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Rethinking participation: a framework for creative engagement in urban greenspace

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ABSTRACT

Urban greenspaces are crucial for sustainable urban development, yet engaging communities effectively with decision-making in these spaces remains a challenge. This paper introduces a Creative Engagement Framework (CEF), developed to enhance participation in urban greenspace governance through a co-production approach. Community engagement, therefore, serves both as an instrumental approach to achieving deeper collaborative governance outcomes and as an intrinsic goal in building stronger community connections. The research utilised qualitative methods, including interviews and case studies, to identify and integrate the key drivers of engagement, summarised by the acronym MASCO: Motivation, Access, Support, Communication and Openness. The framework was tested across diverse organisational contexts within Manchester, revealing that tailored engagement strategies, when aligned with the MASCO drivers, can significantly improve the quality and sustainability of public engagement. Results indicate that while traditional methods often fall short, the CEF offers a practical, adaptable approach to fostering meaningful and informed community involvement. This study not only highlights the gaps in current engagement practices but also demonstrates the potential of creative, co-produced engagement strategies to enhance decision-making and governance in urban greenspaces. The implications of these findings suggest a paradigm shift towards more dynamic, participatory approaches in urban planning and policy-making.

Introduction

An ever-growing amount of research details how urban greenspaces (UGS) offer critical environmental, social and health benefits, providing essential ecosystems within urban settings (CABE Space 2004; Dempsey and Dobson 2020; Klemm, Lenzholzer, and van den Brink 2017; Twohig-Bennett and Jones 2018). The inherent value of UGS extends beyond aesthetics and leisure, contributing significantly to the mitigation of urban heat, enhancement of biodiversity, and improvement of air quality (Twohig-Bennett

and Jones 2018). Despite their proven benefits, there is a growing disconnection between urban populations and natural environments (Beery et al. 2023; Brondizio et al. 2016; Kellert 2018), exacerbated by rapid urbanisation, diminished interest, neglect, development and destruction (Fuller et al. 2007; Kruize et al. 2019; Masood and Russo 2023). At the same time, research indicates a natural human affinity towards nature, suggesting that humans can process natural elements more effectively than synthetic, post-industrial environments (Joye and van den Berg 2018; Wilson 1984). This dichotomy underscores the urgency of rekindling the human-nature relationship through innovative approaches. The aim of this research was to therefore explore how creative engagement – understood here as innovative, imaginative and participatory methods beyond conventional participation – can encourage sustainable environmental action and enhance informed decision-making within UGS. Such engagement can include storytelling, participatory mapping and playful interventions designed to stimulate meaningful connections with greenspaces.

Decisions made about urban development are often inequitable, not only because of factors such as gentrification (Rigolon and Németh 2020; Wolch, Byrne, and Newell 2014) and socio-environmental injustice (Sharifi et al. 2021) but also in the sense that those most affected by these changes are commonly left out of the whole process (Perry, Durose, and Richardson 2019). Environmental improvements can also inadvertently promote gentrification, altering the very fabric of urban communities (Curran and Hamilton 2012; Wolch, Byrne, and Newell 2014). This form of environmental gentrification can cause displacement of the working classes, as repurposing disused land can attract new development, which in turn raises housing prices (Curran and Hamilton 2012). Environmental gentrification refers to socio-economic displacement caused by ecological improvements or "green" developments (Checker 2011; Gould and Lewis 2016), but its occurrence depends on local factors such as real-estate markets, demographics, planning policies, historical inequities and community involvement (Anguelovski et al. 2019). In Manchester, UK, where only 40% of residents live within 200 m of a small greenspace (0.5ha+) (GMCA 2024), historical displacement, investment influx and existing inequalities indicate environmental gentrification is a significant risk, warranting careful consideration. Furthermore, research shows that the inclusion of racially marginalised communities advocating for more UGS can later be displaced due to environmental gentrification (Fernandez, Harris, and Rose 2021; Rigolon and Németh 2018). This highlights complex injustices in UGS provision that are crucial to consider when investigating this topic. Critical reflection of this research is therefore required to ensure results are as equitable as possible. Thoughtful planning of how to design and improve urban nature in cities therefore needs to be paramount for urban planners and decision-makers.

Although resources for community engagement with greenspaces exist (e.g. Agile Initiative 2023; My Community 2020), this research identifies key drivers of effective engagement to inform a flexible, adaptable framework. Current guidelines often provide general recommendations but lack clarity on sustaining meaningful participation across diverse urban contexts.

Defined broadly, UGS include parks, gardens and green roofs among other vegetated areas within urban locales (Shams and Barker 2019). They serve not just as recreational areas but as essential components of urban nature, enhancing environmental sustainability and biodiversity (Nature for All 2024). This study addresses the interaction between people and these greenspaces, examining the participatory processes to understand

how to improve engagement and informed decision-making practices in UGS. UGS within this research were considered as any publicly accessible space with a majority of ground or surfaces that are permeable, such as formal and informal parks and revegetated brownfield sites. Clusters of paved urban street trees were therefore not considered a greenspace under this definition. Greenspaces under 5m2 were also not included as they provide limited opportunity for creative intervention.

Participation has been a cornerstone of government policy and community development since the 1970s (Broome 2005; Ward 1985). However, Moore (2010) critiques participation in planning, suggesting that expertise is essential when contributing to a project. Issues surrounding participation and engagement have been addressed by numerous authors spanning both design and human geography disciplines. While Sanoff (2005) champions citizen involvement and community building, Gooch et al. (2018) highlight the difficulty of scaling participation. Additionally, Swyngedouw (2005) exposes contradictions within participatory decision-making, and Cooke and Kothari (2001) warn that poorly designed initiatives can become manipulative, stressing reflexivity and advocating participatory rural appraisal shaped by cultural and institutional contexts. An inclusive, reflexive approach that draws on collective ideas and resources therefore improves decision-making quality and nurtures stakeholder ownership and accountability (Ansell and Torfing 2021; Cooke and Kothari 2001).

For this research, participation and co-production are combined to address issues relating to decision-making in UGS. Consequently, design thinking principles intertwine with urban planning to understand what each theory and practice can offer, streamlining the effort for more collaborative, knowledge-informed decisions.

Traditional methods of public participation in urban planning – ranging from town hall meetings to standardised surveys – often fail to capture the depth of community insights, resulting in policies that do not reflect public needs (O'Hare 2021). The academic critique of these methods highlights their inability to engage "hard to reach" communities effectively, often attracting the "usual suspects" and thus not truly broadening the participatory process (Eckerd and Heidelberg 2020). This ineffective engagement results in a lack of genuine community representation and engagement fatigue, where participants either feel their contributions are undervalued or become disillusioned with the engagement process itself (Ansell and Torfing 2021). Furthermore, the logistical challenges and high costs associated with organising engagement events exacerbate these issues, making it difficult to achieve equitable and effective participation (Barnes, Newman, and Sullivan 2007). Public participation in urban planning is increasingly recognised as a democratic right, essential for reflective and responsive governance that aligns with community needs (Ansell and Torfing 2021; Barnes, Newman, and Sullivan 2007). The cost of participation – both in terms of finance and labour – is substantial, and the engagement processes often do not adequately reflect the community's diversity or its needs, leading to frustrations and inequitable policy outcomes (Eckerd and Heidelberg 2020).

This research proposes a Creative Engagement Framework (CEF) to enhance involvement in environmental decision-making within UGS. The CEF integrates design thinking with creative engagement to foster inclusive, meaningful and sustained community interaction (Dorst 2011; Rowe 1991). Thematic analysis identified avenues for the researcher to apply design thinking to generate a framework suitable for a wide range of prospective users seeking to integrate creativity into their engagement processes.

Creative engagement in UGS is thus suggested as a pivotal strategy to foster sustainable environmental actions and informed decision-making, leveraging the biophilic tendencies of humans to enhance public engagement with greenspaces (Macaulay et al. 2022a). The concept of creativity, integral to this framework, entails the generation of ideas that are not only novel but are also useful and applicable to improving engagement and environmental management (Sternberg and Lubart 1998). Creative engagement thus involves using innovative approaches to enhance participatory processes, making them more accessible and impactful (Ansell and Torfing 2021).

This research defines creative engagement in UGS planning broadly, extending beyond arts-based methods. Creative engagement involves imaginative, innovative and non-traditional approaches, such as storytelling workshops, participatory mapping, playful design interventions and hands-on activities, that encourage resourcefulness and reflection. Highlighting the distinction between collaboration and creativity (Ansell and Torfing 2021), this broader definition links creativity to everyday adaptability and resourcefulness in UGS interactions (Wakkary and Maestri 2007). Such engagement methods aim to enhance accessibility, inclusivity and diversity, reaching groups typically overlooked by traditional methods, stimulating dialogue and fostering novel solutions.

This research introduces the CEF as an innovative response to these challenges. The CEF is designed to bridge the gap between empirical research and practical application, facilitating more effective governance and community involvement in UGS management. By integrating principles from design thinking with the concept of creative engagement, the framework aimed to enhance the depth, accessibility and impact of participation (Dorst 2011; Rowe 1991). The CEF leverages the MASCO drivers – Motivation, Access, Support, Communication and Openness – identified through comprehensive field research involving interviews and case studies. These elements are crucial in developing strategies that not only respond to but also anticipate the needs and motivations of diverse urban populations, fostering a more engaged and informed community base (Nature for All 2024; Shams and Barker 2019). Ultimately, this research endeavours to demonstrate how a creatively driven engagement process can encourage sustainable environmental action and enhance informed decision-making within UGS. The fragmented nature of public engagement, highlighted through varying project outcomes, underscores the need for a structured yet flexible approach to enhance how organisations and communities interact within UGS.

Materials and methods

Study design

This research employed a Research through Design (RtD) approach, allowing for an immersive, inductive and evolving methodology to explore how creative engagement can foster sustainable environmental action in UGS. Although the definition of RtD is debated, this research understands that "design research is a systematic search for and acquisition of knowledge, related to a general human ecology considered from a designerly way of thinking, i.e. a project-oriented perspective" (Findeli 2010, 294). Furthermore, RtD offers a means to focus on making narratives manifest as objects or knowledge,

contributing to a broader picture or "pincushion" of a million stories (Massey 2013; Lambert and Speed 2017, 109). The RtD framework facilitated a flexible adaptation of methods in response to emerging insights, grounded in semi-structured interviews and case studies. This approach aimed to bridge the gap between empirical research and practical applications, fostering a deep understanding of the complex dynamics within UGS engagement (Durrant et al. 2015; Findeli et al. 2008).

Development of the framework

The Creative Engagement Framework (CEF) was meticulously developed through an iterative co-production process, blending empirical data and a comprehensive systematic literature review. Continuous refinement focused on the MASCO drivers: Motivation, Access, Support, Communication and Openness, to reflect the complex dynamics of UGS engagement.

Co-production was selected due to its emphasis on generating knowledge rather than creating products or services (Björgvinsson, Ehn, and Hillgren 2010). This choice also aligns with *Living Life as Inquiry*, which highlights the importance of acting with integrity and sensitivity within a complex and ever-evolving context (Marshall 2016). Despite its benefits, co-production is not devoid of challenges. It requires a deep understanding of participation across various disciplines to truly enhance decision-making processes in UGS, ensuring that the approaches are holistic and effective.

A review of existing frameworks showed that sector-specific models rarely tackle the intertwined social, ecological and design challenges of UGS (Freiwirth 2013; Gheerawo 2018). Recent scholarship also traces a shift in human – nature relations from simple encounters to richer, transactional experiences tied to well-being (Macaulay et al. 2022a, 2022b).

Effective engagement therefore couples environmental variables – greenspace access, design – with personal factors such as individual needs and nature connection to amplify psychological and ecological gains (Wolff et al. 2022). Frameworks must also bridge creative practice and practical delivery while guarding against risks like environmental gentrification (Curran and Hamilton 2012; Wolch, Byrne, and Newell 2014). Guided by these insights, the CEF is deliberately adaptable and empathetic, equipping practitioners with innovative, context-sensitive tools that foster inclusive participation and mitigate the socio-economic impacts of UGS interventions, helping build more resilient urban communities.

Data collection

Data collection unfolded in three successive stages. First, 13 interviews with city planners, artists, environmental activists, and community workers established how public and creative engagement currently operates in Manchester's UGS. Second, four case studies – a volunteer group, a social enterprise, an environmental charity and a university-affiliated museum – were examined through narrative reflection following a RtD practice of unfolding awareness (Marshall 2016), illustrating how different actors mobilise creativity to spur environmental action (see Table 1). Finally, insights from the interviews and case studies were synthesised, revealing the benefits and barriers of engagement interventions

Table 1. Data collection methods and details.

Method	Details
Semi-structured Interviews	13 interviews with academics (n = 3), council members (n = 2), organisation/charity staff (n = 5), artists and designers (n = 2), and a youth worker (n = 1), all interested and working to strengthen engagement and understand people's relationships to place.
Case Study (CS) 1: Environmental Charity	Working with 3 staff members in the Communities Team (facilitating and delivering community projects), plus 148 responses from individuals from either voluntary groups or organisation responding to their support needs.
CS2: Volunteer Group	Working with 10 volunteers over two workshops. The first had six participants and the second had four. Community mapping of the area was conducted to identify key features of the park as well as scoping opportunities for further engagement. This was facilitated on MIRO where participants responded to prompts, sharing their ideas, reflecting on their previous work, their collective vision for the park and how to develop stronger networks.
CS3: Social Enterprise	Working with the three directors, and conducting semi-structured interviews with 6 of their volunteers and one business partner.
CS4: University Museum	Working with 3 team members at the museum and conducting semi-structured interviews with 17 people representing different actions groups across Manchester.

– among them the displacement risks noted by Curran and Hamilton (2012) and Wolch, Byrne, and Newell (2014) – and guiding refinements to the CEF.

Thirdly, a framework was developed and tested based on insights from the initial phases and helped to refine the CEF. This phase involved co-producing the framework with participants, testing its applicability and effectiveness in enhancing UGS management and community engagement. See Table 1 for data collection methods and further details.

Participant selection used purposive sampling, targeting individuals and groups actively involved in UGS management and creative engagement practices. Data collection methods included semi-structured interviews, direct observations, participant action research and online focus groups, adapted as necessary due to constraints such as the COVID-19 pandemic.

Ethical approval from Manchester Metropolitan's Research Ethics and Governance Committee (ref no: 5896), was granted and informed consent obtained from all participants. Participants were allocated a number, P1, P2, P3 and so on to remain anonymous (see Table 2 for anonymised information on participants). The role of the researcher was critically evaluated to foster genuine relationships and manage and make visible

Table 2. Participant information.

Participant	Profession
P1	Environmental Organisation worker – Communities
P2	Environmental Organisation worker – Communities
P3	Designer/Researcher
P4	[Interview incomplete]
P5	Community Organiser
P6	Environmental Charity Worker – Communities
P7	Youth Worker
P8	Human Geography Academic
P9	Artist/Poet
P10	Artist/Environmental Activist
P11	Artist/Creative Consultant
P12	Manchester City Council – Neighbourhoods
P13	Manchester City Council – Landscape Architect
P14	Artist/Curator/Academic

researcher positionality. By maintaining self-awareness and reflexivity, the research aimed to build meaningful connections that enhance the quality and impact of the findings.

This comprehensive methodology ensured a robust exploration of the interactions between urban populations and greenspaces, aiming to improve both the theory and practice of urban environmental management through the innovative use of the CEF.

Results

Overview of findings

The implementation of the CEF across a variety of organisational contexts demonstrated significant enhancements in public engagement within UGS. The framework's adaptability was evidenced by its application in various settings, from small local environmental groups to larger municipal councils, each reporting improved engagement planning and processes. The organisations noted particularly that they felt more confident to build stronger engagement plans, leading to more informed and sustainable environmental stewardship. The feedback emphasised a greater ability of the community to influence UGS planning and maintenance, more closely aligning projects with public needs and expectations.

MASCO drivers

The core of the CEF revolves around the MASCO drivers: Motivation, Access, Support, Communication and Openness. These drivers were derived from extensive thematic analysis, involving interviews and focus groups that explored the dynamics of community engagement across diverse UGS initiatives.

Motivation

Enhanced by recognising the diverse interests of community members, the CEF successfully aligned projects with these interests, thereby increasing engagement. Initiatives that clearly communicated the benefits of participation saw higher involvement levels, particularly when these benefits resonated with the personal or communal values of the participants (P1, 2, 5 and 12).

Research, especially in case studies (CS) 1–3, showed that sustainable motivation arose from achievable actions that foster a sense of accomplishment and enable individuals to witness the impact of their efforts (CS1 and 2). To foster sustainable engagement, it is crucial to incorporate elements of purpose and transformation, allowing participants to contribute meaningfully and perceive the difference they make (CS3).

Understanding the factors that drive long-term motivation are therefore essential for developing engagement plans. Furthermore, there is a need to develop measures that capture the significance of sustained public engagement over time. P3 highlighted this need by expressing concerns about the insufficient efforts to sustain motivation among those choosing to participate, they explained,

> I think people are also currently suffering great fatigue, consultation fatigue, because they've all been told to come and participate, publicly put your voice out there for the record, it will be listened to you know. And then they think that, or they actually find out

that it's really not been listened to and the powers that be have actually made a decision on their behalf.

An effective approach is to create scenarios that not only attract people's interest but also involve them in the journey of change (P1 and 2).

According to three interviewees, for participation to be truly engaging, there must be a sense of purpose and the opportunity to contribute to social and/or environmental progress. P3 emphasised the importance of "doing something good" and effecting transformation, stating that sustainable motivation stems from tangible actions that yield visible results.

Research by Alford (2009) highlighted that individuals are motivated by intrinsic, social and normative factors and material rewards when participating in the co-production of public services. It is therefore important to recognise that volunteer motivation can be influenced by material rewards and not always driven by self-interest (Pestoff 2012). For instance, P1 explains when they have host events, "we [facilitate events] to make sure we're on track with how we're going to engage with people coming forward and ridiculous as it sounds, the massive way that we found [engages people] is food".

When examining citizen engagement in the co-production of social services in Europe, Pestoff underscores the significance of two key factors: the accessibility of participation and the motivation of individuals to engage in the service provision process (2012). The ease of citizens' involvement is influenced by various factors, including proximity to volunteering sites/services and the availability of relevant information, which directly impacts the transaction costs associated with participation. This was also noted by participants working on community organising projects, P5 and 6. Moreover, the motivation of citizens to participate is closely linked to the perceived importance of the activity, with greater significance leading to increased motivation for active participation in the co-production of social services (Pestoff 2012).

Access

The CEF provides recommendations for addressing physical and socio-economic barriers to accessing UGS, facilitating broader community involvement. Efforts included improving transportation links to parks, offering programmes at varied times to accommodate different schedules, and providing materials in multiple languages (P1, 2 and CS2).

The research revealed that limited access to greenspaces hindered individuals' ability to form strong opinions about them (P8, 9, 10 and 14). Motivation for environmental action stems from the initial opportunity to access and utilise these spaces. Similarly, access plays an essential role in sustaining motivation for action (Patrick, Henderson-Wilson, and Ebden 2022). Therefore, it is crucial to establish more accessible greenspaces that offer multiple opportunities for interaction, engagement and self-expression. A key driver for enhancing greenspaces is ensuring accessibility is equal. Evidence shows that access to greenspace enhances well-being and mitigates the effects of (dis)stress (Kaplan 1973; Pillemer et al. 2010; Wells and Evans 2003).

Participants in this research also highlighted that barriers to access encompass both physical and psychological aspects, emphasising the inequalities and injustices in accessing greenspaces linked with the associated health benefits (P5, 6, 10 and CS2). Areas with limited exposure to nature can hinder engagement, as the benefits may not be

perceived as relevant or valuable. Overcoming these barriers involves identifying and engaging specific groups while striving for mutually beneficial outcomes. As P1 and P12 emphasised, clear articulation of the desired outcomes for both facilitators and participants is essential – ensuring a "*win-win*" scenario for all parties involved is crucial for success (P1).

Support

Support within the CEF context involved consideration for providing logistical, educational, and emotional backing to participants. This included training sessions for volunteers on environmental stewardship and the provision of resources to help individuals contribute meaningfully to projects (CS1 and CS4).

There is a pressing need to enhance the accessibility of support when interacting with greenspaces. Results showed that limited support in terms of financial resources can undermine motivation for environmental action. In turn, it can lead to discouragement and frustration with ineffective systems of change (O'Hare 2021). Providing increased support and fostering transparency in decision-making processes makes it easier for individuals to engage and actively participate (Moore 2010). Inclusive systems, such as See-ClickFix (CIVICPLUS 2024) a platform for reporting issues to local government, can be employed to facilitate engagement and promote a sense of inclusivity. These systems are good in theory, but it can be difficult to fully connect meaningfully with individuals and moreover find the resources or support needed, as P2 discussed, "I think we're surveyed to death and people don't really look at the surveys unless you're in that kind of business or you've got that passion".

The findings from the interviews and case studies highlight the pivotal role of support in promoting and sustaining public engagement in environmental action. This takes various forms, encompassing financial resources, capacity building, resource allocation and collaboration with diverse stakeholders. Interviewees emphasised the importance of actively listening to individuals' desires and aspirations, fostering openness, and tailoring engagement experiences to participants' needs (P1, 2, 3, 5, 6, 9 and 11). Furthermore, the case studies highlighted the critical role consistency played in providing support in terms of finance and skills sharing to ensure the sustainability of public engagement projects (CS2, 3 and 4). Recognition of the efforts of engaged individuals, including older volunteers, was deemed crucial (P3, 8 and 14). P8 spoke about older volunteers being crucial to UGS stewardship more generally, explaining that, "it's not just a hobby. It's actually something really important that they're contributing to through the next phase of their life". Facilitation emerged as a common theme, highlighting the need for skilled facilitators to guide motivated individuals through the process of taking environmental action (P7, 9, 11 and 13).

Creativity was seen as a valuable tool for engagement, but interviewees cautioned against a lack of structure and emphasised the importance of clarity regarding the amount of structure in engagement (P3, 12 and 14). For instance, organisations may have set deliverables that structure engagement, whereas voluntary groups may have more opportunities to try several approaches. Therefore, being transparent about what is achievable during the engagement process is essential. Embracing a range of approaches was advocated for broader engagement, though challenges in realising diversity were noted due to resource and capacity limitations. This is also reflected in Perry

et al.'s (2019) study, where evidence showed creative approaches can aid in overcoming consultation fatigue and reignite the interest of those participating.

Fostering self-confidence and capacity building were identified as ways to support communities in engaging with their environments effectively. Balancing local knowledge with professional expertise was deemed essential, emphasising the significance of sharing skills and adopting appropriate approaches (P1, 2, 5, 7, 8, 10 and 14). A culture of engagement centred around values of "listening, power, and action" is crucial (P5). This reflects the notion of more site-specific approaches that are adaptable and inclusive (Campbell and Svendsen 2008; Fisher, Svendsen, and Connolly 2015; Nesbitt et al. 2018).

These findings highlight the need for enhanced and accessible support in environmental action, recognising its multifaceted nature and impact on motivation and engagement. Transparent decision-making processes and inclusive systems can facilitate engagement and promote a sense of inclusivity.

Communication

Results showed that successful engagement strategies were refined to ensure clarity, transparency and reciprocity, facilitating trust and ongoing dialogue between stakeholders (P1, 2, 3 and 12). Effective communication was particularly noted for enhancing the responsiveness of projects to community feedback, adjusting initiatives in real time to better meet public expectations (P1, 2 and 12).

A positive or negative communication interaction can be a key factor in how people want to engage. If people feel unwelcome, they are likely to not use the space, whereas if they are included and valued, they may feel more inclined to care for the space (P10). Therefore, improved communication through various channels would improve people's engagement with changes that affect them. Transparent communication is necessary as a means to provide clarity on who makes decisions, who is the first point of contact and how ideas can be actioned (Perry, Durose, and Richardson 2019).

All the interviewees demonstrated that effective communication is an essential cornerstone of successful public engagement in environmental action. It plays a pivotal role in fostering meaningful connections, building relationships and ensuring that participants feel heard and valued. Transparency in communication, active listening and acknowledging the contributions of all individuals involved are critical components of successful engagement (P1, 2, 3, 5, 7, 8, 9, 10 and 14). Overcoming communication barriers, both within and outside organisations, is vital for achieving the goals of environmental participation initiatives. This can be designed and achieved through creative approaches.

Creativity in engagement is considered an empowering tool that can disrupt conventional approaches and open doors to novel solutions (Perry, Durose, and Richardson 2019). However, it must be approached with genuine conviction and encouragement to make it accessible to all (P3, 8, 9 and 10). P9 spoke through their experience of engaging with climate focused projects, "so many people are not genuine, they're doing it as a job or research … their reason for doing it isn't something that would resonate with the people who they are wanting to get involved". The complexity of public participation necessitates hands-on experience to ensure evaluation moves beyond mere numbers and a deeper understanding of individuals and social inequalities is achieved (Moore 2010). Finally, the challenges in balancing administrative tasks with community-based work highlight the need for sustainable approaches that support long-term engagement

and flexibility in addressing community needs. The findings indicate the need for a framework that enhances environmental action by integrating creative activities, maintaining transparent communication, strengthening social connections, and flexibly adjusting to participants' changing needs and motivations, thereby making engagement more inclusive and effective.

The case studies revealed that gaps and disparities in communication can lead to frustration and delays in projects, and in some cases, decisions proceeded without input from those affected. The research highlighted variations in communication methods between volunteers and organisations, emphasising the need for a more inclusive approach, especially as digital communication can pose accessibility challenges (CS1). Other issues revolving around communication included, inconsistent communication and decision-making processes (CS2), delayed negotiation and confusion over permissions and tasks with authorities and volunteers (CS3) and resource constraints delaying action (CS4). Therefore, effective communication channels, transparency and inclusivity are crucial to improving engagement with UGS developments.

Openness

Openness in the CEF encourages flexibility and responsiveness, which was deemed essential when adapting projects to evolving community needs and emerging challenges (P1, 2, 3, 6, 13, 14). This adaptability was crucial in maintaining engagement momentum over time, particularly in long-term UGS projects.

"Openness" is an overarching driver of MASCO as it plays a pivotal role in engagement. Across the interviews and case studies, openness was positioned as an essential aspect of engagement that intersects with key elements like motivation, access, support and communication, ultimately enhancing the overall effectiveness of participatory projects.

Facilitators emerge as central figures in this process (P3, 5, 7, 9, 11), playing a vital role in project management and fostering meaningful connections with communities. Aligning facilitators' attitudes with community aspirations and maintaining an open-minded approach was deemed crucial by participants and was reflected in previous literature (Durose and Richardson 2015; Perry, Durose, and Richardson 2019).

Overall, openness towards projects, problem-solving and stewardship is a worthwhile endeavour in theory but can often be challenging when there are time constraints and limited resources. Across the case studies, it was common that any event organised in greenspaces tended to be on an ad hoc basis and very dependent on key leaders in the community (CS1–4). Often ideas were simply, just ideas, and not executed unless the majority agreed, wanted to contribute, or could commit their time. One participant from CS2 explained for any change, "someone's got to be leading it and pushing it for it to get anywhere; there needs to be some energy behind it". Within decision-making, it is important to remain open during the consultation process – this is not always the case with certain projects and if there are predetermined outcomes or targets, they are often pre-set before the consultation begins (P1, 2 and 3). Building flexibility within the consultation period allows people, who often have localised knowledge, to influence and provide insight into any intervention. Furthermore, taking a flexible and open approach creates opportunities for people to engage meaningfully in their local areas (P9, 10, 12 and 14).

Flexible approaches, such as being a "*chameleon*" (P1) in different contexts and flexibility in tailoring opportunities are highlighted as essential for successful engagement, while the need to avoid preconceived answers in consultations is additionally crucial (P3, 7 and 9). Successful engagement involves framing questions to resonate with personal experiences, allowing individuals to genuinely contribute. Although structured engagement is fundamental, it should remain flexible to support creativity without stifling it. Here lies the challenge to develop an engagement framework that can be adaptable, provide structure and advocate meaningful participation. Overall, openness is recognised as a unifying thread that strengthens the interplay between these diverse aspects of engagement, facilitating a holistic and effective approach. This approach echoes the theoretical underpinning of this research, through *living life as inquiry* (Marshall 2016) and remaining open to an unfolding awareness (Taylor 2018) to allow for a narrative to form encapsulating the opinions and actions of those taking environmental action.

These MASCO drivers were fundamental in shaping engagement strategies that were attuned to the unique dynamics of each community, thereby enhancing both the effectiveness and sustainability of engagement practices. With these drivers identified, the framework was developed.

Framework components

The detailed components of the CEF were designed to operationalise the MASCO drivers through practical, actionable strategies. These components facilitated a structured yet flexible approach to engagement, adaptable to various organisational needs and environmental contexts. The framework process has seven key steps to support informed decision making in UGS engagement. Figure 1 shows the steps a user would take to improve their engagement plan (for example, an organisation member or volunteer group facilitator). A group would therefore be able to assess their current engagement strategy by indicating the level of agreement on a Likert scale for each theme (see Figure 2). They then would be able to identify gaps across the MASCO drivers, review the recommended activities designed to increase engagement, and plan, reflect and develop their approach.

Strategic planning tools provided within the CEF help organisations to map out comprehensive engagement plans that considered the specific characteristics and needs of their communities. The CEF emphasises mechanisms for collecting and integrating

Figure 1. The seven-step CEF process.

Motivation

These statements focus on understanding the people you typically engage with and the reasoning behind their environmental action.

Mark on the scale how you agree or disagree with the following statements The numbers are to help add up your score at the end, the agreement scale flows left (strongly disagree) to right (strongly agree).

You understand how to attract engagement from multiple audiences e.g. young people, volunteers, residents groups.
① ② ③ ④ ⑤ (N/A)
<< strongly disagree || strongly agree>>

You typically do not think about potential motivational factors of your project before engaging e.g. what would interest people.
⑤ ④ ③ ② ① (N/A)
<< strongly disagree || strongly agree>>

You struggle to recall the reason why participants want to engage or get involved.
⑤ ④ ③ ② ① (N/A)
<< strongly disagree || strongly agree>>

You have a clear understanding of the benefits of your work on those who engage.
① ② ③ ④ ⑤ (N/A)
<< strongly disagree || strongly agree>>

You do not research the area or types of people/groups in an area before engaging with people, e.g. look for community groups.
⑤ ④ ③ ② ① (N/A)
<< strongly disagree || strongly agree>>

You run a variety of activities to capture people's attention and interest.
① ② ③ ④ ⑤ (N/A)
<< strongly disagree || strongly agree>>

You have a limited understanding of the reasons behind people's involvement with your projects.
⑤ ④ ③ ② ① (N/A)
<< strongly disagree || strongly agree>>

You aim to identify the motivations for engagement through activities to get to know each other e.g. through questions or games.
① ② ③ ④ ⑤ (N/A)
<< strongly disagree || strongly agree>>

You often do not understand the context and area you work within before engaging.
⑤ ④ ③ ② ① (N/A)
<< strongly disagree || strongly agree>>

You uncover the strengths and challenges of individuals when beginning a project.
① ② ③ ④ ⑤ (N/A)
<< strongly disagree || strongly agree>>

5 Add numbers above to give you a score out of 50.   Score: [   ]
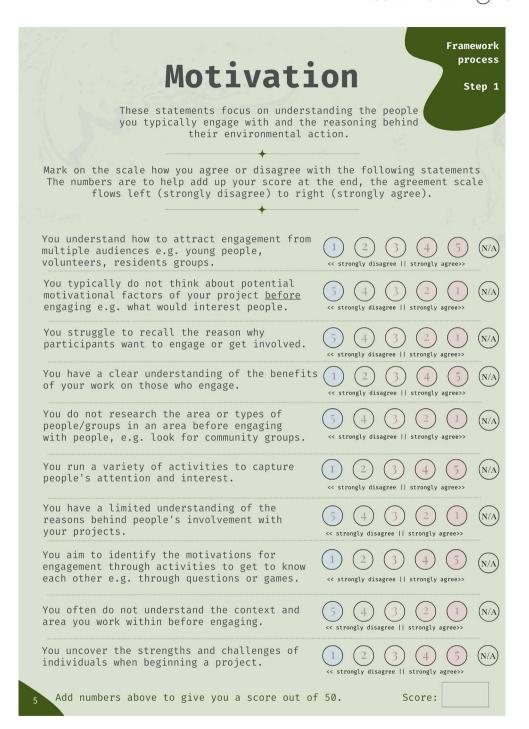
Figure 2. Extract of the finalised CEF self-assessment – motivation (incorporating participant feedback).

community feedback at multiple project stages. This iterative process allows organisations to remain agile, making adjustments to engagement strategies in response to new information and community input.

Capacity building was a critical component for the CEF to include, with resources dedicated to enhancing the skills of those seeking to facilitate engagement. The framework includes a series of 55 recommendations to make engagement more accessible and enjoyable. These included using digital tools for virtual participation, creative workshops for idea generation, and interactive events that facilitated deeper connections between participants and the UGS.

The framework was tested with representatives across the four case studies (n = 8), with their feedback helping to ensure recommendations to improve the quality of participation could be actioned and useful (see Table 3). Figure 3 shows an extract of the CEF used to test with participants for validity and utility.

Table 3. Summary of final feedback from the CEF testing.

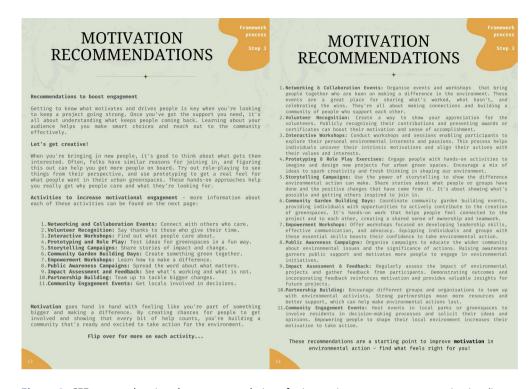|	CEF – summary of final feedback
CS1: *Environmental Charity*	"It does feel more effective with more of a flow and connection with each stage … Personally, this is something where embedding something similar would be of huge benefit to the team. It helps to focus on the direction of travel with that all important review and lessons learned, facilitating conversations on where and how we can improve either during the project or within a similar project" (P1).
	"It helps to focus on the direction of travel with that all important review and lessons learned, facilitating conversations on where and how we can improve either during the project or within a similar project" (P1).
	"the addition of examples to help bring it to life … It provides a great structure to work through and can help us to identify where there are gaps. It will be helpful to help us focus on elements of engagement we can strengthen in our projects" (P2)
CS2: *Volunteer Group*	"The [new] version of the framework is much clearer and better laid out. It now has more of a 'single voice', i.e. the sense that it is directed at some one person within an organisation which is looking to undertake an engagement exercise … . However, if I were that individual I would still find it quite challenging and daunting to use. What I would look for is some further guidance on how the various metrics are to be applied/assessed … I would like some feedback at Stage 1 after my inputs" (CS2 P1).
	"I think the framework looks great – I particularly like the changes you've made to the scoring system to make it easier to use. And I think this framework would be beneficial for groups to use, I think it would be particularly helpful when developing a particular project like a funding bid" (CS2 P2).
CS3: *Social Enterprise*	"It would be useful to see more pictures or examples of activities to give a little more context and spark ideas" (CS3 P1)
	"Communication is constantly challenging and it takes a lot of time to do it all, it would be useful for us but only if we had a dedicated person that worked on communication – but we don't have that at the moment … changing the language used in the framework makes it less robotic" (CS3 P1).
CS4: *University Museum*	"It covers lots of considerations for reflecting on good practice in public engagement. There are some great activity recommendations too" (CS4 P1).
	"I feel like there could be more specific reference to engagement with environmental action – why is this important? What are the unique challenges/considerations/sensitivities compared to public engagement..?" (CS4 P1).
	"The scoring: this is cumulative out of 50, with a higher score putting you in a higher (and more positive) banding. However, you have a mixture of negative and positive statements, so it is possible in some cases to score 5 meaning 'bad' and 5 meaning 'good'! Could there be a more nuanced scoring system, that might also recognise the interplay between the different drivers?" (CS4 P2)
	"it is useful for encouraging self-reflection on good practice for public engagement. The scoring matrix idea is a simple way of benchmarking where improvements could be made in an organisation's practice … I could see how this could provide support to an organisation developing 'more intentional and thoughtful community engagement plans' as described in the statement" (CS4 P2).

Figure 3. CEF extract showing the recommendations for increasing engagement – motivation (incorporating participant feedback).

Impact and reflection

The impact of the CEF was profound, with organisations noting a marked improvement in the effectiveness of their engagement efforts. Reflections from organisational leaders indicated that the structured approach provided by the CEF would help them to be more strategic and thoughtful engagement practices. P1 and 2 noted that the CEF was particularly useful in the way it helped to align projects with community needs, leading to more sustainable and impactful environmental outcomes.

Moreover, the iterative nature of the CEF – emphasising continuous reflection and adaptation – ensured that the framework can remain relevant and effective over time. This adaptability was crucial for responding to changing community dynamics and environmental conditions, which are inherent to UGS projects.

Feedback and further testing

Feedback indicated the CEF is effective for large, well-resourced organisations (CS1, CS4), but highlighted challenges for smaller groups, charities and volunteers (CS2, CS3) due to limited capacity and informal structures. Although no single framework suits all contexts, the adaptable CEF aims to benefit diverse users, including local authority neighbourhood teams, third-sector community groups, social enterprises, and volunteers. Further testing will refine accessibility and identify where tailored support or simplified formats are needed.

Smaller organisations and volunteer groups reported appreciating the structured approach of the CEF but indicated that the framework could sometimes feel too complex for their ad hoc and dynamic operational modes. This was articulated by CS2 participant 1 who explained, "*it seems like a great deal of Step 1 effort is required from the users that then goes all woolly in Step 2 and somehow tails off. I would like some feedback at Stage 1 after my inputs*". However, the recommendations offered helped to inspire new opportunities or community events. They also noted a desire for a more customisable version of the CEF that could be adapted more readily to their specific contexts and resource constraints.

Further feedback

The continued collection of feedback underscored the need for further iterative development of the CEF, particularly to enhance its utility for smaller stakeholders in UGS projects. After their feedback (see Table 3), an amended version of the framework was presented to the participants for final review. Their suggestions included:

- Simplifying the framework to make it more accessible and less daunting for small organisations and volunteer groups.
- Providing options within the framework for organisations to tailor the seven steps according to their specific needs and capacities.
- Developing additional support structures, such as templates and guided workshops, to assist smaller organisations in applying the framework effectively.

The feedback also suggested the necessity of conducting more comprehensive field tests with diverse organisational types to ensure that the CEF is not only theoretically robust but also practically beneficial across all potential user groups.

Discussion

Interpretation of results

Environmental action takes many forms, but each seeks to deepen human – nature connections and guide sound decisions about UGS. The CEF was designed to fill gaps left by conventional engagement methods. It can help communities choose new park facilities, co-design active-travel routes, broaden volunteer recruitment, assist NGOs in rallying residents around nature-based solutions, spark dialogue on climate impacts, and forge links between social enterprises, local authorities and neighbourhoods.

Although widely applicable, the CEF is not meant to be a universal fix. Its modular design lets users adopt only the components that suit their capacity: a small friends-of-parks group might employ a single participatory tool, while a large council team could deploy the full framework. This flexibility clarifies when and how the CEF should be used, maximising practicality while acknowledging that no single approach can serve every environmental action.

The implementation of the CEF across diverse organisational settings underscores its potential to influence governance and decision-making in UGS (see Table 3). By aligning engagement strategies closely with community needs and expectations, the CEF

facilitates responsive and inclusive governance. The effective deployment of the MASCO drivers demonstrates the transformative power of structured engagement frameworks to enhance UGS management. These drivers ensure decisions are informed by comprehensive understandings of local contexts and stakeholder needs, leading to more sustainable outcomes and improved ecological and social benefits (CABE Space 2004; Fuller et al. 2007).

Advantages of the CEF

While there are existing alternative guidelines that promote more inclusive and innovative approaches to community engagement (Agile Initiative 2023; My Community 2020), the CEF provides a significant advancement by offering a structured yet adaptable framework grounded in empirical research. Unlike many toolkits or best-practice manuals, the CEF is built around identified drivers of engagement, aiming to support facilitators in tailoring their approach to specific local contexts and community dynamics. Its structured approach ensures all essential aspects of effective participation are systematically addressed, leading to more comprehensive and effective engagement strategies. The adaptability of the CEF allows for customisation to various organisational and community contexts, offering a significant advantage over traditional methods (Björgvinsson, Ehn, and Hillgren 2010). For instance, a group could look at the recommendations for inspiration to develop engagement events or an organisation can follow a more structured and robust framework in line with monitoring and evaluating engagement success. Additionally, by emphasising open and transparent communication, the CEF builds trust between stakeholders, facilitating effective collaboration and shared decision-making (Ansell and Torfing 2021). It also empowers participants by providing the necessary support and resources, enabling them to contribute effectively to UGS projects.

The MASCO drivers help to address common critiques of traditional community engagement by providing a wide array of participatory methods beyond conventional surveys or town hall meetings. This helps sustain enthusiasm and mitigate engagement fatigue. By equipping facilitators with diverse tools, the CEF lets facilitators adapt activities to local conditions, keeping them relevant, responsive, and attractive to residents and volunteers. Although reaching beyond the "usual suspects" remains difficult, this approach helps broaden and energise participation.

Limitations and challenges

Despite its advantages, the implementation of the CEF has encountered several limitations and challenges. For optimal success, the framework requires significant resources, including time, personnel, and financial investment, which may not be feasible for all organisations, especially smaller or volunteer-led groups (O'Hare 2021). Some stakeholders found the framework complex and challenging to implement without substantial guidance, indicating a need for a trained facilitator or a more simplified and accessible version. Additionally, while the CEF is designed for adaptability, the actual process of adapting it to various contexts can be challenging, requiring careful consideration to maintain its integrity and effectiveness (Perry, Durose, and Richardson 2019).

Recognising the risk of environmental gentrification, the CEF embeds context-specific activities that give affected residents genuine decision-making power. Yet wider

economic forces, especially housing affordability, still threaten displacement (Rigolon and Németh 2020). Analysis shows the MASCO approach boosts local participation but does not fully address the long-term impacts of greenspace improvements. Adding policy and regulatory measures (Anguelovski et al. 2019), would therefore strengthen its reach. Although developed in Manchester, the CEF is intentionally adaptable and could suit other urban areas in the UK and other international settings. Local cultural, social, and environmental conditions will shape its success, so further trials in different cities would be necessary to test and refine its transferability.

Recommendations for practice and further research

To enhance the utility and applicability of the CEF, it is recommended that a simplified version of the framework be developed. Currently a 25-page document, the framework is awaiting further streamlining, most likely as an online platform, to allow for a more user-friendly experience for navigating engagement ideas and strategies. The streamlined version should retain the core elements but reduce its complexity to make it more accessible, especially for smaller organisations and volunteer groups. This research used purposive sampling to work with individuals and groups already engaged in community participation, in order to better understand existing barriers and effective practices. While this approach was intentional, it presents a limitation, as the CEF has not yet been widely trialled with groups who are not knowingly or intentionally applying creative engagement practices. However, working with the volunteers – new to such methods – provided an initial opportunity to explore the framework's accessibility. Future research could therefore test the CEF with less experienced groups to assess its broader applicability.

Further testing and adaptation of the CEF in a variety of urban settings and among diverse communities would help to better understand its applicability and refine its components based on broader empirical evidence. Conducting longitudinal studies would provide deeper insights into the long-term impacts of the CEF on UGS governance and community engagement. Exploring the integration of digital tools and platforms could enhance the scalability and ease of use of the CEF, potentially broadening its reach and impact. Finally, engaging in interdisciplinary research that integrates insights from urban planning, environmental science, sociology and technology could further enhance the framework's effectiveness and relevance (Schell et al. 2020).

Conclusion

This research has applied design thinking to determine ways to enhance public engagement in UGS across Manchester. It contributes to a deeper understanding of the complexity of public engagement and delineates the benefits of incorporating creative approaches to address the wide-ranging issues in UGS. The research has identified the MASCO drivers of engagement: Motivation, Access, Support, Communication and Openness as critical considerations to ensure meaningful relationships are forged and sustained. For this reason, a consideration of these MASCO drivers helps to enable sustainable engagement and stewardship of UGS.

Understanding environmental decision-making processes is crucial for urban residents, yet those most affected by these decisions often have little to no involvement (O'Hare

2021; Perry, Durose, and Richardson 2019). As participation becomes more institutiona-lised, it is vital to develop networks and creative opportunities to engage in decision-making processes (Ansell and Torfing 2021). Such efforts aim to create more open and equitable arenas for such decisions to be made (Cornwall 2017).

Feedback from the CEF indicate its significant potential to improve engagement and decision-making processes in UGS management. However, the feedback also emphasises the critical need for further testing and adaptation to ensure that the framework is equally beneficial and applicable to organisations of all sizes, particularly smaller entities and vol-unteer-led groups. Future iterations of the CEF will focus on increasing its adaptability, simplifying its components and providing more targeted support to enhance its effective-ness and applicability across the broad spectrum of organisations involved in UGS management.

This research provides a platform for critical reflection on environmental action and decision-making practices within UGS. The framework offers guidance for creatively re-imagining strategies that enhance the quality of engagement through innovative design approaches. Developing a bespoke engagement plan that incorporates creative activities thus offers an opportunity to strengthen connections between people and place.

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Disclosure statement

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