

PLAYFUL DESIGN



FREE PLAY IN A DIGITAL WORLD



The Digital Futures Commission is an applied research project hosted by **5Rights Foundation**. Its ambition is to reimagine the digital world as if it were designed with children's needs and rights in mind and to put forward practical steps to get there.

The DFC has three work streams: **play in a digital world; beneficial uses of education data**, and **guidance for innovators**. Find out more about the DFC at digitalfuturescommission.org.uk and 5Rights Foundation at 5rightsfoundation.com

"Playful by Design" sets out 12 qualities of free play. It draws on two academic reviews – **"A Panorama of Play"** and **"The Kaleidoscope of Play in a Digital World"**. It is informed by a public consultation, **"Free Play in a Digital World"** held in spring 2021.

In the autumn of 2021, the DFC will publish a full report showing how the qualities of free play can be enhanced or inhibited by the norms, design features and architecture of the digital environment.



MEET THE AUTHORS



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WHAT IS FREE PLAY?



Play is...

“any behaviour, activity or process initiated, controlled and structured by children themselves.”*

It manifests in various forms and changes according to the evolving capacities and interests and circumstances of the players, as well as the opportunities available to them.

WHY DOES FREE PLAY MATTER?

Play is valued for the joy it gives, and as a means for children to express themselves, build relationships with others and make sense of the world around them on their own terms - free from adults' expectations, judgements, restrictions or rules, although it might well include playing with parents or other adults.

The importance of free play has been articulated by influential thinkers throughout history for how it foregrounds children's agency and enhances their wellbeing, learning, and their social, emotional and cognitive development.



This image of a girl playing with a cardboard box was the favourite out of 7 illustrations of free play that we showed children, parents and professionals of all ages and walks of life. It seemed to unlock overwhelmingly positive ideas of play from children and adults alike.



"I always love having a cardboard box because I could draw all over it and it wouldn't matter."
(Girl, 12)

"It becomes its own sandbox environment ...it allows the imagination to go completely wild with it because it's not dealing with any constraints."
(Boy, 17)

"Each individual child will work out just exactly the potentiality of what that box could be."
(Theatre Professional)

"My five-year-old, he takes everything out of the box... and he will sit in the box and say, mama, I'm driving a car... It's quite interesting how they use their imagination in various ways ...to play and have fun."
(Mother)

Here the **imaginative**, **voluntary**, **stimulating** and **open-ended** qualities of play shine through. The cardboard box also affords **diverse** possibilities for children to play in ways that are meaningful to them and their circumstances. In other contexts, other qualities come to the fore, with **social** and **emotional resonance** often prioritised. Across contexts, play that is **intrinsically motivated** is always vital.

The UN Convention on the Rights of the Child includes the child's right to play. But our society does not always provide children with time, space and resources to play as they wish.

UN Convention on the Rights of the Child, Article 31

"States Parties recognise the right of the child to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts."



Most important of all, play matters to children.

"I feel like, when you're playing, you kind of have a more creative side open up to you, and you kind of have a goal that you're trying to do at the same time."

(Boy, 13 years old)

"I miss it, being just carefree and just playing however you want."

(Girl, 16 years old)

It matters to parents too:

"Play often feels chaotic when it's viewed from the outside. It only really makes sense when you're on the inside of it... They're hunting a giant squid, or they're pharaohs. That's when they have their biggest moments of joy."

(A mother and creative professional)

WHAT DO CHILDREN AND EXPERTS SAY ABOUT FREE PLAY?

The Digital Futures Commission reviewed the multidisciplinary research literature and child rights practice relating to play. From this, we identified **8 qualities of free play:**



DO CHILDREN AGREE WITH THE EXPERTS?

Yes, but.

The children agreed that each of the 8 qualities are important, but they added four more things. These included risk-taking and feeling safe in their environment. These qualities aren't contradictory – one needs a degree of safety in order to be able to take risks, and a degree of risk-taking is vital for growth. We also heard from children how they relish a sense of achievement in their play, and how they love to be immersed in another world, by themselves or with others.

1. INTRINSICALLY MOTIVATED
2. VOLUNTARY
3. OPEN-ENDED
4. IMAGINATIVE
5. STIMULATING
6. EMOTIONALLY RESONANT
7. SOCIAL
8. DIVERSE
9. Risk-taking
10. Safety
11. Sense of achievement
12. Immersive

So that's the
Digital Future
Commission's
12 qualities of
free play!



CAN CHILDREN PLAY FREELY IN THE DIGITAL WORLD?

Is there an equivalent of the cardboard box when playing online? Is there the opportunity for digital hide and seek? In some ways, yes.

"You can play hide and seek on Roblox and I do it regularly. I actually feel the same level of, oh my God, they've just run past me"

(Girl, 18 years old)

"I mainly use ... things like game on Steam mainly, things like Slime Rancher. It's a world where you have infinite possibilities to do whatever you want... You are not controlled by a set of rules."

(Girl, 14 years old)



"I can see the comparison ... [of the cardboard] box with Minecraft; that's very much a mix. I said it was a sandbox. It opens your imagination. If you wanted to build a ten-foot replica of an orange, you could do."

(Boy, 17 years old)

"Minecraft would be a good example. In that game, you can basically do whatever you want because you just download the mods for ... what you'd like...so you're not really following a script."

(Boy, 16 years old)

Children told us how they love it when the digital environment facilitates their **voluntary** opportunities for **imaginative** and **stimulating** play. When the play is **open-ended** and not scripted for them, it quickly becomes **immersive**, emerging from the **social** interaction among players. This emergent nature of free play is **intrinsically motivating** and necessarily **diverse**, and often **emotionally resonant**, because it arises from the players' different real-life contexts. **Open-ended** play often involves **risk-taking**, and this in turn can generate a **sense of achievement** – even if the achievement is to build a huge orange! Also important to children is feeling **safe**, as this makes free play possible in the first place.

But while the qualities of free play are important in all environments, digital and non-digital, each environment has its particular features that enable or inhibit free play. The digital environment is heavily engineered to maximise the time and money that users spend online, and to extract their data for business purposes. Children told us that they find the commercial pressures and compulsive features that accompany their play intrusive or problematic. They also find play in digital contexts to be often hostile and unsafe.



Consider Roblox - a gaming platform that has become very popular among children aged 6-12 years old.

Also consider Zoom – while not usually thought of as a place for digital play, it became so during the pandemic.

ROBLOX

Roblox is an online game platform with a large collection of multi-player and social games created by its community of players, supported by a team of professionals. It operates on various platforms and generates its income through in-game purchases to improve gameplay with the platform's currency, Robux.

"I found [my 10-year-old son] got really into the Roblox idea. He knew through watching YouTube that you could learn other people playing it and see how to pick up tips and how to get better at the game."

(A mother & early years support worker)



"[In Roblox, my 9-year-old daughter] builds houses and interact with [friends] in whatever world they've generated... they're also always doing it with a House Party, Zoom call type thing going on in the background."

(Father of two children)



"There was a recent thing shared quite a bit about Roblox where a little seven-year-old girl was playing and had then said to her daddy she wasn't sure about this person messaging. And he took over. And according to [the story shared on] social media, that was a groomer."

(A mother and early years support worker)

It seems that Roblox supports the **imaginative, stimulating** and **social** qualities of play, allowing for some **diversity** also in its variety of games and "worlds." But its support for some qualities of play is qualified by features that impede children's **intrinsic motivation, safe, voluntary** and **social** play. These concerns include in-game commercial pressures such as loot boxes, limited platform interoperability, and insufficient safety features.



"On Roblox, there are thousands of different worlds and games to play on. Some of them, you can't play together if someone's on a computer and someone's on an iPad."

(Girl, 9 years old)



"My mum... blocked the chat... just in case some people say any mean things... [but] there are Rubux ... it's not good because they're kind of tempting you to buy."

(Girl, 9 years old)

zoom

Designed for remote business meetings, Zoom, a video communication service, has enjoyed a pandemic explosion in everyday uses at home. Users can join the call with their camera and microphone on or off, choose personalised virtual backgrounds, text chat and emoticons. Paid-for accounts allow more than the free 40 minutes, plus such functionality as breakout rooms and integration with other apps like the annotation tool “Whiteboard.”

In our consultation, adults praised Zoom for enabling **social** play, even for providing a digital playground during the pandemic, although free accounts limit how **open-ended** play can be. Children were appreciative too.

“My eight-year-old was playing on Zoom... all the kids, and they’re sort of playing hide and seek or catch, tag, so someone has to draw, and someone has to be the eraser.”
(A mother and youth worker)



“I was annotating, and my cousin wanted to know how you do that... So, my aunty put a whiteboard on the Zoom for us to annotate on.”
(Girl, 9 years old, on playing family Scattergories on Zoom)



“During the first lockdown, we had Zoom nights, so we’d all get round... Mum and dad would have a glass of wine; I’d have a glass of Coke, and we’d all sit down and play quizzes and stuff.”
(Boy, 15 years old)



But people also found the platform restrictive, constraining their **social** and **emotional** experiences, and undermining their possibilities for **immersion** and **intrinsically motivated** play.

“It’s kind of different because we don’t go to friends’ houses anymore and we don’t... knock at the door ... and we can’t go into family’s houses.”
(Girl, 8 years old)



“My child often gets quite hurt by things that happen on Zoom ... I find it really problematic mainly because the kids aren’t moving their bodies; they’re not experiencing enough of the 360-degree experience.”
(Artist and mother)

Some children have found ways to counteract these limitations, for example, by developing a new social etiquette or treating it as a stage, imaginatively harnessing the available control functions (e.g. virtual background) or diversifying the experience by bringing a teddy or a pet into view from ‘off stage.’ Professionals who work with children are keen to support this playful creativity:



“I really struggled with Zoom in the beginning. I’ve been telling people to write in the chat and turn your screen upside down. It actually enabled them to listen more and get engaged and get more motivated.”
(Teacher & performer)



So while Zoom supports some qualities of free play (**social**, **imaginative**, **voluntary**, **diverse** and **open-ended**), we heard little of its potential for being **emotionally resonant**, **immersive**, or enabling **risk-taking** or a **sense of achievement**. And it has limitations in terms of enabling **intrinsically motivated** play and **safety**.

WHAT WILL WE DO NEXT?

Some qualities of free play are not well supported by the digital environment. Moreover, some digital features actively undermine the 12 qualities of play.

Our vision is that society should hold out high expectations for the quality of children's play across all environments. We want to discover what it would take for free play to thrive in the digital world.

Next we will identify the digital architecture that enables the qualities of free play to flourish. By mapping the design features that enable or inhibit free play, we hope to get one step closer to a digital world that is...



Playful by Design's 12 qualities of free play, by the Digital Futures Commission:



The
Alan Turing
Institute

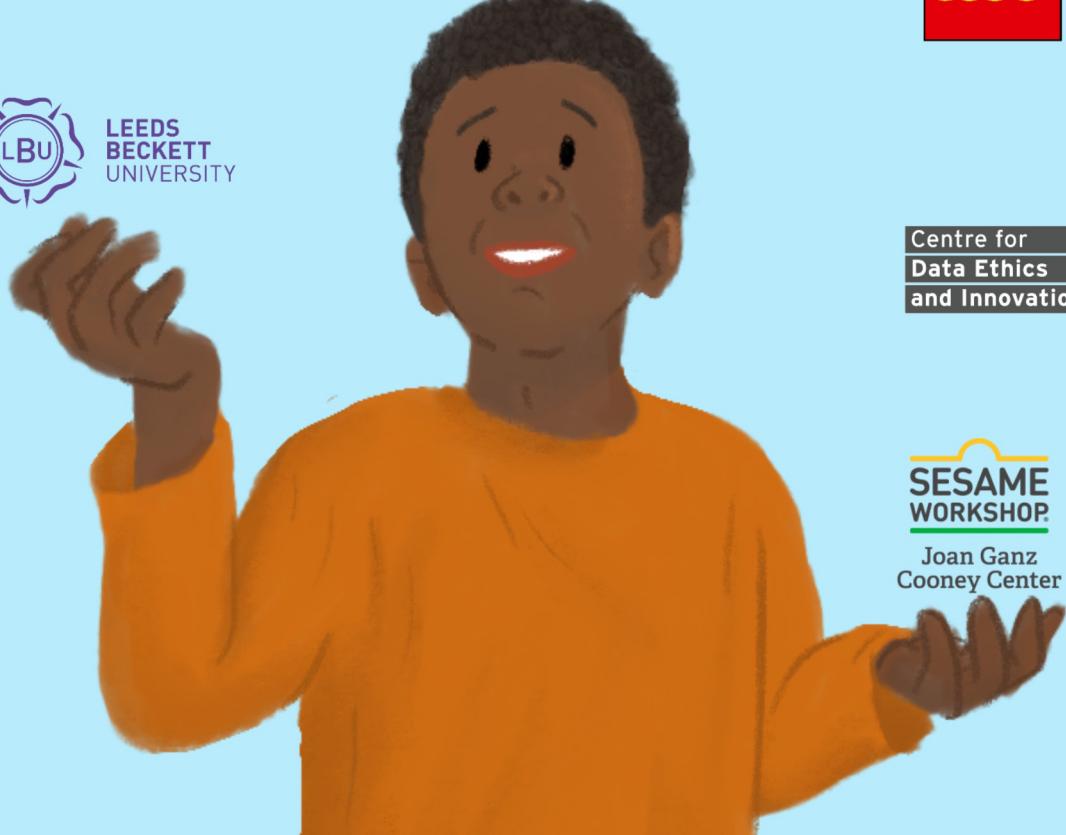
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