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TITLE PAGE:

Towards a collaborative approach and structure for engaged research

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Towards a collaborative approach and structure for engaged research

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. Drawing on examples from University College Cork, Ireland; Koç University, Türkiye; University of Oulu, Finland, the paper explores four cases illustrating the incorporation of engaged research into teaching: i) a threefold approach in Ireland: a. lecturer presentation & class discussion, b. class activities, c. students conducting engaged research; ii) Koç University Social Impact Forum in Türkiye, iii) research-based pilots in land-use planning in Finland, and iv) research and development project course empowering children in Finland. Authors argue that such integration enhances the impact of research, nurturing engaged citizens for transformative initiatives.

Keywords: community-based research, engaged research, teaching at higher education, transformative teaching

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Introduction

The discrepancy between the outputs of the academic field and the communities that they consider the subject of study has been a subject matter for some time. Academic studies have been criticised for needing to engage with the communities they truly aim to impact. Research papers and books that take their places 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 being criticised for approaching the communities as objects of study only, but 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 science claims to be producing solutions to societal problems. Meanwhile, higher education institutes are expected to contribute to the system-level change for how innovations accelerate local transformations (Pontikakis et al., 2022) for sustainability. Why are “the resources of universities and colleges not being used to improve the 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

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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 advanced with community partners rather than for them. For engaged research to be authentic, relevant research stakeholders meaningfully and actively collaborate across the stages of the research lifecycle"(Campus Engage Policy Briefing: Higher Education Institutions, 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; Thomas, 2012).

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,

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diversity, inclusion, and equity (UNIC4ER - Towards a Collaborative Approach and Structure for Engaged Research)¹

This paper argues that engaged research methods should be integrated with teaching/learning at undergraduate and postgraduate levels in higher education institutions. Engaged research, which brings about civic and social responsibility in higher education [institutes], 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/participation are essential in engaged research. The integration of research into the life of the community, especially in formal and informal educational contexts, requires the training of its members in knowledge, skills and values that empower their position with respect to the professionalised scientific community. People, citizens, in their different roles and functions, are the key to a process of 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, p. 3), 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. Thus, there is a need to develop curricula around this understanding. This paper aims to share four cases of embedding engaged

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

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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 University of Oulu, Finland. These institutions are connected to each other within the UNIC European University of Cities in Post-Industrial Transition and are learning from and collaborating with each other to enhance engaged research since 2021.

The first case 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 & class discussion, b. class activities, c. students conducting engaged research. **The second case** presents Koç University Social Impact Forum (KUSIF), which supports experiential learning and engaged research to develop students' skills related to social impact issues in Türkiye. **The third case** describes two research-based pilots connected to interactive land-use planning teaching and learning, based on authentic learning, and aiming towards engaged research at the University of Oulu in Finland. **The fourth and last case** presents experiences from a research and development project course, also, at the University of Oulu which aims at empowering children in Finland.

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

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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 level education. It is argued that central to the teaching of engaged research is an engaged pedagogy, i.e., active, participatory teaching methods. This necessitates de-centring oneself as a lecturer in the classroom, embedding student participation to complement lectures, and integrating multiple pedagogical methods to accommodate multiple learning styles (Saltmarsh, 2019). 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 value and values of participatory research, which Etmanski

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and Pant (2007, p. 277) argue, are as important to communicate as the process of doing research. Guest speakers from the community are also invited and reports/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 or 'pair & 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., 2019), considering what the rap means, and discussing it in groups. In another, students explore participants' experiences of the research process through audio/video from recorded public events and discuss the impacts, benefits, challenges, and ethics of engaged research (Author et al., 2023a). 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 organisations (CSOs) to suggest potential research topics that can be pursued by

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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 organisations (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, following review by an Advisory Community, and 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 letter of recommendation from a tutor, and if accepted they are matched to a community organisation by the CARL coordinator. In the third phase, project management gets underway with an initial planning meeting between the organisation, student, CARL coordinator, and academic supervisor. The student then undertakes research with regular support and input from their supervisor and the community organisation. In the fourth dissemination phase, the student's report is presented to the community organisation after the examinations process, and if it reaches a particular grade threshold it is placed on the CARL publicly available website. A follow up meeting is also held with the community organisation to discuss recommendations and how to implement findings (for more details see [CARL Research Process Map](#)).

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

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gain greater insight into their understanding of eating disorders. Her project² resulted in a follow-up study with the School of Dentistry, and the organisation is following up on her recommendations. 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: 34). For example, a postgraduate social science student partnered with a community development organisation in a deprived area of Cork City and developed a participatory methodology to document the impacts of a learning programme (Learning Neighbourhoods) on communities and organisations. His project³ provided recommendations for sustainable models of practice and has informed the ongoing development of the programme. In documenting their motivation for engaging in CARL projects, students noted the importance of having 'some form of real-world applicability' to their research. They furthermore 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.

² For more information please visit: https://www.ucc.ie/en/media/research/carl/2016_Hazel_McDermott.pdf

³ For more information please visit: <https://www.ucc.ie/en/media/research/carl/EamonNashCARLreport2020.pdf>

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These collaborations successfully generate CARL proposals that future students can undertake (Hally et al., 2020). Opportunities for students to conduct research were also developed in an engaged research project. Working with the UCC Centre for Adult Continuing Education (ACE), the municipal authority, and community organisations, collaboration was attained with mature students living in an area characterised by high deprivation to co-create a household survey on the regeneration of their area (Cullinane, 2020). The students became field researchers in their community, and several undergraduate students also joined the fieldwork. Evaluation of this engaged research project showed the impact on student learning and their commitment to the community, including the development of new skills, knowledge, and confidence (Cullinane, 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

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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.

Case 2, Koç University, Istanbul, Türkiye

Koç University Social Impact Forum (KUSIF) ⁴ was established in 2012 to be "the Research and Practice Centre" on social impact. 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. The Forum is the funding member of two networks in Türkiye such as Turkish Social Entrepreneurship Network and Social Value Türkiye and has published research and practical guides on social impact and social entrepreneurship. At academic level, KUSIF has expertise in impact education, i.e. teaching students on 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 the faculty can get support from KUSIF to integrate social impact in their work and benefit from KUSIF's societal network for their courses and projects.

⁴ For more information please visit; <https://kusif.ku.edu.tr/en/>.

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Engaged research and experiential learning are fundamental to KUSIF's impact education. '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 an organization could maximize impact.

Each semester, KUSIF partners with a diverse range of impact organizations which can commit to working with KUSIF and allocate time to students during the semester. Each partner organization brings to the class one impact project, or if it is a small organization, the organization can be studied. Experiential learning and engaged research are integrated into the class to support students in collecting information from the stakeholders to be able to answer ten impact questions (Maximize Your Impact Guide⁵, p. 20) to prepare the final report and learning of the class on the main impact research question which is "how this project or the organization could be more impactful". 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 of the research to improve their products and services to create positive impact on their beneficiaries, customers

⁵ 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>.

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and other stakeholders in their communities. On the other hand, students learn ~~the~~ impact ecosystem, different kind 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 and understand different characteristics of social impact to manage this impact.

Main challenges around conducting engaged research and conducting experiential learning integrated class are i. stakeholder management and ii. time management as many stakeholders are involved and these classes take more time and effort. There are also some significant aspects to be considered for students' learning process.

First important aspect is about giving students the option to work with the topics that they are interested in the most, to increase their learning and take 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 in their daily life. Centres, units or different functions 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.

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Case 3, University of Oulu, Oulu, Finland

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This case describes a research-based pilot connected to interactive land-use planning teaching and learning, based on authentic learning, and aiming towards engaged research in Finland. Municipalities play a significant role in land use planning in Finland. They are responsible for land use planning and local plans in their respective areas. The Land Use and Building Act⁶, enacted in 2000, increased the municipalities' independent authority to decide on detailed plans. 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 to the Municipal Planning course⁷ and the Extension Course in Urban Planning⁸ organized annually in the Urban Planning discipline. 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

⁶ For more information please visit; <https://ym.fi/en/land-use-and-building-act>.

⁷ Course link: <https://opas.peppi oulu.fi/en/course/454505S/4294?period=2023-2024>

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

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collaborating municipalities have been located up to 700 km north and 350 km south of Oulu, explaining 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, more detailed plans, written reports, and impact assessment of the plans. 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 parts, 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 Sevetijärvi in Inari, Finnish Lapland, near the border of Norway and Russia. Sevetijärvi is a Skolt Sámi village characterized by its unique Skolt Sámi language and traditional livelihoods. The future of Sevetijärvi 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 ageing. 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.

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In 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 e.g. Skolt Sámi community and 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 a) internet-based participation tools, involving local Sámi community school children in information gathering, and b) 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: Hentilä, 2009; Nuojuua et al., 2010; Halkola et al., 2014; Kuure et al., 2010). Architects and information technology researchers collaborated closely on the research 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 involved: visits to Sevettijärvi, discussions and interactive seminars with local stakeholders for co-creation and evaluation

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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 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

The fourth and last case presents experiences from a research and development project course, which aims at empowering 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). Trans-disciplinarity underscores reciprocal interaction among multiple disciplines,

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transcending the disciplinary boundaries and a holistic approach with integration of participants also other than researchers (Choi & Pak, 2007). Scandinavian participatory design brings in the need for participants' active, effective, meaningful participation, underscoring they must have a voice and a say in issues affecting their lives. This requires equalizing power relations, democratic practices, mutual reciprocal learning, valuing each other's expertise and a reflexive, ethical, responsible stance (Greenbaum & Loi, 2012; Luck, 2018; Pihkala & Karasti, 2016). Closely aligned are theories on empowerment highlighting the need to empower participants as well as larger collectives, particularly those marginalized or oppressed, in the sense of increased power of decision, meaningfulness, choice, impact, and competence (e.g., Author, 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, and 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 that and thus, to increase their academic expertise. In practice, the course entails working in ~ 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.

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We researchers have proposed tens of 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, and provided literature hints and research and design ethics and methods guidance and participated in practical work at schools. The projects have included children in participatory design of, e.g., digital portfolios, music learning environments, future school, games, or digital tools to tackle bullying. Children's empowerment has been addressed in different senses (Author al., 2023; Sharma et al., 2023; Ventä-Olkkonen et al., 2021): as increased decision-making power or as perceived meaningfulness, choice, self-efficacy and impact as regards design, digital technology, and anti-bullying interventions, or in collective sense as feeling of social responsibility, addressing collective concerns, and empowering a collective for action taking.

The master's students have perceived the projects valuable and have enjoyed the work and appreciated the possibility to address societal problems and to work on behalf of those marginalized and to 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 have created considerable value for the projects. Students' work on empowerment of children has been invaluable for the children, themselves. The projects

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have generated an extensive empirical dataset, based on which numerous master's theses and publications have been written. Deep insights have been attained into how power, politics, 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 (Kinnula et al., 2015, 2018; xx et al., 2023b): We have shown, for instance, that very divergent discourses on children's participation may emerge in the projects despite a genuine will to empower them and that exclusions of various kind may picture strong 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 task assignment. We have also elaborated on how humour, imitation and recycling provide valuable resources for participatory design among children and how both adult and child participants with their histories and accustomed practices are collaboratively shaping 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 21st 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 or if engaged research is not an institutional priority or if there is limited awareness about the concept, its benefits, and various

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methodologies. In fact, Fontaine (2006) has touched upon the fact that, faculty review committees or administration might 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, to be inspired by their best practices, learn the key-take aways, consult experts in these centres while developing their own engaged research. These centres may stand as 'home' to students who enter and depart the higher education in a few years. Finally, these centres 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 three different geographies; 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 the communities through academia at early stages. These experiences have an impact on their

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future careers. Finally, all four cases emphasize **i.** the significance of collaboration with community partners, **ii.** student engagement in the research process, **iii.** incorporating multidisciplinary and transdisciplinary methods; blending different fields of study and incorporating diverse perspectives to address complex societal issues and **iv.** the importance of applying research to real-world contexts. Continuous best practice sharing is essential for further developing the understanding of research-based teaching and learning within UNIC European University and among societal partners and a successful transformation of higher education with a research orientation.

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