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# Community engagement through research- based design and spatial planning education

## Towards a conceptual framework for conditions and tensions

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### Abstract

Universities worldwide are becoming increasingly interested and active in fighting social inequality and strengthening social cohesion at a local level, often referred to as 'university-community engagement', 'local engagement', or 'community outreach'. Many activities are clustered under this heading, such as lifelong learning, volunteerism of staff and students, service-based learning, and participatory research. Despite the rise of internet-based communication, community engagement in education requires face-to-face, reciprocal interactions between stakeholders and community members. While the goals of students, instructors, and community members may partly overlap, community engagement embodies fundamental tensions among the different interests, knowledge, and time frames of these actors. The extent to which these conditions can be met largely affects the level of community engagement. The chapter uses the relevant literature and experiential knowledge to develop a conceptual framework of the basic conditions for and inherent tensions in local university-community engagement in the context of research-based design and spatial planning education.

### Keywords

Community engagement, community development, transdisciplinary, civic university, spatial planning

**COVER FIGURE** Residents' input on a map of the Kuyperwijk during a community engagement event organized by students, by Reinout Kleinhans, 2024.

# 1 Introduction

Universities across the world are becoming increasingly interested and active in fighting social inequality, creating opportunities, and strengthening social cohesion at local levels. This phenomenon, in the academic literature known as ‘university–community engagement’, ‘community outreach’, or ‘community–university partnerships’, increasingly receives attention from stakeholders such as policymakers, academics and local or regional authorities (Farnell, 2020; Goddard et al., 2016; Grau et al., 2017; Millican & Bourner, 2014). There are many ways to conceptualise university–community engagement (UCE), which has hitherto resulted in vague definitions and overlapping terms (Benneworth et al., 2018; Hart & Northmore, 2011; Sandmann, 2008; Sie & Frank, 2022). Many definitions and theoretical models incorporate spatial elements, and terms such as ‘local’, ‘surroundings’, and ‘regional’ are often used, referring to the spatial settings in which universities are embedded.

Despite rapidly growing interest in UCE, the literature is still characterised by a lack of conceptual clarity (Koekkoeck et al., 2021). Due to the prevalence of broad definitions, many activities are clustered under this heading, e.g. lifelong learning, volunteering of staff and students, service-based learning, participatory action research, cultural events, and access to university buildings, for example, by art groups renting spaces (Benneworth et al. 2018; Goddard et al., 2016; Humphrey, 2013; Sandmann, 2008). Such activities partly stem from the increasing ‘pressure’ on universities to show their relevance and contribution to society. Other motives behind the growing popularity of UCE are related to its presumed benefits, including strengthening democracy, empowering marginalised groups or communities, combining scientific methodologies with ‘real-world’ problems, students becoming ‘better citizens’, equity, and generational solidarity. Through UCE, students are expected to transcend their disciplinary ‘bubbles’ and obtain relevant knowledge from people who are not experts, academics, or policymakers (Bourner & Millican, 2011; Brewis et al., 2010).

While the notion of UCE can be found across a wide range of disciplines, this chapter focuses on UCE in the context of *architecture and spatial planning education* at the university level. These are disciplines with an inherent interest in creating new knowledge and design for a ‘better world’, including housing, public space, and facilities for work, retail, health care, and other domains. In the context of their education, students are presented with settings that include a mix of research, design, and local problem-solving, whether or not there is an explicit requirement to address specific target communities. It is for these reasons that *architecture and spatial planning* are interesting and relevant disciplines for UCE. At TU Delft, these disciplines are embedded in the engineering programme, building on the current vision of TU Delft, which is inspired by the notion of a ‘civic university’ (Goddard et al., 2016) and reflects the concept of UCE: ‘Delft University of Technology contributes to solving global challenges by educating new generations of socially responsible engineers and expanding the frontiers of the engineering sciences’ (TU Delft, 2018, p. 12).

Two parts of the TU Delft mission statement which are connected to the vision, are particularly relevant to UCE (TU Delft, 2018, p. 12):

- We develop and enhance the expertise of tomorrow’s engineering leaders and educate professional, high-level, and *responsible* engineers throughout their careers.
- We help to develop and deliver technology-driven, innovative solutions to societal problems through collaborations with leading national and international partners while *being firmly rooted in Delft*.

It is precisely the combination of responsibility, innovative solutions to societal problems, and being rooted in certain localities that underpin the relatively unexplored merits of community engagement. In this context, instructors develop educational activities that enable students to make a positive local impact, for

example, a knowledge-based intervention or network in a locality (street, square, neighbourhood, shopping centre, or school area), informing urban policy, or answering specific questions that local practitioners who often lack time and other resources to do the research themselves are trying to address.

Before moving towards solutions, we need to carefully identify the extant knowledge and challenges regarding UCE in the context of architecture and spatial planning education. Based on the relevant literature and experiences piloting UCE in existing courses, the aim of this chapter is to develop a conceptual framework of the basic conditions for and inherent tensions in local university–community engagement in the context of research-based design and spatial planning education. The next section briefly explores the notion of community engagement. Section 3 develops a conceptual framework that includes the basic conditions and potential tensions between actors participating in UCE. The final section presents the conclusions.

## 2 Definitions of community engagement

Similar to UCE, the notion of community engagement (CE) is characterised by a plethora of definitions and activities. In its essence, CE refers to various ways in which local community members, such as residents, policymakers, entrepreneurs, and others, can be engaged with (research in) design and spatial planning education. Engagement entails participation. The International Association for Public Participation (IAP2) has developed a Spectrum of Public Participation, which can ‘assist with the selection of the level of participation that defines the public’s role in any public participation process’ (IAP2, 2018). The spectrum is used internationally, and it is found in many public participation plans. It is a useful framework for explaining CE and its community impact. If, for example, residents participate as informants in students’ research, the level ‘Consult’ applies, whereas students and local stakeholders who jointly develop strategies or a design would be reflected by the level ‘Collaborate’. With each step to the right (see Figure 1), the level of engagement by the public increases, as well as the strength of the reciprocity between academics, policymakers, and ‘the public’.

In an effort to tackle the plethora of definitions and meanings, Benneworth et al. (2018) recently completed a critical synthesis of the state-of-the-art on UCE in higher education. Based on their review, they define UCE as ‘a process whereby universities engage with community stakeholders to undertake joint activities that can be mutually beneficial even if each side benefits in a different way’ (Benneworth et al., 2018, p. 17). These activities may relate to teaching and learning, research, service and knowledge exchange, student initiatives, and university-level engagement, whereby universities open up their facilities or venues to the community and provide open access to educational resources (Farnell, 2020). In this chapter, the focus lies on teaching and learning.

## IAP2 Spectrum of Public Participation

IAP2's Spectrum of Public Participation was designed to assist with the selection of the level of participation that defines the public's role in any public participation process. The Spectrum is used internationally, and it is found in public participation plans around the world.

INCREASING IMPACT ON THE DECISION					
	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

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FIGURE 1 IAP2's Spectrum of Public Participation. From *International Association for Public Participation*, 2024 ([www.iap2.org](http://www.iap2.org)). Reproduced here with written permission.

## 3 Applying UCE in courses: Conditions and tensions

In November 2019, I acquired a Delft Education Fellowship to explore the implementation of UCE in the context of education. This fellowship aims to improve our understanding of the feasibility of and effective approaches to strengthening community engagement by enabling architecture students to conduct research and design that truly connects to and engages (members of) local communities in the context of regular coursework, which will be further developed for this purpose. The two courses used for piloting are:

- 1 The minor 'Cities, Migration and Socio-Spatial Inequality' (BK7470/7471/7472)
- 2 The MSc elective 'Social Inequality in the City, Diversity and Design' (AR0095)

The piloting yielded several insights that helped build the conceptual framework. While both ten-week courses have learning objectives regarding the skills and competencies that students acquire or extend during the course, local community engagement is an implicit underlying objective. In terms of the IAP2 Spectrum of Public Participation, students are expected to consult and involve residents and professional stakeholders (such as civil servants or the local police force) in selected target neighbourhoods in their research efforts, i.e. as a source of information, but also in the proposals for strategies or designs.

The extent, nature, and quality of the exchanges between students (and instructors) and community members are affected by many conditions. Even if all involved actors agree on the relevance and desirability

of UCE, the various scopes and boundary conditions may not be easily aligned. This situation can be conceptualised as an (im)balance between centripetal and centrifugal forces (see Figure 2), which reflect different interests and scopes.

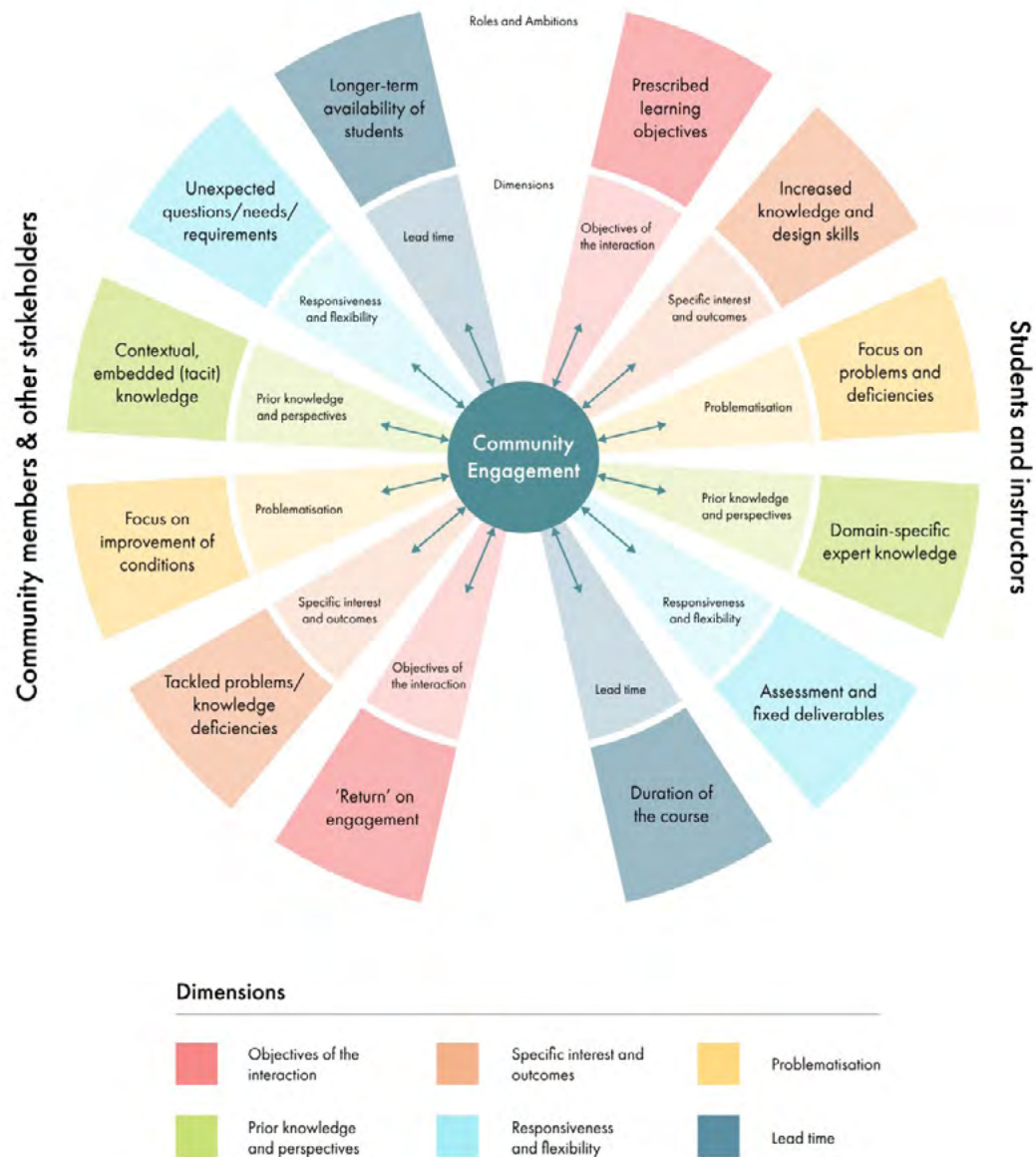


FIGURE 2 A framework of conditions and tensions in UCE in the context of design education and research, by Jonas Althuis, 2024.

While the core of the diagram refers to both the process and the outcome, the intermediate circle reflects six dimensions that include boundary conditions, interests, and scope in the context of UCE. The outer circle operationalises the nature or elements of the dimensions, particularly roles and ambitions, from the perspective of the students and their instructors (right part of the diagram) or by community members and other stakeholders (left part). Each dimension will be briefly discussed below.

### 3.1 Objectives of the interaction

As explained earlier, UCE aims for broader effects than only offering challenging education. However, in the context of educational activities that will be graded, the *prescribed learning objectives* and related instruction will lead students' learning activities. In the context of UCE, proper learning objectives define the outcomes not only in terms of acquired knowledge and student skills (e.g. developing a research-based design) but also in terms of benefits for other involved actors or institutions (e.g. a local strategy). For the non-academic partners in UCE, the *'return' on engagement* with students and instructors may be similar to the learning objectives but is more likely to be related to changes in policy, the built environment, social services, or economic facilities. In the pilot courses, this often emerged in the form of expectations, whether the elaboration of an incomplete problem analysis or a 'fresh' outsider perspective from students regarding such changes.

### 3.2 Specific interests and outcomes

In both pilot courses, local stakeholders (i.e. representatives of local governments or programme offices) offered certain 'questions' in advance, hoping that these could be tackled in the course. In many cases, such questions were not 'ready' to be processed directly as a research question within (student research in) the course. Notably, there is at least a partial difference in interest between academics and non-university stakeholders. While UCE may be part of students' personal goals, they are ultimately interested in finishing a course with good results through *increased knowledge and design skills*. In contrast, other stakeholders are looking for certain *problems, opportunities, or knowledge deficiencies* to be effectively addressed. This difference reflects a more fundamental tension between the interests of students and local communities.

Whereas local communities hope to obtain a result that is as beneficial as possible, students benefit from making mistakes and failing during their educational career – a crucial element of learning. During the pilot courses, it turned out that making mistakes is not – by definition – conducive to an optimal outcome for the community, as it may diminish the robustness of the problem analysis, the resulting strategies, or both.

### 3.3 Problematisation

All instructors involved in architecture and spatial planning education know that many of their students are ambitious (and partly naïve) 'world improvers' who are keen on solving large (societal) challenges. This is often reflected in their approach. In the piloting courses, students tended to focus on *problems or deficiencies*, while community members looked for the *improvement of a situation or conditions* without disturbing positive elements in the status quo. The imminent danger of a 'deficiency approach' is that it ignores local strengths, assets, and opportunities and devaluates community members' efforts to generate local benefits or improvements. In asset-based community development, a key principle is to 'focus on what is strong, not what is wrong' (Russell, 2020).

### 3.4 Prior knowledge and perspectives

As a consequence of their previous education, experience, and active intellectual schemata, students and their supervisors accumulate significant *domain-specific (expert) knowledge* that they apply to a real-life situation, trying to make sense of their observations in the chosen UCE context. Usually, they are new to this situation, whereas local community members are embedded in it and have a large amount of *contextual (tacit) knowledge* and experiences. In other words, the perspectives of both groups are affected by their prior knowledge, and combining these types of knowledge is very useful but can also pose challenges. During the interactions in the pilot courses, we noticed, for example, that certain interpretations of students (e.g. regarding the use of public space) were constructively ‘falsified’ by residents who offered different explanations. In other interactions, ‘unarticulated’ questions arising from the community fell partly or completely outside the expertise and skills of students and their instructors.

### 3.5 Responsiveness and flexibility

As no one can predict community responses in the context of UCE, the approaches adopted by universities need to be flexible, and academics must maintain an open mind and receptiveness towards (*unexpected*) *questions, needs, views and requirements* of community members and other local stakeholders (e.g. Benneworth et al. 2018). This aim can be at odds with a priori course requirements regarding clear learning objectives, boundary conditions, planning, fixed deliverables, and assessment. In other words, any attempt to be flexible and respond to particular community inputs and requirements may come at the expense of the aspired constructive alignment (Biggs & Tang, 2007), for example, because it expands the subject matter beyond reasonable limits for a ten-week course. Flexibility is also needed in relation to the tension between benefitting a (local) community and students’ opportunities to fail in their educational efforts, which is a crucial element of learning.

### 3.6 Lead time

The *duration of the course* may be at odds with community expectations regarding the longer-term ‘availability’ of students and their instructors, as well as the duration of policy cycles. Consequently, many previous UCE attempts have been perceived as ‘hit and run’ projects in which students quickly gather the data they need and withdraw from further engagement with the community. In the pilot courses, this issue was felt very strongly because both courses only last one academic quarter (ten weeks). This length turned out to be just sufficient time to consult community members but a bit too challenging to involve them in the elaboration of strategies and designs. A possible solution is ‘stacking’ the work of several student cohorts, who build upon each other’s work. A disadvantage is the time gap between ‘episodes’ of the same course, which may result in the loss of momentum.



## 4 Preliminary conclusions: Towards establishing clear boundary conditions for UCE

This chapter has reported some preliminary outcomes of an education innovation project, i.e. my TU Delft Education Fellowship (2020–2021). I have developed a conceptual framework of the basic conditions for and tensions in university–community engagement in the context of research-based design and spatial planning education. Based on a literature review (not reported here) and the piloting of several courses at the Faculty of Architecture and the Built Environment, this framework (Figure 2) contains six dimensions that encompass the conditions, interests, and scope of the crucial actors in the context of small-scale UCE within regular courses.

At this stage, several conclusions can be drawn. First of all, even if instructors and community members agree on the relevance of UCE, significant preparation is required to set clear boundaries for the research and design efforts by the students. Such work should include ‘preparing’ community members, especially residents, for their engagement with students so that they know what to expect from student interaction, deliverables, feedback, and lead time. Students need to be prepared as well. Double-sided expectation management is key.

Second, the pilot experiences showed that a lead time of ten weeks is very short for community engagement to move beyond the consultation level (see Figure 1). This issue may be overcome by either ‘stacking’ the work of student cohorts in the same course or embedding UCE in longer-term studio settings (including MSc thesis research).

Third, student deliverables need to be reconsidered to allow for more flexibility and to ensure they are more ‘understandable’ to the community, though this may complicate the constructive alignment in the course. One of the pilot courses showed the utility of a supplementary Dutch note on top of the English reports.

To support implementation in other courses (and beyond) with a desire to venture into community engagement as part of student research and design, a TU Delft-wide learning community (also known as a ‘special interest group’) was established under the umbrella of the Teaching Lab at the Delft University of Technology. In this learning community, instructors and education coordinators from several faculties exchanged experiences and worked jointly on further professionalisation regarding this topic. This process occurred in close collaboration with colleagues at the TU Delft Community Outreach Team.

The findings were also fed into the development of the Thesis Hub at The Hague Southwest (see <https://www.scriptiewerkplaats-dhzw.nl/english>). This initiative stems from the educational programme of Leiden-Delft-Erasmus universities, which actively connects with practice and policy. In the Thesis Hub, student research is linked to concrete challenges in The Hague Southwest. Instructors closely collaborate with local stakeholders such as the municipality of The Hague, housing associations, welfare organisations, local neighbourhood professionals, and residents of The Hague Southwest. The author of this chapter is active in the steering committee of the Thesis Hub. In a recent evaluation of Leiden-Delft-Erasmus Centres by an external committee, the Thesis Hub was lauded as an exemplary education innovation. Indeed, the fundamental thinking underlying the work described in this chapter is gaining ground and will continue to do so in the coming years.

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