



## Exploring a Child-Centred Design Approach From tools and methods to approach and mindset

*Impact Case Study*

**Karen FEDER**  
*Design School Kolding*  
*LAB for Play & Design*

Year of completion:	2020
Discipline/field:	Design research, design for play, child-centred design
Type of Doctorate (e.g. PhD, DDes, ArtD)	PhD
Supervisor(s)	Canan Akoglu

### *Abstract*

This PhD project originates from a professional need and a demand for a higher focus on children in the design process; a theoretical lack of definitions and a shared language for working in a child-centred fashion in design as well as a personal puzzlement why children have not been the starting point when designing for playful experiences for children. This research explores the notion of a child-centred design approach and the influence on the design practitioner when experiencing the world seen from the perspective of the child.

An initial study of existing initiatives in the area of design, play and children establishes recommendations for working with children in the design process. This is studied further through a series of interviews with experts in the area to create direction and structure for the subsequent research process.



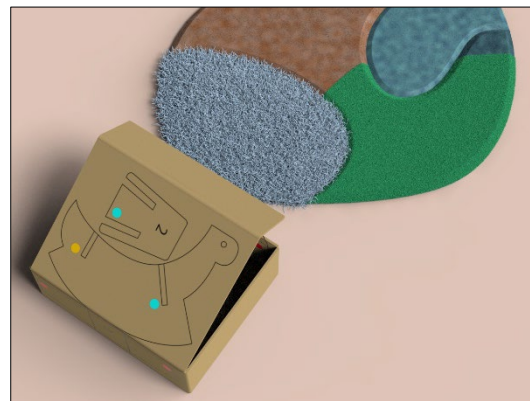
The research project is rooted in design research and makes use of methods from design practice to research through design and research for design development. An open and exploratory approach to the field of research is possible through the use of design experiments and a programmatic, structured research



question: What is a child-centred design approach and how does it influence the designer? The general research approach is primarily qualitative and follows the methodology of Grounded Theory which makes it possible to enter the field of research without a predefined theory. Instead, the collected data from the conducted field studies becomes the main focus of the analysis, and the findings from the field studies are being explained and discussed through existing theoretical literature.

A collection of child-centred design methods targeted designers has been developed to conduct research into what a child-centred design approach is. The methods are: 'internship as a child', 'co-creating the life of a child' and 'comparing child personas'. The field studies conducted in this research project include two pilot studies and two main studies. The pilot studies primarily experiment with the child-centred design methods with different types of participants, surroundings and activities and develop methods for documenting the process. The two main studies are a part of a Master's course for a group of design students and a professional development course for a group of professional designers, respectively - all participating with the further purpose of designing playful experiences for children. The child-centred design approach is introduced for the designers in collaboration with children in the children's everyday environments.

The designers' experience of the child-centred design activities is documented throughout the process through reflections and tracking tools developed specifically for this project - Design process strips, reflection cards and a reflection kit, among others. The documentation and the follow-up interviews identify how the designer experiences and articulates the child-centred design approach in practice. This accounts for the data material for the Grounded Theory analysis resulting in eight 'grounded' concepts reflecting the designers' experience of the child-centred design approach.



*Photo credit: Paula and Marta*

The 'grounded' concepts establish the groundwork for the development of four categories: designer, design, child and life, which delimit and structure the theoretical literature which is a part of the discussion and the explanation of the 'grounded' data from the field studies.

The discussion addresses and answers the research questions: What is a child-centred design approach and how does it influence the designer? The research is an illustration of the child-centred design approach, which takes its starting point in the experience of children and their everyday lives. The specific focus is on exploring, inspiring and informing open-ended encounters with the purpose of identifying what kind of play experiences should be designed - and how - in order to make them



relevant seen from the perspective of the child. Experiencing the children and their everyday lives through the child-centred design approach leads to unexpected surprises for the designers making them reflect upon their assumptions regarding children and even change their design practice to be conducted with children - a change in mindset that includes the perspective of children in future design processes. This leads to a specific contribution to design research, recommendations for the design industry and implications for design education, as well as directions for further research into the child-centred design approach.

## *Summary of impact beyond academia*

This PhD takes its starting point within design practice, rooted in the need for a more child-centred perspective when designing for play experiences.

During the PhD process, professional designers from play designing companies has been enrolled in courses in child-centred design as a part of their professional development, who afterward has implemented the approach in practice in their company work life.

This child-centred design approach has been taught to play design master's students for 5 years, influencing their practice and design output in the organisations and companies they are working in now.

On the completion of the PhD, tools and methods from the child-centred design approach has been incorporated within development processes and projects in companies and municipalities, driven by the designers and practitioners in the involved departments. This has led to new products, new ways of working and the reach of new target groups.

Overall, the child-centred design approach has led to more child-relevant solutions and designs, to the benefit of the children as the end users.

## *Underpinning research, context and summary of methodology*

The PhD project on developing a child-centred design approach originates from the project 'Hub for Design & Play' - an industry study on play-designing companies in Denmark which examined the industry's foundations for designing playful experiences for children (Feder, 2013}. The study showed the companies' sincere and heartfelt passion for designing high-quality play experiences for children, but it also revealed challenges and barriers to reach a full potential in designing relevant play



experiences that take their point of departure in the child. The study indicated that most of the designers in the companies would like to focus on children in the product development process, but very few of them actually did (Feder, 2013}. The most common way for the companies to include children in design of play was to let the children help test the product when it had reached the prototype stage or to invite children in when pictures were going to be taken for the product catalogue. The industry study (Feder, 2013} and similar initiatives (Play User Lab, Design School Kolding & Capital of Children Billund, 2016}; (Design for Play, 2017} revealed some of the reasons why children are not more in the centre of the development processes when companies are designing play experiences: inaccessible knowledge, limited relevant education, unfamiliarity with children and unawareness of the potential of children's input.

The consequences were that the designers had to go back and spend time on changing the design, or, in a worst-case scenario, the product had to be discarded altogether and the design process had to start all over. It is costly for the companies and wasted time that could have been better spent. In such cases, early involvement of children could help to identify challenges earlier in the process, or result in the development of a completely different and a more relevant design idea (Allison, 1998).

These challenges called for an increased awareness of the potential of taking the starting point in the children and the opportunity for the companies to experience this way of working in relation to a development process. It required the introduction to a more open-ended approach to the design process to draw the designers' attention to the potential of identifying relevant design opportunities together with children.

The PhD studied existing initiatives on designing for children to establish the research field and identified gaps and new potentials. This was combined with a series of expert interviews shaping the introduction of the child-centred design approach for the designers in the conducted field studies. The approach was explored through different kinds of iterative design experiments together with designers and children with the purpose of further defining the child-centred design approach. A series of tracking tools and a follow-up study was developed to study how the approach influenced the designer. The analysis led to a number of concepts which were discussed and explained through existing literature. The research has during and after the PhD delivered valuable impact to students, designers, companies, municipalities – and children in specific.



## *References produced by researcher from/during doctoral research*

Feder, K., September, 2021, Designing for children's play from a child-centred perspective. Lecture for 100 practitioners at the Play@Heart conference, <https://playful-learning.dk/viden-og-inspiration/udvikling-af-playspaces-i-playheart/>

Feder, K., August 2020, Designing for play with a child-centred perspective, s. 89-102 (book chapter). Framing Play Design: A hands-on guide for designers, learners and innovators. Skovbjerg, H. M. & Gudiksen, S. K. (red) BIS-Verlag <https://www.bispublishers.com/framing-play-design.html>

Feder, K., 2018-2022, Child-centred design for play, A master's course for play design student at Design School Kolding, <https://www.designskolenkolding.dk/en/design-for-play>

Feder, K., May 2018, Professional development course for designers in designing for play from a child-centred perspective, <https://www.designskolenkolding.dk/design-af-leg-fra-et-børneperspektiv>

Feder, K., September 2017, But how do we actually engage children in design for play? An introduction to Play User Lab, IPA 2017: International Play Association conference 2017, Canada, <http://canada2017.ipaworld.org/about/ipa-triennial-world-conference/>

PhD blog on Facebook with 400 followers, <https://www.facebook.com/karenfederdk>

## *Details of impact*

Educating the child-centred design approach to 100 play design students at Design School Kolding: <https://www.designskolenkolding.dk/en/child-centred-design>

Lecture on the child-centred design approach for 100 teachers and managers from various schools in Denmark, as a part of a conference on playful methods on children's approach to technology: <https://playful-learning.dk/playheart/>

Implementing the child-centred design approach in 3 municipalities in Denmark: 'The joy of Reading' project in libraries in the Municipality of Kolding <https://www.designskolenkolding.dk/læselyst-læserum> , 'Outdoor schooling' at Hørup Centralskole in the municipality of Sønderborg <https://www.designskolenkolding.dk/node/3966> , and the project 'Rammer der Rummer' on how people and spaces can facilitate new cultural experiences for children <https://www.designskolenkolding.dk/rammer-der-rummer> .



Applying the child-centred design approach to 3 city development projects: Playline – a playful path through the city of Billund <http://byudvikling.billund.dk/billund/playline/> , Travbyen – a new neighbourhood <https://www.travbyen.dk> and Play Campus – a place for playing, learning and living.

Teaching the child-centred design approach to professional designers from 10 companies: LEGO Group, Aros, Systematic, ARLA Foods, VIA University, Pænt Goddag, etc. <https://www.designskolenkolding.dk/design-af-leg-fra-et-børneperspektiv>

Publishing the child-centred design approach in the chapter 'Designing for play with a child-centred design approach' in the book 'Framing Play Design – a hands-on guide for designers, learners and innovators' (Gudiksen & Skovbjerg, 2020) with 1500 sold copies <https://www.amazon.com/Framing-Play-Design-hands-Innovators/dp/9063695721>



This Case Study is an outcome of the D.Doc Project, funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

For more information on D.Doc visit <https://d-doc.eu/>