



**CHATHAM HOUSE
&
LONDON DESIGN BIENNALE**

DESIGN IN AN AGE OF CRISIS
OPEN CALL 2020

ACTIVE CLASSROOM

2020

Project description

The 'Active Classroom' presents a collection of four stools designed for primary school children. Study after study shows that more time spent sitting in conventional chairs can cause serious health risks. The deep habituation in chair sitting served as an inspiration to design healthy alternatives for sitting, starting with the youth.

The four stools are based on a new sitting philosophy that focuses on postural change using a choreography of postural affordances ¹, which can be translated as opportunities to move.

To support concentration, autonomous and active postures of the body are used to mobilize muscle groups to function actively and keep the body energized. Each stool is designed to incorporate a minimum of four different postures, as frequent variations in alternative sitting positions increases the activity of muscles that would otherwise be left unused in conventional chairs.

To realize the postural changes, the design focuses on the edge of sitting in balance & imbalance. The use of the stools thus requires a measured effort, in which the subtle fatigue of the muscles implicitly encourages the change of postures. Every adjustment of positions implies a necessity to activate other muscle groups.

Rethinking sitting is crucial, but changing sitting means transforming habitus. This is a serious challenge given the inertia built into conventional chair sitting. The transition to a new sitting behavior generates cultural and psychological discomfort as well as practical objections. Western adult users find it difficult and even annoying to deviate from their lifelong built sitting behaviors.

It is evident that design has a big impact on shaping the body's daily movement and therefore is of social importance in influencing the health and well-being of the user. Thus, it is particularly crucial for the design-discipline to rethink sitting and the use of chairs. The 'Active Classroom' aims to fully apply 'body conscious design' into our everyday reality.



In order to not take the 'Active Classroom' stools as a regular design presumption, a research is being conducted (since February 2020) in 3rd grade primary school classes. The younger generation was selected on purpose because this age category is both mentally and physically flexible and most receptive to changes in habitual behavior.

The research project is run in collaboration with Dr. Simone Caljouw, R.U.G., University of Groningen, Faculty of Medical Science, and Dr. John van der Kamp, V.U., Free University of Amsterdam, Faculty of Movement Sciences, both specialised in the theoretical and practical knowledge of Affordances ¹. Previously they have investigated an alternative working environment called 'The End of Sitting' ² developed by Rietveld Architecture - Art - Affordances (RAAAF), to observe how adult workers adapt to an office environment without chairs.

The goal of this research project is to understand whether or not the design approach of the 'Active Classroom' invites postural change and diversity by redesigning seating objects instead of removing the conventional chairs altogether. The aim is to facilitate a more acceptable transition from the contemporary Western culture to embracing a healthier sitting habitus, starting in schools. The research will be published in Autumn 2020.

References

1. Gibson JJ. (1979/1986). The ecological approach to visual perception, chapter 8. The Theory of Affordances.
2. Withagen R. & Caljouw SR. (2016). "The end of sitting": An empirical study on working in an office of the future.



Project information

Project title

'Active Classroom'

Project URL / website

<https://borislancelot.com/AC-stools>

Video URL

<https://vimeo.com/404000449>

Collaboration partners

R.U.G., University of Groningen, Faculty of Medical Science, Dr. Simone Caljouw.

V.U., Free University of Amsterdam, Faculty of Movement Sciences, Dr. John van der Kamp.

Production / completion date

18 January 2020

Previous conference

IAPS 2020, 'Body Conscious Design' - Prof. Dr. Galen Crazz, University of California Berkeley.

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