International Journal of Design for Social Change, Sustainable Innovation and Entrepreneurship

https://www.designforsocialchange.org/journal/index.php/DISCERN-J

ISSN 2184-6995

This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

Playful pedagogies for participatory justice: Advancing children's rights through design education for social change

Fatima Cassim

Published online: May 2026

To cite this article:
Cassim, F. (2026). Playful pedagogies for participatory justice: Advancing children's rights through design education for social change. *Discern: International Journal of Design for Social Change, Sustainable Innovation and Entrepreneurship*, 7(1), 11-25.

Playful pedagogies for participatory justice: Advancing children's rights through design education for social change

Fatima Cassim[a]

[a]University of Pretoria, fatima.cassim@up.ac.za

Abstract

As Jamieson (2011, p. 23) observes, prevailing beliefs about children's reliance "on parents and other adult duty-bearers … often lead adults to see children as objects of protection rather than individuals with rights". This adult-centric view persists even though international and national legal frameworks, including the United Nations Convention on the Rights of the Child (Unicef, n.d.-a) and the South African Constitution, safeguard children's right to participate in social dialogue. Against this backdrop, this paper explores how play, when embedded as a participatory and pedagogic method, can advance children's rights and participatory justice within design education for social change. Framed within a South African tertiary design-for-development project, the study situates the inclusion of children in the design of serious games as a civic and ethical imperative. Drawing on Winn's (2009) Design, Play and Experience framework, the case study illustrates how playful participation mediates interactions between adult design students and children as co-creators. The empirical evidence from the student process documentation demonstrates that play facilitated a shift in students' perception – from viewing children as passive users to recognising them as epistemic agents with valid voices. The findings position play as a means of redistributing voice and agency, as well as a catalyst for mutual learning within intergenerational design encounters. The paper argues that integrating play into design education extends beyond methodological innovation to advance a justice-oriented, critical pedagogy to nurture citizen designers capable of co-creating inclusive and equitable futures with, rather than for, children.

Keywords: Design education, Design for social change, Children's rights, Play, Participatory justice

Introduction

The recognition of children as active participants in shaping their own lives, rather than passive recipients of adult protection and decision-making, is a fundamental shift in understanding and upholding children's rights. As Jamieson (2011) from the Children's Institute in South Africa emphasises, the prevalent adult-centric perspective often undermines children's agency, reducing them to objects of care rather than acknowledging them as rights-bearing individuals with valid voices. However, including and consulting children in decision-making processes that impact them is not only a legal and ethical obligation but also a pedagogic opportunity to advance social equity through meaningful participatory approaches.

In this regard, design education plays a critical role. As design educators, we not only develop students' professional design capacity but also have an obligation to nurture citizen designers who will develop meaningful and inclusive solutions relevant to a wide range of users, including children. The term citizen designers, as Resnick (2015) uses it, refers to designers who are not merely creators

of products or services but also agents of social change, using their skills constructively to address complex social problems and contribute positively to their communities. Drawing on this conception, I examine the issue of recognising and integrating children's rights into the design process as an act of participatory justice through a case study of South African tertiary design education. For the purposes of this paper, participatory justice refers to the ethical and procedural question of who is permitted to contribute knowledge; it denotes equitable practices within a participatory design process, where the voices of those impacted by the design decisions are heard and meaningfully centred throughout. This view aligns with the recent call by Calvo et al. (2022) to amplify and support mutual learning in participatory, co-design contexts.

The case study illustrates how the inclusion of playful engagements during the design process facilitated a form of civic engagement that reconsiders both adult-child hierarchies and participatory ethics, thereby deepening students' understanding of children's needs, behaviours, and experiences. To this end, the case study is supported theoretically by three perspectives, namely the design for development project context, the legal framework that justifies children's right to participate and have their voices heard, and Winn's (2009) Design, Play, and Experience framework for serious games, which shaped the student engagement methodology. Collectively, these perspectives support the central claim that play is not only a tool for inclusivity but also offers a mode of structural disruption that allows children's agency to surface as a contributor to design for social change.

Situating the curriculum context: Design for development

Within the broader agenda of design for social change, design for development is positioned as a focused pedagogic and professional approach that intentionally employs design methodologies to address social, economic, and environmental challenges. Here, the word "development" is not narrowly defined as (technological) progress and (financial) growth (Oxford English Dictionary, 2024); instead, it is reframed as a commitment to human dignity and human rights, participatory equity, and social justice. Design for development examines how design can catalyse sustainable change, particularly in under-resourced or marginalised communities, by integrating principles of community participation, inclusivity, and social impact. Owing to its real-world focus, design for development often intersects with other disciplines, including (but not limited to) the social sciences, environmental studies, and health sciences; such interdisciplinary approaches enrich the design process by enabling a more holistic understanding of context-specific challenges. In comparison, aligned with the broader values of design for social change, design for development places particular emphasis on civic engagement, framing design not merely as a problem-solving tool but as a process of empowerment and long-term societal well-being. The current literature shows a shift from designing solutions to thinking more critically about systems of power, decoloniality, and social justice (Barnes et al., 2024; Botes, 2025; Costanza-Chock, 2020). In turn, design education increasingly questions the structures of inequality embedded in it and, ultimately, what kind of world we want to build by and through design.

Papanek's (1974) polemic – against "aesthetic dilettantism" in favour of a "design culture of collaboration and 'real' social engagement" (Clarke, 2021, p. 239) – set a precedent in this regard. More recent discourse on the intersection of design and social issues (Margolin & Margolin, 2002;

Whiteley, 1997); collaborative approaches to design and social innovation that enhance user engagement (Manzini, 2015; Sanders & Stappers, 2008); and design education and its role in social change (Bennett & Vulpinari, 2011; Bonsiepe, 2021) have contributed to and shaped the contemporary understanding and practice of design for development. From a pragmatic standpoint, pressing global issues such as climate change, inequality, and public health crises have also spurred designers to develop practical, contextually relevant solutions that meet the community's actual needs and are scalable. Even though design presents opportunities for intentional and meaningful change, it is necessary to acknowledge that a developmental approach may pose challenges. Reliance on technology must be critically assessed to avoid exacerbating existing inequalities, particularly in communities with limited access to technological resources. Scholars such as Escobar (2018) and Akama and Yee (2016) recognise that design for development may inadvertently reproduce power hierarchies and saviourism if local agency is not critically situated and engaged. Nevertheless, the focus on social outcomes distinguishes design for development from traditional design practices that prioritise commercial success and/or aesthetic appeal.

Consistent with the abovementioned conception, the Information Design course at the University of Pretoria includes an annual, curriculum-related design for development project (Cassim & Haese, 2023). The project is part of an exit-level design module completed in groups by final-year students. Since 2015, the project has seen the convergence of design for development and play: their integration is characterised by an emphasis on localised practice, inter-subjective relationships, and self-realisation through experience (Cassim, 2020). Since its inception, the project's focus on play has been two-fold. First, the project brief asks students to develop a toolkit that helps children confront and address topical social issues – such as hygiene and sanitation, emotional regulation, and environmental awareness – through play-based, experiential learning design solutions developed through iterative play testing and design engagements with children. Originally conceived as a physical/printed toolkit, the project outcome was reconsidered during the Covid-19 pandemic and continues as a digital intervention that takes the form of an app prototype. Each student group selects the screen size (either a cell phone or a tablet), which depends on the nature and content of the intended app. Second, play is approached not only as a design outcome but also as a pedagogical method, encouraging students to adopt a playful mindset and use play-based activities (including designing and testing alongside child participants) in their own iterative, user-centred design process. While I have previously argued that play 'enables a frame or window that allows people to determine their capacity to act in the world' (Cassim, 2023, p. 9) and that playful learning in a South African design higher education context has the potential to decolonise design education (Cassim, 2020), the focus of this paper is on the purposeful role of play as a form of critical inquiry for students. More specifically, the paper examines how play may be harnessed in design education to realise and affirm children's rights.

Legal framework: Children's right to participation and expression in design

Legal frameworks for children's rights, such as the United Nations Convention on the Rights of the Child (UNCRC) and the South African Constitution, emphasise the importance of recognising and realising children's right to participate meaningfully in decisions that affect their lives. These frameworks do not simply offer ethical justification but also provide legal support for participatory justice within civic and educational contexts. Adopted by the UN General Assembly in 1989, the UNCRC is a legally binding international treaty that sets out the fundamental rights of children,

namely persons under the age of 18 (Wikipedia, 2004). The convention is widely ratified and thus serves as a global human rights instrument, regardless of children's race, religion, or abilities. It comprises articles that address every aspect of a child's life by outlining their civil, political, economic, social, and cultural rights. Of particular relevance to this study are Articles 12 and 13, which recognise children's right to express their views and to have those views taken seriously (Unicef, n.d.). Furthermore, Article 12 is recognised as a general principle for interpreting other rights of the child. Both these articles challenge the adult-centric assumptions that may marginalise children's contributions in civic decision-making and participatory design processes and align with participatory design scholarship, which calls for more inclusive, intergenerational design practices (van Mechelen et al., 2015). In the South African context, the democratic Constitution (1996) enshrines children's rights within its Bill of Rights. The bill makes specific provisions for children: Sections 9 – the right to equality – and 28 – the right to be heard – apply here (Constitution of the Republic of South Africa, 1996). While these provisions echo the UNCRC's emphasis on participation, they are not always translated effectively into practice, especially when adult perspectives dominate the creation of tools, systems, and environments intended for children. Hence, other mechanisms, such as monitoring and reporting, are necessary to implement children's rights.

The South African Child Gauge, an annual publication of the Children's Institute at the University of Cape Town is one such complementary mechanism that "aims to report on and monitor the situation of children in South Africa, in particular the realisation of their rights" (Children's Institute, 2004). For instance, the 2010/2011 Child Gauge publication (Part two), entitled Children as citizens: Participating in social dialogue (Jamieson et al., 2011), is pertinent to this study because it frames children as active citizens and highlights the importance of their participation in social dialogue across different contexts.

Despite not granting children full decision-making authority, the abovementioned frameworks/instruments collectively affirm children's capacity to participate in decision-making according to their age and maturity. Notwithstanding these robust mechanisms, challenges remain in ensuring the effective implementation of children's rights. There are often gaps between policy and practice in South Africa owing to structural inequalities, socio-economic challenges (such as high levels of poverty, inequality, and unemployment), limited awareness of children's rights, and institutional constraints that hinder meaningful engagement, particularly for children in impoverished and marginalised communities.

To realise children's right to express themselves and be heard, it is therefore essential to create safe spaces for children. Analogously, stakeholders should be educated to increase their awareness of children's rights. The design for development case study presented in this paper is designed with this in mind: it foregrounds the strategic imperative for designers as stakeholders to recognise children's rights and listen intently to them when designing games intended for them. Concomitantly, the case study interrogates how play, as a participatory approach, may either challenge or reinforce adult-child hierarchies depending on its application.

Curriculum project methodology: Winn's Design, Play and Experience framework for designing serious games

The Design, Play, and Experience (DPE) framework was developed by Winn (2009) as a comprehensive approach to designing serious games and is an expansion of LeBlanc's mechanics, dynamics, and aesthetics (MDA) framework designed by Marc (2005). Winn expanded the framework to include aspects beyond gameplay, such as storytelling and user experience. In his own words, "[t]he DPE framework presents a language to discuss design, a methodology to analyze a design, and a process to design a serious game for learning" (Winn, 2009, p. 1014). The DPE framework, as presented in Image 1, comprises three interrelated components: design, play, and experience. In turn, each of the three components is scaffolded by subcomponents: learning, storytelling, gameplay, and user experience. The design serves as the foundation or plan. It is the only component that designers can control through the narrative and the design of the interrelated elements to bring the story to life. Play, the central component, makes the foundation visible through the player's interaction with the design. It symbolises a mediated play experience influenced by both design and the player's background. The player's experience, represented by the third component, reflects the game's impact and effectiveness. The play experience (both emotional and cognitive) is varied and informed by the player's background and choices/actions during the game. The three components in the DPE framework signify the inherent relationship between the designer and the player (Winn, 2009).

While no universal principles guide the design and effects of serious games (Haring et al., 2011), they are often described as games designed for a primary purpose other than pure entertainment, for example, games that serve educational, training, or social change purposes while simultaneously empowering players. According to Jenkins (2006), "restricting games to purely an entertainment medium seriously undersells its potential". Winn (2009, p. 1012) asserts that "rather than simply trying to optimize the entertainment aspect of the game, or the so-called fun factor, one must also optimize to achieve a specific set of serious outcomes". Winn's definition of serious games, through the lens of the DPE framework, thus highlights the significance of intentional design that combines captivating gameplay with impactful educational experiences.

Following this definition, it may be inferred that the project requirement outlined in the design for development project brief (Cassim & Haese, 2023) is essentially the design of a serious game:

> *The digital intervention (or 'game') must be designed for children aged 6-8 and must encourage connection – amongst family, friends, and/or the community – as a result of playing the game (you will need to clearly identify your target audience context). You will ultimately be required to translate your research and reflections into an appropriate, well crafted, digital intervention, to provide an engaging and experiential learning environment for children.*

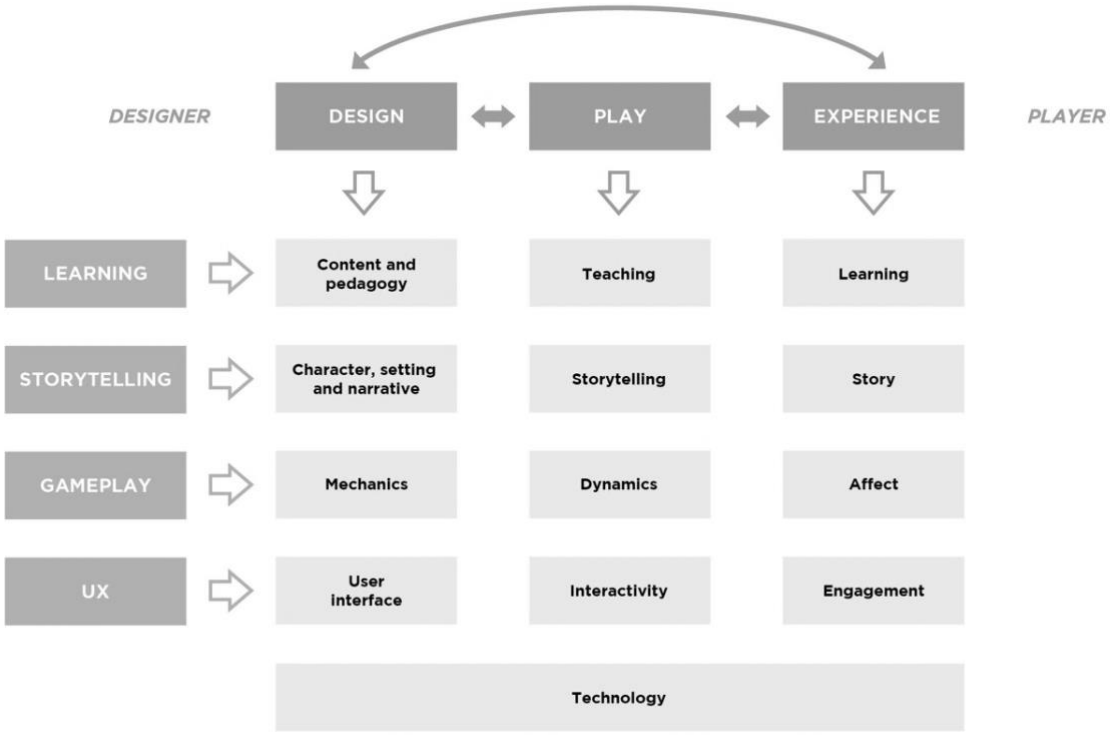

Image 1: Winn's (2009) Design, Play, and Experience framework for designing serious games (redrawn by author).

Case study

Having established the theoretical framework, this section explains how the theoretical exposition is pragmatically integrated and applied in the Information Design project. The case study traces one group's design process, illustrating how playful participation enabled the students to shift towards a rights-based approach. While only one project is presented in this paper, it is noteworthy that other student groups in the cohort explored similar themes, and common design and play strategies emerged. These strategies include simple, rule-based interactions, feedback through reward and consequence, and narrative framing, to name a few. All groups also had to document the children's perspectives, feedback, and contributions throughout the process to preserve their ideas and provide a record of children's involvement; this data had to be collated and submitted as a digital process document. The empirical evidence in this section is sourced from the selected group's documentation and foregrounds play as a civic and pedagogical interface that facilitates exchanges between students (adults) and children.

Considering that Winn's (2009) DPE framework underscores the intrinsic relationship between designer and player, it implicitly guides the discussion of how the design students included and considered children's perspectives and participation when conceptualising and developing their serious games. Since the resulting digital games were not scaled up beyond the classroom context, the discussion focuses only on the design and play components of Winn's framework: specific reference is made to the playful engagements that were facilitated and/or experienced as the students oscillated between these two components to develop authentic personas in the service

of their game design. Akin to design thinking methodologies, the DPE framework also promotes an iterative, dialogic, and emergent design process. Similarly, the discussion that follows mimics the student's cyclical design process and learning journey. For this reason, the design and play components of the framework are not presented independently when illustrating how the group used them to ensure meaningful engagement with the children.

Following the project briefing, the students attended a play workshop led by two play experts, certified Child Life specialists, Dr Karen van Zyl and Mrs Megan Ribbens. The purpose of this workshop was to orient the students towards the target audience they had to design for. In tandem with children's developmental stages, the workshop's content covered suitable play types for children aged 8 to 12. More significantly, the play experts aimed to foster a play environment; they set up various play stations showcasing different play types, including free play, mastery play, dramatised play, biblioplay, creative play, and sensory play. After an introduction to each play type, the students explored the games and activities at each station to experience the different kinds of play (see Image 2).

Image 2: Students exploring a mastery play activity (photograph by author).

The students were then tasked with visualising their own play personas (see Image 3); this play prompt helped make their individual play preferences visible to the rest of their group. The play prompt also modelled for the design students the nature of a playful engagement, namely an exploratory activity in which participants/end-users engage in an open (unstructured or semi-structured) and experimental way with a design concept or design outcome. Consequently, the student groups were assigned a thematic prompt, such as science, music, or well-being. While connection was the overarching aim that the brief called for, the prompt was intended to help students delineate the learning curve for their game during the concept development phase. The group that was assigned the well-being prompt articulated the following learning outcome as the point of departure for their game:

> *We want children to recognise that there are different ways to show and receive love … It must be made clear that the way you receive love and the way you give love are not necessarily the same. This sets children up for healthy relationships throughout their lives.*

Image 3: Example of a student's own play persona.

Next, the student group (three students) engaged children in gathering insights into their understanding of love, relative to their ages and lived experiences. The students followed all ethical protocols and received permission from both parents/guardians and the children before undertaking any fieldwork. During their first interaction, with the parents' assistance, the students posed questions to the children. The following questions and answers illustrate this initial interaction:

> *Q: What does your brother do that makes you feel the most special?*
> *A1: Giving me sweets – liquorice.*
> *A2: Playing with me.*
>
> *Q: How do you like to show your friends and family that you care about them?*
> *A1: Hugs and kisses.*
> *A2: I am friendly.*

Reflecting on this exchange, the student group noted:

> *This age range still has a fundamental understanding of what love is. They are familiar with seeing it in their families and can recognise different acts of love. Even though they are familiar with different ways of showing love, they are not aware of all the different love languages.*

Insights such as these, early on in the design process, were central to how this student group framed the mechanics and narrative of their game, namely a family garden adventure. Their concept was that each activity in the game would help the family members, as the players, to move through the virtual garden and help it flourish. In their subsequent meeting with the children, this narrative steered the playful participation between the students and the children. The students acknowledged this in their process documentation:

> *We started the session by playing hide-and-seek. This served both as an icebreaker and as a way to get a sense of how they feel about physical 'move around' games. Both children*

really enjoyed this. We then gave them some prompts that may appear in our games to see how they respond to them.

The students' prompts encouraged the children they engaged with to contribute to the narrative development because the students allowed the children to experiment with and express their own ideas. For example, one prompt was a drawing challenge to draw a family portrait; another prompt was to invent a secret handshake for their family. Other prompts, such as building a ladybird out of paper (see Image 4), also encouraged the children to tap into their imagination. The students participated and completed the prompts alongside the children, which helped to flatten the power dynamics and build trust with the children. This experience generated the following insights from this student group:

- *Children were more focused on the content than on the images' style.*
- *The children were very drawn to the animals.*
- *Children have one perception of how something looks, and if it's not that way, it doesn't make sense to them.*
- *They were drawn to the characters that looked like them.*
- *Different children prefer different activities. [Child 1] likes crafts. [Child 2] likes more physical play, such as handshakes and hide-and-seek*

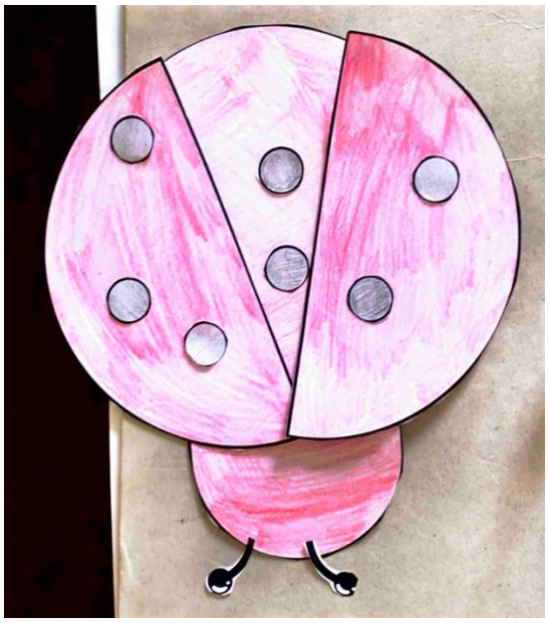

Image 4: Outcome of the ladybird activity with the participants.

Thereafter, the students demonstrated participatory flexibility by incorporating the children's ideas and feedback into their game content. As a case in point, the group decided that "an animal guiding character may be more effective" for their game narrative, owing to the children's affinity towards animals. The students stated that "as the children were so drawn to the animals, we made the avatars (see Image 5) and the guiding character animals. We really wanted to give the characters character so the children could relate to them". For their "playful and organic" visual identity (see Image 6), the students were influenced by the "simple shapes, softer colours reminiscent of child

drawings". The students also acknowledged in their process documentation that the organic, handmade letterforms for their typography suggest "child-like spontaneity" experienced by the children they interacted with.

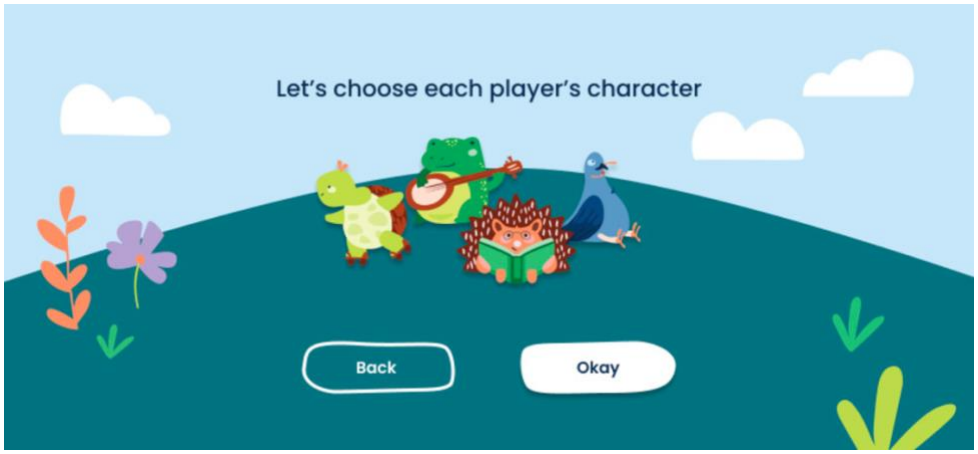

Image 5: Avatar illustrations by students.

Image 6: Example of the visual identity for the app.

Regarding the design of the gameplay mechanics, the students' decisions were informed by structured playtesting. For example, the children's interactions with the low- to mid-fidelity prototypes allowed the students to glean the children's opinions on what works and what does not. In turn, these observations enabled the students to identify essential elements of children's experiences that should be prioritised in their design process, such as opportunities for creativity and inclusive digital environments that accommodate a range of abilities and interests. This is evidenced in the following student reflections:

> *The children wanted more interaction on the app itself. For example, when they get water, they want to water the garden themselves rather than have it happen automatically.*
>
> *Some children prefer step-by-step guidance, while others prefer more free play. The app has to accommodate both.*

From the above reflections, it is evident that play, as a vehicle for engagement, served a specific purpose during the game design process: it mediated the students' experiences with the children. It supported the children's meaningful participation at multiple stages of the process. Through playful participation, the students captured the diversity and nuances of children's lived experiences. In turn, the increased understanding of children as the target audience led to tangible improvements in the students' game, resulting in a successful game prototype that not only met the brief's requirement for connection but was also more authentic and reflective of the children's contributions.

Project reflections and conclusion

This case study, which outlines the purposeful integration of play into the design for development project, aligns with the aforementioned legal frameworks on children's rights that emphasise their right to freely express their views on matters that affect them and for those views to be respected and taken seriously. In doing so, the project inadvertently recognises play as a fundamental human right in itself, echoing seminal play theorists such as Huizinga (1949), Sutton-Smith (1997), and Sicart (2014). The case also recognises the opportunities play afford for designers' creativity and civic consciousness. Moreover, the project offers valuable insights into how playful participation (as forms of engagement and expression) enabled students to step into the world of children and, consequently, how play functioned as an enabling condition for reimagining the adult-child relationship through a participatory justice lens. Hence, in conclusion, I reflect on these findings in relation to their pedagogical and ethical implications.

To begin with, the image of children (through the students' eyes) was reconceptualised through their learning journey described above. The playful interactions between the children and the students opened opportunities for a deeper, more empathetic understanding of children's participation in the design process. Through a hands-on, experiential approach, the students moved beyond treating children as passive subjects and engaged them as active stakeholders and co-creators with their own preferences and desires. That being so, the playful engagements did not perpetuate hierarchical adult-child relationships that position children as in need; nor were the engagements merely tokenistic or symbolic to ratify the students' design decisions. In a linguistically diverse South African context, it is striking that playful engagements also enabled inclusivity amongst the diverse group of children and students. This finding emphasises that excluding children from the front end of the design process and from meaningful participation risks reproducing forms of marginalisation – such as adult-centric approaches and tokenistic consultation as recognised by Van Mechelen et al. (2015) – which design for social change seeks to address. It is therefore imperative for future research to examine children's perspectives and reflections to ensure that their participation truly moves beyond representation towards genuine influence, shaping not only design outcomes but also the underlying power dynamics of the design process.

Next, through observation and play activities, the students began to recognise the importance of giving children agency over their experiences and respecting their autonomy. As the project progressed, this understanding deepened. It led the students to incorporate children's input and wishes into their design decisions. In class, they demonstrated this shift by consciously aligning their

design choices with the children's preferences. Hence, what may have initially been viewed as a top-down process evolved into a dialogic process; play in this context became a means of redistributing power, voice, and recognition. The students' willingness to embrace the children's right to participate and express themselves demonstrates the potential of a justice-oriented pedagogy that aligns with Freire's (1970) critical pedagogical tradition.

While research for design (Friedman, 2008), especially when employing co- and participatory design approaches, is neither new nor uncommon in contemporary design practice, what differentiates the process outlined in this case study is the way in which the designer-user/adult-child engagements are centred on intergenerational participants playing together. As such, the case study deepens Friedman's concept by embedding intergenerational co-play as a foundation for ethical decision-making and shared learning in research for design. Such a co-play stance affirms the children's right to participate in decisions that affect their learning, while also modelling a sense of ownership for the children. In a similar vein, the playful mindset kindled a sense of social responsibility among the students towards their role as designers. In addition, the intentional inclusion of children in the design process aligns with ethical principles of justice and respect for persons: it is only by first recognising children as rights holders and respecting their perspectives that adults can ensure they are treated with dignity and equality.

Then, the theoretical grounding provided by Winn's (2009) DPE framework played a critical role in structuring the students' approach to serious game design. By focusing on the co-dependent components of design and play, the students were able to grasp the more profound educational and social impact that serious games can have. This framework not only guided their design decisions but also reinforced the importance of contextually relevant choices that foster connection. For instance, feedback loops throughout the design process reinforced the children's right to influence the games being developed for them. The students used the qualitative data generated with the children to iterate on the game design, that is, the gameplay and mechanics as outlined in the DPE framework: this involved adjusting the difficulty level, pacing and content based on the children's feedback so that they were age-appropriate and catered to the cognitive and physical abilities of the target audience. Having said this, one limitation of this case study is that the experience component of Winn's framework has not been considered; that is, the children's experience of the final game remains unexplored. Comparably, if children's contributions to the design process were made more public, it could further legitimate their role and reinforce their right to be seen, heard, and valued in the design process. Herein lies another research area for investigation: how post-design experiences, in other words, reflection-on-action (Schön, 1983), may also serve as opportunities for participatory justice.

Nevertheless, another pedagogical strength of the project, given its parameters, is that some of the encounters the students had with the children highlighted the complexities of designing for children. For instance, the students had to navigate the gaps in their understanding and/or assumptions of children's developmental stages and their reactions to different play prompts. The iterative process was therefore beneficial because it reinforced in students the need to be flexible and adaptable when designing in general and when designing erious games. Here, another takeaway from the case study is that, through these participatory and playful encounters, the design process became a site

of mutual learning: the children gained a sense of agency, and the design students developed a more critical and playful disposition.

To conclude, this project's significance lies not merely in the development of serious game prototypes but in the shift it enabled in students to recognise children as epistemic agents rather than design subjects. By demonstrating how a playful and participatory design process can foreground children's rights, this study highlights the potential of design education to nurture a civic sensibility in students, equipping them not only to address immediate developmental needs but also to contribute to the broader civic project of social change. In doing so, it illustrates how embedding play in design education can deepen commitments to participatory justice and ethical co-creation. To borrow from Lester (2013, p. 38), the design for development project is ultimately a "reminder that 'becoming' is not an individual trait of children but is a shared process". In recognising this civic "capacity to act in concert" (Arendt, 1958, p. 200), the contemporary role of designers may also be reimagined as co-creators of inclusive and just futures for children and adults alike.

References

Akama, Y., & Yee, J. (2016). *Seeking stronger plurality: Intimacy and integrity in designing for social innovation*. Paper presented at Cumulus Hong Kong 2016. https://tinyurl.com/5hdzcpep

Arendt, H. (1958). *The human condition*. University of Chicago Press.

Barnes, K., Emerusenge, A. P., Rabi, A., Ullah, N., Mazari, H., Moustafa, N., Thakrar, J., Zhao, A., & Koomar, S. (2024). Designing for social justice: A decolonial exploration of how to develop edtech for refugees. *Education Sciences*, 14(1), Article 77. https://doi.org/10.3390/educsci14010077

Bennett, A, & Vulpinari, O. (Eds.). (2011). *Icograda design manifesto*. Icograda. https://www.theicod.org/storage/app/media/resources/Icograda%20Documents/IcogradaEducationManifesto_2011.pdf

Bonsiepe, G. (2021). *The disobedience of design*. Bloomsbury.

Botes, H. (2025). Integrating decolonial theory through signature pedagogies in design education [special issue]. *Critical Studies in Teaching and Learning* (CriSTal), 13(SI1), 88-106. https://doi.org/10.14426/cristal.v13isi1.2700

Calvo, M., Cruickshank, L., & Sclater, M. (2022). Exploring mutual learning in co-design. *Discern: International Journal of Design for Social Change*, *Sustainable Innovation and Entrepreneurship*, 3(2), 79-96. https://tinyurl.com/3p2abzac

Costanza-Chock, S. (2020). *Design justice: Community-led practices to build the worlds we need*. MIT Press. https://doi.org/10.7551/mitpress/12255.001.0001

Cassim, F. (2020). Decolonising design education through playful learning in a tertiary communication design program in South Africa. *International Journal of Art & Design Education*, 39(3), 523-535. https://tinyurl.com/8jswf5kt

Cassim, F. (2023). Using play to realise the intent of social design. *Image & Text*, 37, 1-19. https://journals.co.za/doi/epdf/10.17159/2617-3255/2023/n37a5

Cassim, F., & Haese, A. (2023). Design for development. Designing digital, game-based interventions that encourage connection through play. Unpublished student project brief. Information Design 400, University of Pretoria.

Children's Institute. (2004). *Child Gauge: Overview*. University of Cape Town. https://ci.uct.ac.za/child-gauge-overview

Clarke, A. (2021). *Victor Papanek: Designer for the real world*. MIT Press.

Constitution of the Republic of South Africa. (1996). *Act 108 of 1996*. Government Printer. https://www.justice.gov.za/legislation/acts/1996-108.pdf

Escobar, A. (2018). *Designs for the pluriverse: Radical interdependence, autonomy and the making of worlds*. Duke University Press. https://doi.org/10.1215/9780822371816

Freire, P. (1970). *Pedagogy of the oppressed* (M. B. Ramos, Trans.). Herder & Herder.

Friedman, K. (2008). Research into, by and for design. *Journal of Visual Arts Practice*, 7(2), 153-160. https://doi.org/10.1386/jvap.7.2.153_1

Haring, P., Chakinska, D., & Ritterfeld, U. (2011). Understanding serious gaming: A psychological perspective. In P. Felicia (Ed.), *Handbook of research on improving learning and motivation through educational games: Multidisciplinary approaches* (pp. 413-430). IGI Global Scientific Publishing. https://doi.org/10.4018/978-1-60960-495-0.ch020

Huizinga, J. (1949). *Homo ludens. A study of the play element in culture*. Routledge & Kegan Paul.

Jamieson, L. (2011). Children's rights to participate in social dialogue. In L. Jamieson, R. Bray, A. Viviers, L. Lake, S. Pendlebury, & C. Smith (Eds.), *South African child gauge 2010/2011* (pp. 22-29). Children's Institute, University of Cape Town. http://hdl.handle.net/11427/3973

Jenkins, H. (2006, July 30). *Getting serious about games*. Pop Junctions. http://www.henryjenkins.org/2006/07/getting_serious_about_games.html

LeBlanc, M. (2005). *Game design and tuning workshop*. Workshop presented at FuturePlay 2005 International Academic Conference on the Future of Game Design and Technology, East Lansing, MI.

Lester, S. (2013). Rethinking children's participation in democratic processes: A right to play. In S. Kawecka Nenga & J. K. Taft (Eds.), *Youth engagement: The civic-political lives of children and youth* (pp, 21-43). https://doi.org/10.1108/S1537-4661(2013)0000016006

Manzini, E. (2015). *Design, when everyone designs: An introduction to design for social innovation*. MIT Press. https://doi.org/10.7551/mitpress/9873.001.0001

Margolin, V., & Margolin, S. (2002). A "social model" of design: Issues of practice and research. *Design Issues*, 18(4), 24–30. https://www.jstor.org/stable/1511974

Oxford English Dictionary. (2024). Development. In *OED.com dictionary*. https://www.oed.com/dictionary/development_n?tab=factsheet#6853101

Papanek, V. (1974). *Design for the real world*. Collins.

Resnick, E. (2015). *Developing citizen designers*. Bloomsbury.

Sanders, E, & Stappers, P. (2008). Co-creation and the new landscapes of design. *CoDesign* 4(1), 5-18. https://doi.org/10.1080/15710880701875068

Schön, D. (1983). *The reflective practitioner: How professionals think in action*. Basic Books.

Sicart, M. (2014). *Play matters*. MIT Press. https://doi.org/10.7551/mitpress/10042.001.0001

Sutton-Smith, B. (1997). *The ambiguity of play*. Harvard University Press.

Unicef. (n.d.). A summary of the UN Convention on the rights of the child https://www.unicef.org.uk/wp-content/uploads/2019/10/UNCRC_summary-1_1.pdf

Van Mechelen, M., Zaman, B., Laenen, A., & Vanden Abeele, V. (2015, June 21-25). Challenging group dynamics in participatory design with children: Lessons from social interdependence theory. In M. U. Bers & G. Revelle (Eds.), *IDC '15" Proceedings of the 14th International Conference on Interaction Design and Children* (IDC '15) (pp. 219-228). ACM. https://doi.org/10.1145/2771839.2771862

Whiteley, N. (1997). *Design for society*. Reaktion Books.

Wikipedia. (2004). Convention on the rights of the child. https://en.wikipedia.org/wiki/Convention_on_the_Rights_of_the_Child

Winn, B. M. (2009). The design, play, and experience framework. In R. E. Ferdig (Ed.), *Handbook of research on effective electronic gaming in education* (pp. 1010-1024). Information Science Reference.