Aligning values and priorities through collaborative action research: an opportunity to connect, co-create and achieve the SDGs

Ani Raiden, ani.raiden@ntu.ac.uk
Nottingham Business School, Nottingham Trent University, UK

Laura Alvarez, Laura.Alvarez@nottinghamcity.gov.uk
Heritage and Urban Design, Nottingham City Council, UK

Andrew King, andrew.soulvalue@gmail.com
Soul Value Consultants, UK

Abstract

Social value is a practical vehicle for realising the United Nations Sustainable Development Goals (SDGs) within built environment processes. Research and practice in this space recognises co-creation and stakeholder management as fundamental to achieving the desired outcomes. However, given differences in individual perceptions and organisational/industry ethos and goals, involving a diverse range of stakeholders in social value work is not without challenges. We discuss collaborative action research methodology as an approach to help placemaking and construction management fields meet and, together, respond to the grand challenges facing cities. This methodology is aligned with social constructivist research philosophy and includes a five-step sharing conversations process that was employed within an ambitious local authority project in the UK: Nottingham City Council's aim and aspiration to become carbon neutral by 2028. Key results included the development of processes that achieved a deep and meaningful understanding of the different stakeholders' perceptions and perspectives. This helped form and reform collaborative relationships and long-term partnerships between internal and external stakeholders. Thus, we advocate collaborative action research as an opportunity to connect, co-create and achieve the SDGs, specifically SDG 17 and 11, through collective understanding, appreciation and aligning of individual and shared values and priorities, and organic dissolution of perceived barriers.

Keywords
Action research, collaboration, social value.

1 Introduction

The United Nations (UN) Sustainable Development Goals (SDGs) are a universal call to action to end poverty, protect the planet, and ensure all people enjoy peace and prosperity. Social value is one of the key practical vehicles for realising the SDGs in the UK at a national and organisational level. Social value in this context refers to the positive social, environmental, and economic impact any

organisation, project or program makes to the lives of the stakeholders affected. Social value is associated with all the SDGs (Raiden and King 2022: 7), but since our discussion is about aligning the values and priorities of different professions in the built environment and creating an opportunity to connect and co-create to achieve the SDGs, we are specifically interested in the goals 17: partnerships for the goals, and 11: sustainable cities and communities.

At the time of this research, the case organisation at the centre of our research (Nottingham City Council in the UK), was focused on reviewing their services, systems and delivery tools with a view to achieving greater overall sustainability and meeting their ambition to become carbon neutral by 2028. In this context, their Heritage and Urban Design team was working on re-thinking the planning processes and how new ways of collaborative cross-department, multi-agency working could deliver higher quality places and built environment. Crucial to this work was the understanding of the potential capacity of the planning process to deliver social value. However, the target could not be met without good collaboration between the many different teams and departments within the organisation. More specifically, the focus was on: a) the urban design and planning teams, and b) the construction and infrastructure project management divisions. Together, they were to develop new effective and efficient ways of co-working that would help them achieve the social value targets collectively.

The joint venture involved two fields where values and priorities differ widely. Urban design and planning are concerned with placemaking, which takes a broader perspective and is likely to involve multiple agencies and projects (Hedborg and Karrbom Gustavsson 2020). For construction management, firm level commercial management, legal and leadership issues, and identification of customer needs have been identified as central priorities (see for example, Bröchner *et al* 2005; Raiden *et al* 2006; Casady and Baxter 2020). Such difference in contextual focus commonly leads to misalignment of values and priorities, which results in difficulty developing conversations and working together, as the parties may fail to share a common vision. Additionally, the different fields come across key deliverables at different stages in the construction/placemaking process, which often increases the barriers to shared delivery. To counter these difficulties, proactive management of the early stages of collaboration is key, allowing tailored processes focus on achieving multi-agency goals around a nexus of SDGs in order to achieve more than any individual project or initiative is able to deliver (Raiden and King 2021). Social value research and practice recognises co-creation and stakeholder management as fundamental to successfully considering, creating, and delivering social value. Involving a diverse range of stakeholders in discussions about such work is challenging given differences in individual perceptions and priorities and organisational ethos and goals.

Given our prior collaboration and research on social value (see Raiden *et al* 2022) our research question in this project focused on asking:

How can collaborative action research be employed in built environment processes to develop an opportunity to connect, find common ground, co-create and achieve the SDGs?

A collaborative action research programme was devised, piloted, reviewed, and implemented within the ambitious local authority project. At the core was a five-step sharing conversations process, which proved to be beneficial for developing deep and meaningful understanding of the different stakeholders' perceptions and perspectives. This, in turn, helped form and reform collaborative relationships and partnerships between internal and external stakeholders. The project was not without challenges, and it became evident that the approach requires skill, commitment and care. Differences in communication styles, use of language and word choices, and approaches to managing conflict all potentially impact upon the process.

Key results, in the form of a collective and agreed vision of what the participants aspired to create together, far outweighed the project challenges. Discussions were grounded in individual experiences and shared understandings, and this created an opportunity to connect, co-create and achieve the SDGs. We therefore advocate collaborative action research methdology as an approach that can help construction/project management and placemaking fields come together to consider, create and deliver social value through the five-step sharing conversations process.

2   Literature Review – Development and Applications of Action Research

Action research has a long and varied history in many diverse fields, such as education, medicine and nursing, agriculture, the women's movement, Indigenous land rights, green and conservation activism, and community research (McIntyre 2008: 1-5; Kemmis *et al* 2014: 4). In organisation research, the approach devised by Kurt Lewin is often referred to as marking the origins of the type of work that combined the discussion of problems followed by group decisions on how to proceed (Adelman 1993: 9). Today, as in our work, action research is about research projects and action, but it is also a philosophical stance:

> *"an attitude of enquiry that enables people to question and improve taken for granted ways of thinking and acting" (McNiff and Whitehead 2009: 7).*

Some frame action research as a form of engaged scholarship with the aim to develop knowledge that advances both science and practice (see for example, Voordjik and Adriaanse 2016). Others frame action research as a form of phenomenological research that seeks to achieve the dual outcomes of contributing to the basic knowledge in social sciences and introducing change (Argyris *et al* 1985, cited in Sexton and Lu 2009: 688).

The central characteristics of action research are generally identified to include change orientation, collaboration orientation, and process orientation (cyclical flow and circularity) (Sexton and Lu 2009: 688). Some researchers discuss much more specific roles, contributions and qualities related to action research, like Sunding and Ekholm (2015: 698) who see it as being future oriented and collaborative, an approach that implies system development, generates theory grounded in action, is agnostic and situational.

Participatory action research is one particular development in this space which *"offers a multidimensional approach to research that intentionally integrates participants' life experiences into the research process"* (McIntyre 2008: xiv). Although the nature of participatory action research projects can vary widely, as do action research projects in general, McIntyre (2008: 1) identifies the following tenets to characterise participatory action research:

- a collective commitment to investigate an issue or a problem

- a desire to engage in self- and collective reflection to gain clarity about the issue under investigation

- a joint decision to engage in individual and/or collective action that leads to a useful solution that benefits the people involved

- the building of alliances between researchers and participants in the planning, implementation, and dissemination of the research process.

A cyclical process of exploration, knowledge construction, and action at different moments throughout the research process, is central to this approach (ibid) (see Figure 1). Participatory action research is

a *"living dialectical process"* that changes the researcher, the participants, and the situations in which they act (McTaggart 1997, cited in McIntyre 2008: 1). This circularity is a key feature frequently reported as a hallmark of action research (see for example, McIntyre 2008: 7; McNiff and Whitehead 2009: 9-10; Kemmis *et al* 2014: 19; Coghlan and Brannick 2014: 11).
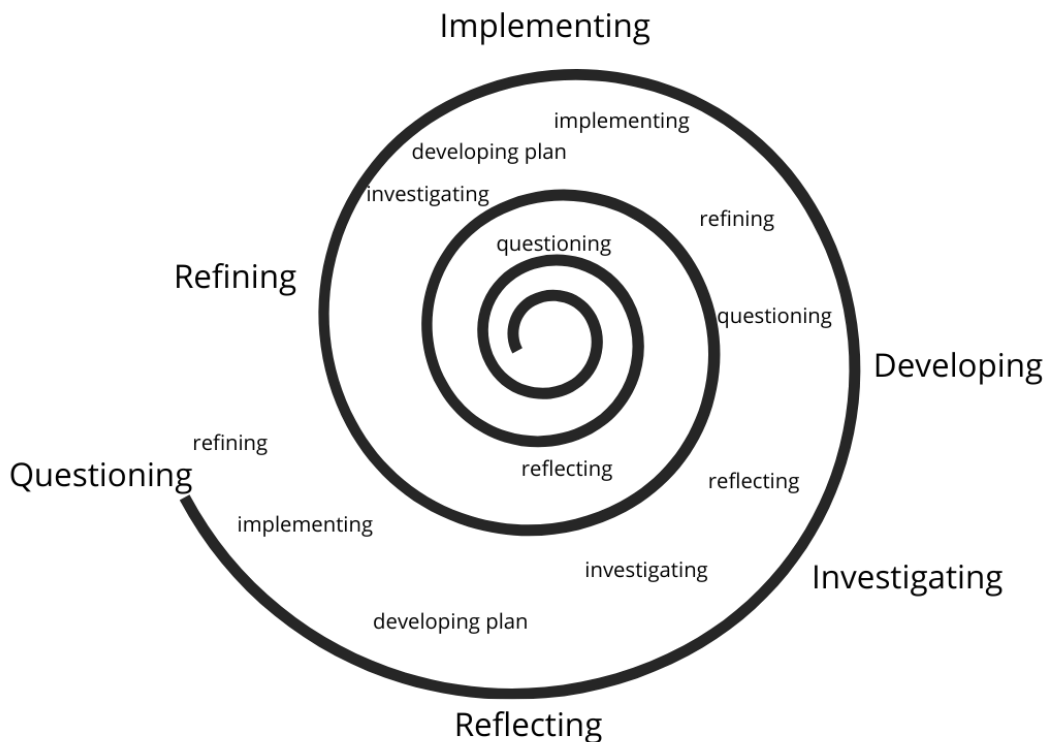

Figure 1. The Recursive Process of participatory action research (adapted from McIntyre 2008: 7)

2.1 Action Research in Construction Management

There has been growing interest in action research in construction management since the late 1990s (Connaughton and Weller 2013) with recent projects researching, for example, environmental management systems (Teriö and Kähkönen 2011), behavioural change (Sunding and Ekholm 2015), energy management (Gottsche *et al* 2016), rework management (Taggart *et al* 2014; Asadi *et al* 2021), collaboration in procurement (Connaughton and Collinge 2021) and production planning and control (Lehtovaara *et al* 2022). The key features of action research, primarily the focus on 'real world' problems, collaboration, and bridging the gap between theory and practice, are recognised to outdo the criticisms about replicability, reliability, generalisability and objectivity.

2.2 Action Research in Urban Design and Planning

In the field of urban design and planning, terminology preferences differ somewhat from 'action research' and instead 'action learning' is more commonly used and applied to processes like co-design. This has offered a diversion from the objective researcher approach, albeit it has mainly remained focused on developing a form of practice that combined design with evidence-based decision making to achieve a design outcome. The route that seems to have prevailed in recent years has its emphasis on the need to substantiate design solutions with sound scientific background knowledge. Participatory action research – with or without the action learning element – has also recently grown in popularity in the field, but it has been focused on community empowerment, inclusivity and partnership triggering

through the process itself but mainly by working on a specific design goal, for example through co-production practices.

3   Research Methodology

Our research methodology aligns with participatory action research after McIntyre (2008) and in the following sections we discuss the research philosophy, research design and research methods relevant to our quest to answer the research question.

3.1   Research Philosophy

Constructivism and more importantly social constructivism are important cornerstones of action research. Whilst debates continue on the fundamental differences between these two theories of psychological development (Amin and Valsiner 2004; Kitchener 2004; Lourenço 2012), they are broadly characterised as differing in how they see knowledge being created. Constructivism (Piaget 1952) views knowledge creation as a more solitary affair (Tappan 1997) where the learner 'constructs' knowledge for themselves using their existing knowledge as a foundation. In contrast, social constructivism views knowledge creation as being socially constructed through interaction with others – we work together to develop knowledge (Vygotsky 1987). Social constructivism is particularly important for our research, as it offers a philosophical framework within which to locate action research by focusing on how knowledge is created through interaction with others as a social endeavour.

3.2   Research Design

McIntyre (2008: 2) highlights the context specificity of participatory action research, which means that there is no fixed formula for designing, practicing, or implementing participatory action research projects. It is this malleability that is the beauty in participatory action research, and we present our design for a *collaborative action research* programme that views participants as active agents in co-creating the research, whereby their personal and professional values and priorities play an integral part in shaping and developing the research and action within a cyclical process.

The research design involves a sharing conversation process which comprises the following steps:

Issue Questions – A set of questions are designed (as relevant to a project/programme) and sent to participants who complete their 'first-pass' responses in writing, in their own time. This includes the researcher.

First Sharing Conversation – One to one meetings are arranged with the participants to discuss the first-pass answers. The first conversations are led by the participants (and not the researcher).

Second Sharing Conversation - A further conversation is then arranged to explore the first-pass responses deeper in-depth, this time with the questioning being led by the researcher. (Depending on the nature of the relationship, this step may be omitted, and the process proceeds to the third sharing conversation below.)

Third Sharing Conversation - The next stage of the process involves the participants being randomly assigned partners and sharing their responses with each other.

Group Sharing - The final stage involves each participant sharing their responses with the wider participant group who have taken part in the process. The researcher observes.

3.3   Data Collection and Analysis

Data was collected in two phases: Firstly, an initial pilot by a member of the urban design and planning team within Nottingham City Council and a construction management consultant took place and they followed the sharing conversation process. The pilot learnings were used to shape the application of the methodology within a larger group; and secondly then, the researcher facilitated multi-disciplinary workshops. One of the upmost critical points in collecting data at the group sharing stage was to co-create a set of ground rules to help everyone feel at ease. This generated an environment where participants were able to collaborate openly and confidently. These ground rules were initially prompted by participants themselves, expressing what type of environment they felt was necessary to feel at ease. For example, the need to retain confidentiality over conversations, or the pace of those conversations could become ground rules.

Circa 40 participants form 14 different fields of expertise and 17 different departments within the local authority collaborated on a total of 10 workshops. All the research participants' job roles had a direct connection with the City Council's urban design and planning teams and construction and infrastructure project management divisions who are responsible for the planning and delivery of high-quality places and built environment within the local authority. Initially, the data was classified inductively and themes that represented the essences of participants' views were identified. The data was then analysed thematically. The themes themselves were then sub-categorized to add more depth, and a cyclic process was undertaken: analysing already collected data and using that to conduct further workshops so that the findings of previous sessions informed the collective process of understanding one another across disciplines and the how different participants viewed the key issues that arose.

4   Findings and Discussion

One of the critical functions of the collaborative action research methodology was to create a secure, neutral, safe environment within the workshops. This was important to enable difficult conversations and to openly debate different perceptions and perspectives. For example, on the one hand, urban design and planning professionals were enthused with the idea of placemaking, bringing people closer to natural environments and prioritising pedestrians with a view to creating healthier places, along with the thought of a reducing long-term pressures on health services. On the other hand, road safety engineers were concerned with the number of complaints the city council received and the need to reduce long term maintenance costs. These and other fields not only had their own agendas, they also had their own motives and cultural group priorities, some of which were the result of national guidance and budget expenditure priorities. The workshops became a space where the norms could be challenged without consequences, allowing different forms of practice to be reimagined collectively, in the spirit of the SDG 17: partnerships for the goals.

All participants had an equal opportunity to influence and generate new systems of thought whilst learning during the process and thereby new knowledge was produced in an inter-disciplinary environment. This is important because, as Voordijk and Adriaanse (2016, p.539) state: *"it is not sufficient to just observe phenomena; we need to try to change them in order to arrive at a deeper knowledge of their character"*.

For the local authority, the research process produced threefold results:

a)   achieving a shared definition and understanding of social value in planning for Nottingham City;

b) engaging staff in the project, which led to high levels of commitment, job satisfaction, sense of fulfilment and self-worth; and

c) mutual understanding amongst participants created a comfortable, horizontal work environment that helped everyone feel at ease and confident that their own values were heard and reflected in the project and carried across to other projects in the long term.

In terms of achieving a shared definition and understanding of social value, the sharing conversations facilitated the participants' collective arrival at the conclusion that social value is a way of thinking that involves complex systems. They felt that above all, social value is a culture of understanding within which both action and lack of action have consequences in the broader system. This may mean consequences for other fields of practice and expertise, and/or in and between different individuals and organisations. One construction management professional highlighted that social value is about:

"People feeling connected, involved in, valued by and positively impacting each other and the communities they are connected to …also embrace the connection to the natural world – i.e. being social doesn't end with other humans." (construction and infrastructure project management)

One of the urban design and planning professional's view was that opportunities to create positive impact through responsible planning must not be missed and instead must be actively sought so as to develop sustainable cities and communities (SDG 11), and expressed the challenge to do this as follows:

"Too many opportunities to make things better are missed, most of the time the reason is 'this is how we do things' … 'I'll get in trouble if things go wrong' … 'I know this works and I have no time to try something different' … 'I need results now, I cannot wait to see how things evolve' … in construction the 'final' product is way too important, no one seems to take ownership of the long- term life of development." (urban design and planning)

There was a bridge between defining and understanding social value and the engagement of staff in the 'carbon neutral by 2028' project. One construction management professional noted:

"I want to do good in the world, serve society in a way that has impact, feels good for others and me. I don't just want to go along with things, I want to live my values and I need to identify people to work with who are of a similar persuasion, or whose similar persuasions overlap enough with mine to make an opportunity for us both." (construction and infrastructure project management)

The collaborative action research methodology helped participants establish connections with one another, again in the spirit of SDG 17: partnerships for the goals, but also, importantly, with themselves in terms of aligning their professional roles and individual value systems. As the participants opened up to themselves in the process, they were better able to see others as individuals beyond the professional roles. The time available within the workshops, outside of normal work-related expectations, facilitated mutual understanding amongst participants. This, in turn, helped create a comfortable, horizontal work environment where everyone felt at ease and could be confident that their values were heard.

The process worked as a catalyst to spark thoughtful interdisciplinary action. There was a greater recognition of how, for example, the actions of the construction and infrastructure project managers impacted upon a wide a range of stakeholders. Rather than focusing on protecting specific professional

boundaries, the participants were reformed as active agents in co-creating. That said, in an industry overwhelmed with hierarchical structures and distinctive power systems that are the backbones of the operation, there were difficulties with the adoption of the collaborative action research methodology, specifically in reaching a point where the participants felt they could leave their professional identities behind without losing their professional capacity. Hence, considerable time was spent in co-establishing and collectively agreeing ground rules, i.e. not specified by the researcher but put forward by the participants. Recurrent ground rule topics were: a commitment to be honest and share openly even if this is uncomfortable, not talking on top of one another, not finishing someone else's sentences, not making assumptions and instead clarifying every statement, and giving participants time without rushing them. This set of co-created ground rules sought to demonstrate that everyone's input was welcomed and valued, which removed any hierarchies and power systems that might have biased personal contributions towards particular discussions. In this environment, underrepresented minorities and individuals holding less perceived hierarchy, who often feel disempowered, can find an opportunity to contribute without feeling oppressed or undermined.

Overall, the collaborative action research methodology helped unearth *"an opportunity to craft social value through a project with considered and worthwhile goals, a well-resourced and committed team who make things work and are present with each other" (construction and infrastructure project management).* It was successful in aligning the values and priorities of practitioners in urban design and planning fields, and in construction and infrastructure project management, so that they could connect, co-create and achieve the SDGs 11 and 17 through social value interventions.

5   Conclusions and Further Research

Research and practice on social value and the SDGs in construction and in the wider context of built environment recognises co-creation and stakeholder management as fundamental to successfully considering, creating, and delivering social value. Involving a diverse range of stakeholders in value-based work is not without challenges however, given differences in individual perceptions and priorities, and organisational/industry ethos and goals, such as urban design and planning and construction and infrastructure project management, which have been our focus in this paper.

With this research, we show how collaborative action research methodology can facilitate exploration of practitioners' perceptions and priorities, and thereafter allow their complimentary and collective values and priorities to consolidate. Clarity around potential areas of conflict and misalignment, as well as mutual agreements and benefits, were achieved because collaboration started with an understanding of the differences in the participants perceptions and perspectives.

We showcase this collaborative action research methodology in practice in the context of Nottingham City Council's aim and aspiration to become carbon neutral by 2028. The participants were active agents in co-creating the research. The methodology was designed to allow participants from the different fields of expertise to see the logic behind each other's thinking, and to open an opportunity to make better informed choices that ultimately lead to more balanced results. This was achieved through the five step sharing conversations process. As such, we answer our research question: *How can collaborative action research be employed in built environment processes to develop an opportunity to connect, find common ground, co-create and achieve the SDGs?*

On the basis of our experience, we anticipate that especially large and high-impact developments that rely on a good working relationship between different stakeholders will find many benefits to adopting our proposed collaborative action research methodology. This is with the limitations of, and challenges with, this approach in mind: it requires skill, commitment and care. A clear visualisation of specific

communication styles and managing conflict are necessary, together with agreed ground rules and boundaries.

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