is carrying out her recommendations.³ One of the other successes of CARL is that it systematically engages postgraduate students who “represent a unique population to engage” as they possess academic and professional sophistication with the potential for sustained engagement (Stanton, 2008, p. 34). For example, a postgraduate social science student partnered with a community development organization in a deprived area of Cork City and developed a participatory methodology to document the impacts of a learning program (Learning Neighbourhoods) on communities and organizations. His project provided recommendations for sustainable models of practice and has informed the ongoing development of the program. In documenting their motivation for engaging in CBPR projects, students noted the importance of having “some form of real-world applicability” to their research.⁴ Furthermore, they highlighted the benefits that “operating in a real-world context” would bring, including creating “a more demanding project environment...resulting in the creation of a more accurate and appropriate...solution [to the research question]” (Bates & Burns, 2012, p. 73).

Other initiatives in CBPR by colleagues at UCC include the development of a CBPR Ph.D. module to equip graduate students with community engagement skills by working with a societal partner. These collaborations successfully generate CARL proposals that future students can undertake (Hally et al., 2020). Opportunities for students to conduct research were also developed using an engaged research project. In collaboration with the UCC Centre for Adult Continuing Education (ACE), the municipal authority, and community organizations, a partnership was formed with mature students living in a highly deprived area to co-create a household survey on the regeneration of their community (Cullinane & O'Sullivan, 2020). The students became field researchers in their community, and several undergraduate students also joined the fieldwork. Evaluation of this engaged research project through one-on-one interviews showed the impact on student learning and their commitment to the community, including the development of new skills, knowledge, and confidence (Cullinane & O'Sullivan, 2020). Two of the mature students subsequently completed degrees in community work and now work in the sector. This illustrates the impact of such approaches in not only enhancing the student experience but also potentially altering their life trajectories.

Overall, integrating engaged research into undergraduate and postgraduate education through diverse ways can “infuse and enrich teaching and research with a deeper sense of context, locality and application” (Lazarus et al., 2008, p. 60). The three levels can facilitate students to understand the dynamics and uses of “real-world” research, bring to life the methodological approaches they are studying, and support them to undertake engaged research for social justice and change. As Bates and Burns (2012) highlight, a CBPR approach in education brings reciprocal benefits. It enables students to gain valuable experience through “opportunities to work on live research questions in a real-life context outside of the HEI,” enabling them “to learn with and from communities,” who benefit from research insights that can contribute to changes in practice and policy (Bates & Burns, 2012, p. 69). Thus, integrating engaged research into higher level education ensures that the university is responsive to the challenges faced by communities.

Collaborative Approach and Structure for Engaged Research *continued*

Case 2: Koç University, Istanbul, Türkiye

Koç University Social Impact Forum (KUSIF) was established in 2012 to be “the Research and Practice Centre” on social impact.⁵ KUSIF works with social impact actors such as NGOs, social entrepreneurs, responsible businesses, and funders to increase their capacity on social impact measurement and management. KUSIF is the founding member of two networks in Türkiye, Turkish Social Entrepreneurship Network and Social Value Türkiye, and has published research and practical guides on social impact and social entrepreneurship. At the academic level, KUSIF has expertise in impact education, i.e. teaching students how to understand and be part of the solution of societal problems to contribute positively to sustainability. KUSIF has two practice-based courses, “Social Impact Project Management: An Experiential Learning” and “Social Entrepreneurship,” under the academic track program “Sustainability and Impact Management.” Additionally, other units of the university and faculty can get support from KUSIF to integrate social impact into their work and benefit from KUSIF’s societal network for their courses and projects.

Engaged research and experiential learning are fundamental to KUSIF’s impact education. The “Creating Social Impact through Collaborative Project Management: Experiential Learning” course provides students with a theoretical approach as well as practical experience to become impact thinkers when they learn to ask and answer five impact dimensions—what, who, how much, contribution, and risk—to understand how a project or organization could maximize impact.

Each semester, KUSIF partners with a diverse range of impact organizations which commit to working with KUSIF and allocate time to students during the semester. Each partner organization brings to the class one impact project. If it is a small organization, the organization can instead be studied. Experiential learning and engaged research are incorporated into the class to help students gather information from stakeholders, enabling them to answer ten impact-related questions and contribute to the final report.

This process supports the class’s exploration of the main research question: “How could this project or organization have a greater impact?” (Maximize Your Impact Guide, p. 20).⁶ Through the semester, partnered organizations benefit from the engaged research on social impact that the students are doing for their organizations. They use the results to improve their products and services to create a constructive impact on their beneficiaries, customers, and other stakeholders in their communities. In return, students learn about the impact network, i.e. different kinds of impact organizations, and work with real-life community problems in the field. The key take-away for the students is to avoid impact washing—falsely claiming outcomes without making substantial changes or delivering genuine benefits—and to understand the different characteristics of social impact to effectively manage it.

The main challenges around conducting engaged research and experiential learning classes are stakeholder management and time management, as many stakeholders are involved, and these classes take more time and effort. Additionally, there are significant aspects to be considered concerning students’ learning process.

The first important aspect is giving students the option to work on topics that interest them most to enhance their learning and encourage further action after the course. Second, is partnering with different organizations from various thematic areas among social impact actors to increase student learning on impact ecosystem and empathy for important community issues that they are not faced with in their daily lives. Third, engaging with stakeholders requires a feedback process to improve the course and the experience of stakeholders. Short online surveys are submitted to partner organizations of the course at the end of each class. For students, besides the university-wide course evaluation and feedback process, the last lesson of each course is devoted to face-to-face evaluation. Additionally, during written team evaluation, students evaluate themselves and their team members and assess the course with open-ended questions. Centers, units, or different institutions like KUSIF, which have in-depth relations with the community and impact networks in higher education institutions, have a great potential to connect students to the community.

Collaborative Approach and Structure for Engaged Research *continued*

Case 3: University of Oulu, Oulu, Finland

This case describes a research-based pilot connected to interactive land-use planning teaching and learning, based on authentic learning and aimed at engaged research in Finland. Municipalities play a significant role in land-use planning in Finland, as they are responsible for land-use planning and local plans in their respective areas. The Land Use and Building Act, enacted in 2000, increased the municipalities' independent authority to decide on detailed plans.⁷ At the same time, the law introduced the obligation to prepare plans in interaction with those whose conditions or interests are affected by the plans. This change reflects a broader communicative turn in land-use planning (Healey, 1997). The legal requirement for interaction has created a need to develop new methods and practices for interactive land-use planning. The Oulu School of Architecture at the University of Oulu has actively researched the topic and carried out various pilot experiments.

The pilot experiments are integrated into the Municipal Planning course and the Extension Course in Urban Planning and organized annually in the Urban Planning discipline.⁸ The two courses have been implemented in collaboration with municipalities in Northern Finland for several years. The courses adhere to the principles of authentic learning (Herrington & Oliver, 2000). The collaborating municipalities have been located up to 700 km north and 350 km south of Oulu, illuminating Finland's sparse population and long distances.

In cooperation with the municipality, an area requiring land-use planning is selected as the target area for the courses. The plans prepared by the students include strategic land-use development scenarios, detailed plans, written reports, and impact assessments. The courses experiment and pilot new data collection, co-creation, and interaction methods. These pilot experiments are often based on externally funded scientific research projects, integrating the knowledge produced by the research and the expertise of the researchers into teaching. In the next section, the implementation of one research-based pilot experiment will be briefly described.

In the fall of 2008, the Municipal Planning course focused on the small village of Sevettijärvi in Inari, Finnish Lapland, near the border of Norway and Russia. Sevettijärvi is a Skolt Sámi village characterized by its

unique Skolt Sámi language and traditional livelihoods. The future of Sevettijärvi as a Skolt Sámi village is under threat, as many young people are moving away in search of better job opportunities and education, and the population is aging. The previous planning history of the village has been influenced by different values and interests related to land use. In land-use planning, there was a need to consider the aim of strengthening the Skolt Sámi community's culture and continuity of the traditional way of life.

Under the Municipal Planning course, new participation and interactive planning methods were tested. The course began by establishing a discussion forum involving all possible stakeholders, like the Skolt Sámi community, the Sámi Parliament members, and representatives of the Inari municipality. Various platforms were created throughout the course to facilitate interactive planning and information exchange. These included internet-based participation tools, involving local Sámi community school children in information gathering, and open discussion sessions, where land-use plans were presented. The establishment of these forums and the involvement of researchers in their preparation were based on a research project funded by the Academy of Finland called Participatory Urban Design Support with Advanced Information Technology Environment (PUDAS; see, e.g., Hentilä et al., 2009; Nuojua et al., 2010; Molin-Juustila et al., 2010, 2014).

Architects and information technology researchers collaborated closely on the project. The forums for information production and dissemination were twofold.

Forums with one-way information flow

These included lectures for university students (by their own teachers and visiting experts), independent information retrieval (from the internet, literature sources), feedback from the local stakeholders received by university students through project websites, the "Tell a Story" Mobile app, responses from a resident survey, guidance provided to university students by their teachers and visiting experts during planning studio sessions and learning through their own engagement in the process.

Forums with two-way (communicative) information flow

These involved visits to Sevettijärvi and discussions

Collaborative Approach and Structure for Engaged Research *continued*

and interactive seminars with local stakeholders for co-creation and evaluation of the land-use planning proposals, including environmental and societal impact assessments, group work, and interaction with other university students.

The forums facilitated the emergence of creative ideas and allowed for the expression of tacit knowledge (Polanyi, 1983). This would not have been possible without the engagement of local participants. At the beginning of the land-use planning project, the university students had limited knowledge and information about reindeer herding or other traditional aspects of Skolt Sámi culture. Finding relevant information through independent research, such as literature sources, would not have replaced the knowledge generated through the interactive process. In each interaction event, new valuable insights based on local tacit knowledge and culture emerged. For example, the reindeer grazing areas and routes were included to the plan based on the interaction. The local stakeholders gave their feedback on the engaged project through a dialogue in an on-site meeting where the students presented the final project outcomes. Feedback from the students was gathered via a course review. In both cases, the feedback on the engaged way of working was positive. The engaged approach aided in creating a locally rooted land-use plan as a result, as well as offered an authentic learning environment and new skills for the future land-use planners.

Case 4: University of Oulu, Oulu, Finland

This case presents experiences from a research and development project course which aims to empower children in Finland. In this case, the approach to engaged research has been inspired by nexus analysis, transdisciplinary research, Scandinavian participatory design, and empowerment theories. Nexus analysis emphasizes in-depth ethnographic inquiries and close collaboration with research participants to address issues important for them (Scollon & Scollon, 2004). Transdisciplinarity underscores reciprocal interaction among multiple disciplines, transcending the disciplinary boundaries and offering a holistic approach with integration of participants other than researchers (Choi & Pak, 2006). Scandinavian participatory design brings in the need for participants' active, effective, and meaningful participation, underscoring that they must

have a voice in issues affecting their lives. This requires equalizing power relations, democratic practices, mutual reciprocal learning, valuing each other's expertise, and a reflexive, ethical, and responsible stance (Greenbaum & Loi, 2012; Luck, 2018; Pihkala & Karasti, 2016). Closely aligned are theories on empowerment highlighting the need to enable participants as well as larger collectives, particularly those marginalized or oppressed, in the sense of increased power of decision, meaningfulness, choice, impact, and competence (see, e.g., Iivari, 2020).

The approach to engaged research has been embedded into teaching through the "Research and Development Project" course, targeted to master's students specializing in Information Systems, Human Computer Interaction, or Software Engineering. The course aims at building professional expertise in the IT field, the topic of the project, project work, and management. The course is followed by a presentation in a Project Seminar course. This combination aims to make students see the connection between real life IT project work and research related to it, thus increasing their academic expertise. In practice, the course entails working in approximately 4-person project teams for 260 hours each. The project topics are proposed by customers, whom the projects serve. A customer representative is in the steering group of the project, making decisions on the project. The students are allowed to select projects they are interested in.

The researchers have proposed several project topics for student projects as customers, inviting master's students to work for the empowerment of children in and through design and digital technology in the context of their basic education. As customers, we have approved their project plans, organized meetings, provided literature suggestions and guidance on research and design ethics and methods, and participated in practical work at schools. The projects have included children in participatory design of digital portfolios, music learning environments, future schools, games, and digital tools to tackle bullying. Children's empowerment has been addressed in different senses (Iivari et al., 2023; Ventä-Olkkonen et al., 2021; Ventä-Olkkonen et al., 2022): as increased decision-making power or perceived meaningfulness, choice, self-efficacy, and impact in relation to design, digital technology, and anti-bullying interventions, or, in a collective sense, as a feeling of social responsibility, addressing collective

Collaborative Approach and Structure for Engaged Research *continued*

concerns, and empowering a group to take action. We collected data on the experiences of the students in the projects through dedicated project documentation, which indicates that the master's students found the projects valuable, enjoyed the work, and appreciated the opportunity to address societal problems, work on behalf of marginalized groups, and build expertise in design, digital technology, children's computing education, empowerment, participation, stakeholder engagement, anti-bullying interventions, project work, project management, and (engaged, transdisciplinary) research (Kinnula et al., 2018).

Collaborating with master's students has created considerable value for the projects. Students' work on empowerment of children has been invaluable for the children. The projects have generated an extensive empirical dataset on which numerous master's theses and publications have been written. Deep insights have been attained into how political, disciplinary, historical, social, ethical, and practical aspects are intertwined in empowering children in and through design and digital technology in the context of their basic education (Iivari et al., 2015; Iivari et al., 2018; Iivari et al., 2020; Iivari et al., 2023; Kinnula et al., 2018; Molin-Juustila et al., 2015). For instance, we have shown that very divergent discourses on children's participation may emerge in the projects despite a genuine desire to empower them, and that various forms of exclusion may be prominent in children's empowerment projects. Furthermore, we have revealed that children may address empowerment in their designs in very different senses even if given the same assignment. We have also elaborated on how humor, imitation, and recycling provide valuable resources for participatory design among children, and how both adult and child participants, with their histories and established practices, collaboratively shape the design process and outcomes.

Conclusion

Integrating engaged research and teaching is a reconsideration and expansion of the definitions of research, teaching, and learning not only for academics but also for students, universities, and communities. It is a strategy that serves academia, students, and societies of the twenty-first century since it enables co-creation and co-design opportunities. Embedding

engaged research into teaching can be challenging if the re-conceptualization has not been achieved, engaged research is not an institutional priority, or if there is limited awareness about the concept, its benefits, and various methodologies. In fact, Fontaine (2006) has touched upon the fact that faculty review committees or administration may tend to view community engagement or participatory research activities as service-providing rather than scholarship. Due to this view, engaged research might not be an institutional priority. However, nodes such as CARL (Ireland) and KUSIF (Türkiye) provide a sustainable, institutional basis which both interested scholars and students may look up to, be inspired by their best practices, learn the key takeaways, and consult experts in these centers while developing their own engaged research. These centers may stand as a "home" to students who enter and depart higher education in a few years. Finally, these centers hold the potential to build trust within the communities that the universities are situated in. Through UNIC European University, which values multi-disciplinary collaboration, CARL and KUSIF are expected to enhance their impact across different faculties.

The four cases from University College Cork, Koç University, and the University of Oulu provide different, successful, and locally accustomed techniques and methods of embedding engaged research into teaching in various disciplines after a thorough evaluation of the needs of both students and the societies in general. They also present insights about the outcomes of this integration. The highlighted benefits in all cases are reciprocally valuing the academic environment, students at all levels, and communities at large. These best practices prove the importance of engaged research in linking higher education institutions to the communities that they are in. All four cases illustrate the ways in which students may start building relations to their communities through academia at early stages. These experiences have an impact on their future careers. Finally, all four cases emphasize: the significance of collaboration with community partners; student engagement in the research process; incorporating multidisciplinary and transdisciplinary methods, blending different fields of study and incorporating diverse perspectives to address complex societal issues; and the importance of applying research to real-world contexts. Continuous best practice sharing is essential for further developing the

Collaborative Approach and Structure for Engaged Research *continued*

understanding of research-based teaching and learning within UNIC European University and among societal partners as well as for a successful transformation of higher education with a research orientation.

Collaborative Approach and Structure for Engaged Research *continued*

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Collaborative Approach and Structure for Engaged Research *continued*

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Footnotes

¹ For more information, please visit: <https://unic.eu/en/publications>.

² For more information, please visit: https://www.ucc.ie/en/media/research/carl/CARL_CampusEngage_CBR_Process_Map.pdf

³ For more information, please visit: https://www.ucc.ie/en/media/research/carl/2016_Hazel_McDermott.pdf

⁴ For more information, please visit: <https://www.ucc.ie/en/media/research/carl/EamonNashCARLreport2020.pdf>

⁵ For more information, please visit: <https://kusif.ku.edu.tr/en/>

⁶ Maximise Your Impact: A Guide for Social Entrepreneurs <https://kusif.ku.edu.tr/wp-content/uploads/2019/01/MaximiseYourImpact-1.pdf>
Impact Thinking Approach <https://kusif.ku.edu.tr/wp-content/uploads/2019/01/MaximiseYourImpact-1.pdf>

⁷ For more information, please visit: <https://ym.fi/en/land-use-and-building-act>

⁸ Course link: <https://opas.peppi oulu.fi/en/course/454505S/4294?period=2023-2024>
Course link: <https://opas.peppi oulu.fi/en/course/454560S/4521?period=2023-2024>