

## **“Shared Mental Models, Design Thinking and Serious Play: Methods for Envisioning a Sustainable Future”**



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Workshop by Dr. Claudia Schmitt und Cordula Schwart

Center for a Sustainable University, Universität Hamburg, Project HOCH<sup>N</sup> – Sustainability at Higher Education Institutions

[www.hoch-n.org](http://www.hoch-n.org)

## **Shared Mental Models, Design Thinking and Serious Play: Using Lego® for Envisioning a Sustainable Future**

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Research on team processes and performance shows that shared mental models play an important role for effectiveness and achievement (Mathieu et al., 2000). Design Thinking (Kelley, 2006; Brenner & Uebernickel, 2016) as well as Serious Play (Schrage, 2000) are recent trends not only in business organizations but also in educational settings to generate new insights and perspectives.

What if we use these findings, methods and tools for purposes such as envisioning a sustainable future? What if we (re)activate playful mindsets and collaboration techniques for creating shared models of how organizations dedicated to sustainable development would look and feel like? What if we can facilitate sustainability-oriented organizational development by applying innovation modes (cf. Schmitt & Palm, 2017)?

In this workshop, first a short introduction into the above mentioned theoretical frameworks is given; moreover, Lego Serious Play® (LSP) is proposed as one example tool for generating experiential knowledge, to develop new shared views and to discover hidden opportunities within transformational processes (cf. Dornaus et al., 2015): The practical section of this workshop offers the occasion to get familiar with basic LSP related to sustainable development challenges and visions. It shows one way of how inter- and transdisciplinary topics are approached within the HOCH<sup>N</sup> project, a research collaboration on fostering sustainable development at Higher Education Institutions, funded by the German Federal Ministry of Education and Research (BMBF; [www.hoch-n.org](http://www.hoch-n.org)). A joint discussion on the models, team processes and method per se will be the closing section of this workshop.

### **Literature:**

- Brenner, W. & Uebernickel, F. (Eds.) (2016). Design Thinking for Innovation: Research and Practice. Heidelberg: Springer.
- Dornaus, C., Staples, R., Wendelken, A., Wolf, D., et al. (2015). Innovationspotenziale: entdecken, wertschätzen, nutzen! [Innovation potential: discover it, appreciate it, use it!]. Erlangen: FAU University Press.
- Kelley, T. (2006). The Ten Faces of Innovation. Strategies for Heightening Creativity. London: Profile Books.
- Mathieu, J.E., Heffner, T.S., Goodwin, G.F., Salas, E. & Cannon-Bowers, J.A. (2000). The Influence of Shared Mental Models on Team Process and Performance. *Journal of Applied Psychology*, 85 (2), 273-283.
- Schmitt, C.T., Palm, S. (2017, in press). Sustainability at German Universities: The Universität Hamburg as a Case Study for Sustainability-oriented Organizational Development. In Leal Filho, W. (Hrsg.). *Handbook of Sustainability Science and Research*. Berlin: Springer.
- Schrage, M. (2000). Serious Play: How the world's best companies simulate innovation. Boston: Harvard Business School Press.

## Goal of the workshop

Goal of the workshop is to introduce LEGO-Serious-Play (LSP)-method and create shared visions of Higher Education Institutions in 2030 and beyond. Small groups of participants have the challenge to build a model of a sustainable university. The results of the LEGO Serious Play workshop at the Hamburg Sustainable Development Summit (2017) were used to build upon and expand the visions that had already been created there.

## Structure of the workshop

- Introduction of the theoretical background of the LSP-method
- Playful introduction into the method with a short building exercise (skill-building)
- Introduction of the lead question and building of a shared group model for the university of the future
- Presentation and discussion of the models within the group
- Common reflection on the method and its applicability

## Results of the workshop

Results sum up the experience of 1 ½ hours with the LSP-method. After building individual models of the most important element of sustainability education, participants created their shared models for the sustainable university of the future.



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## „THE UNIVERSITY OF THE FUTURE“

Lead question: Which elements do you consider as most important for a university in 2030?

How would a model of a Sustainable University look like?

What is missing in the models from the 2017 workshops?

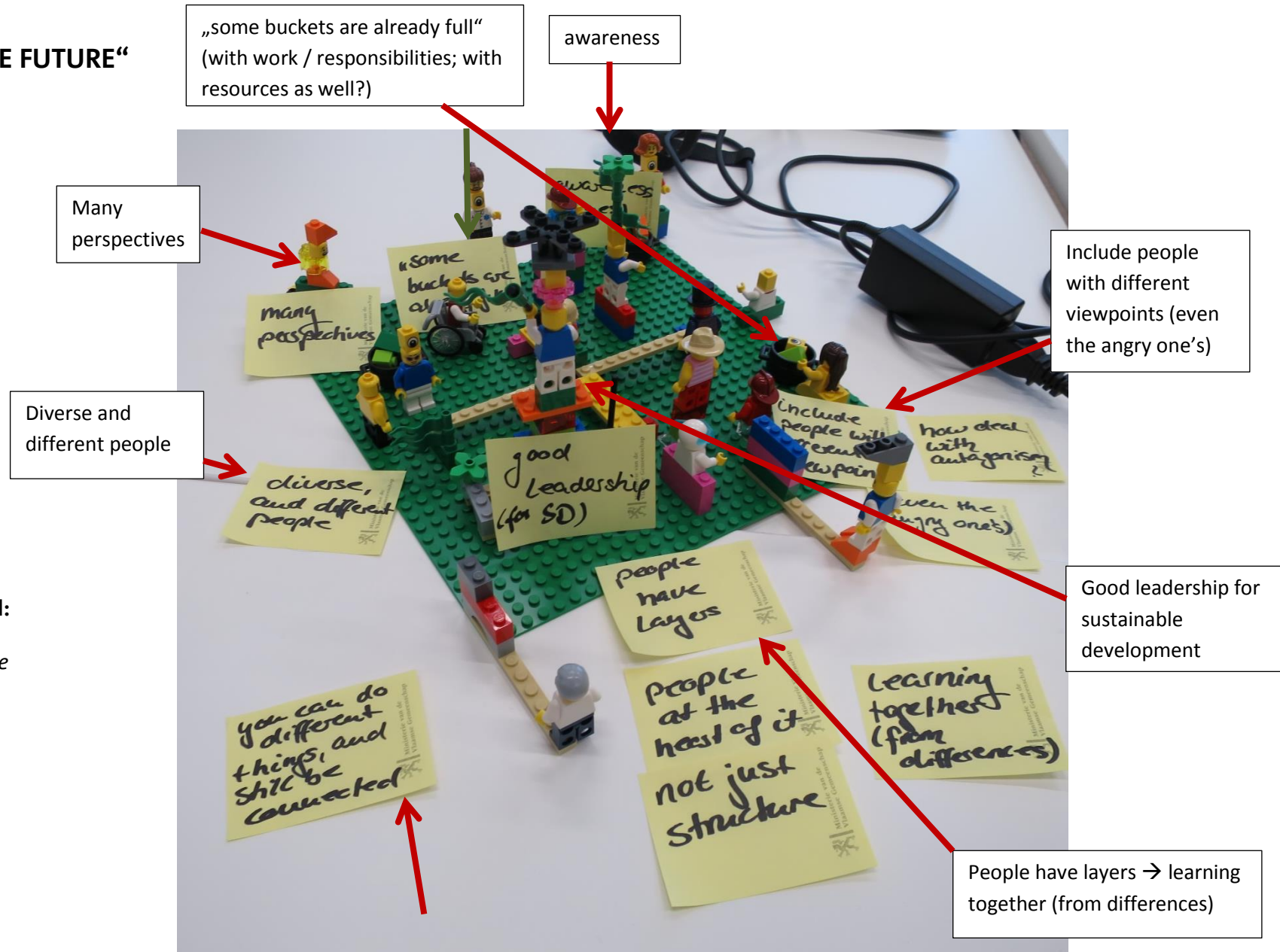
### GROUP 1

#### Core statement of the model:

*“People are at the heart of the university of the future, not just structures”*

#### Questions raised in the discussion:

*“How to deal with antagonisms?”*





## „THE UNIVERSITY OF THE FUTURE“

### GROUP 2

#### Core statements of the model:

*Conflicts have to be included in our vision, but conflicts can be constructive → council as a form of using different ideas and viewpoints in problem-solving*

*Circular interactions (dynamic)*

*Symbiosis, excellence for everybody*

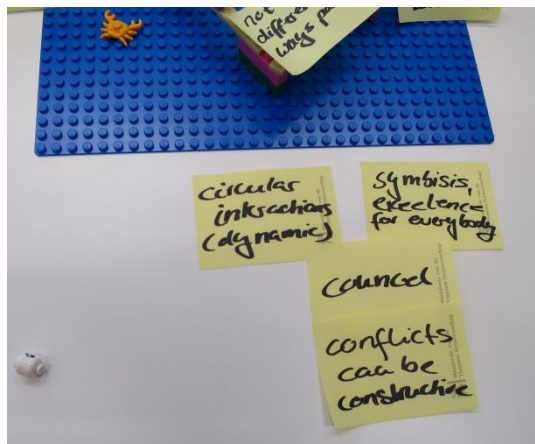


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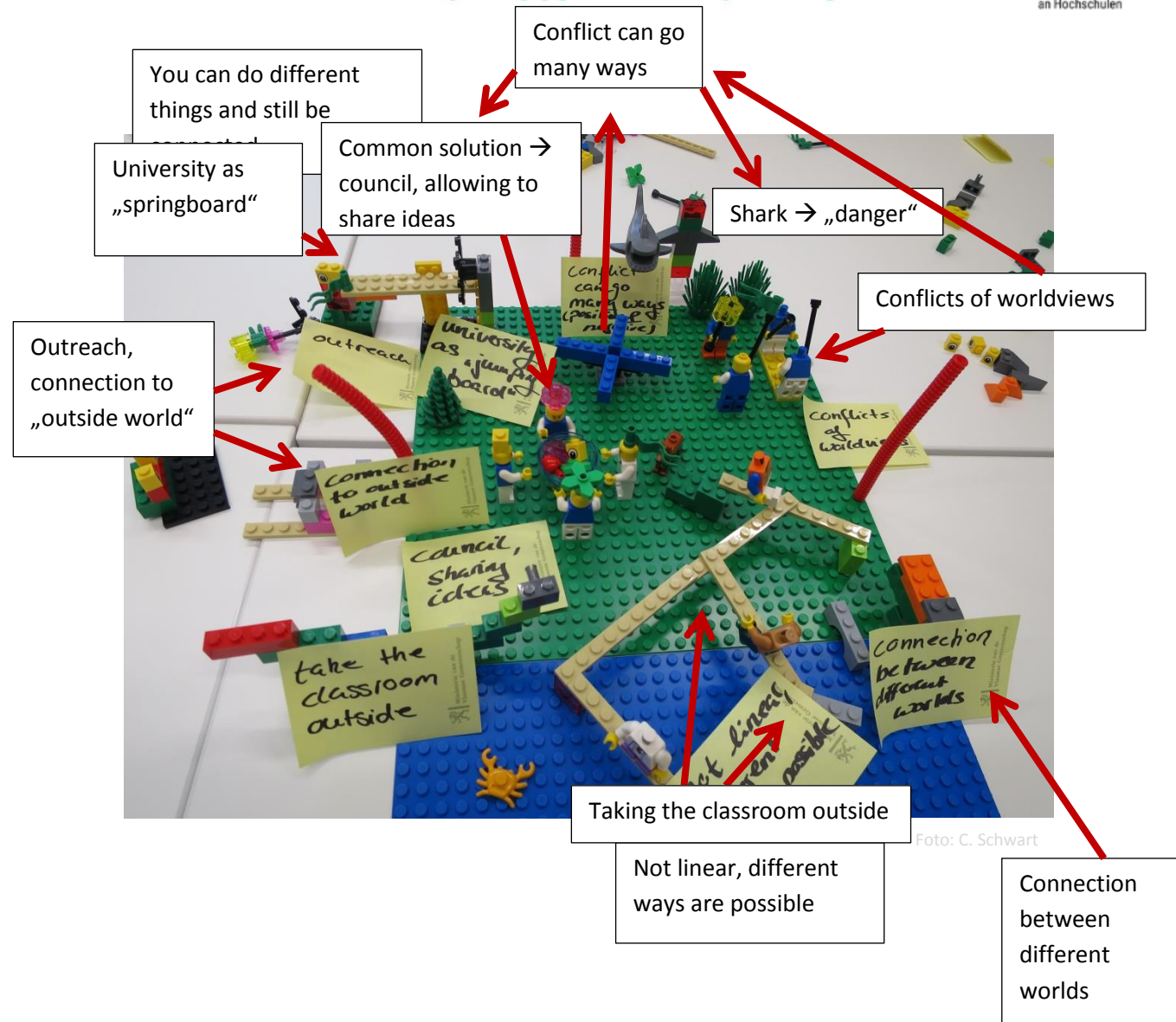


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## „THE UNIVERSITY OF THE FUTURE“

### GROUP 3

#### Core statement of the model:

*University as a community*

*Keeping in mind the  
development of the world if  
nothing changes*

*Concentration on the  
development of individuals in  
complex structures →  
changing minds towards  
sustainable development and  
to new perspectives*

#### Questions raised in the discussion:

*How to bring the people  
together?*

*How to avoid the “nightmare  
future”?*

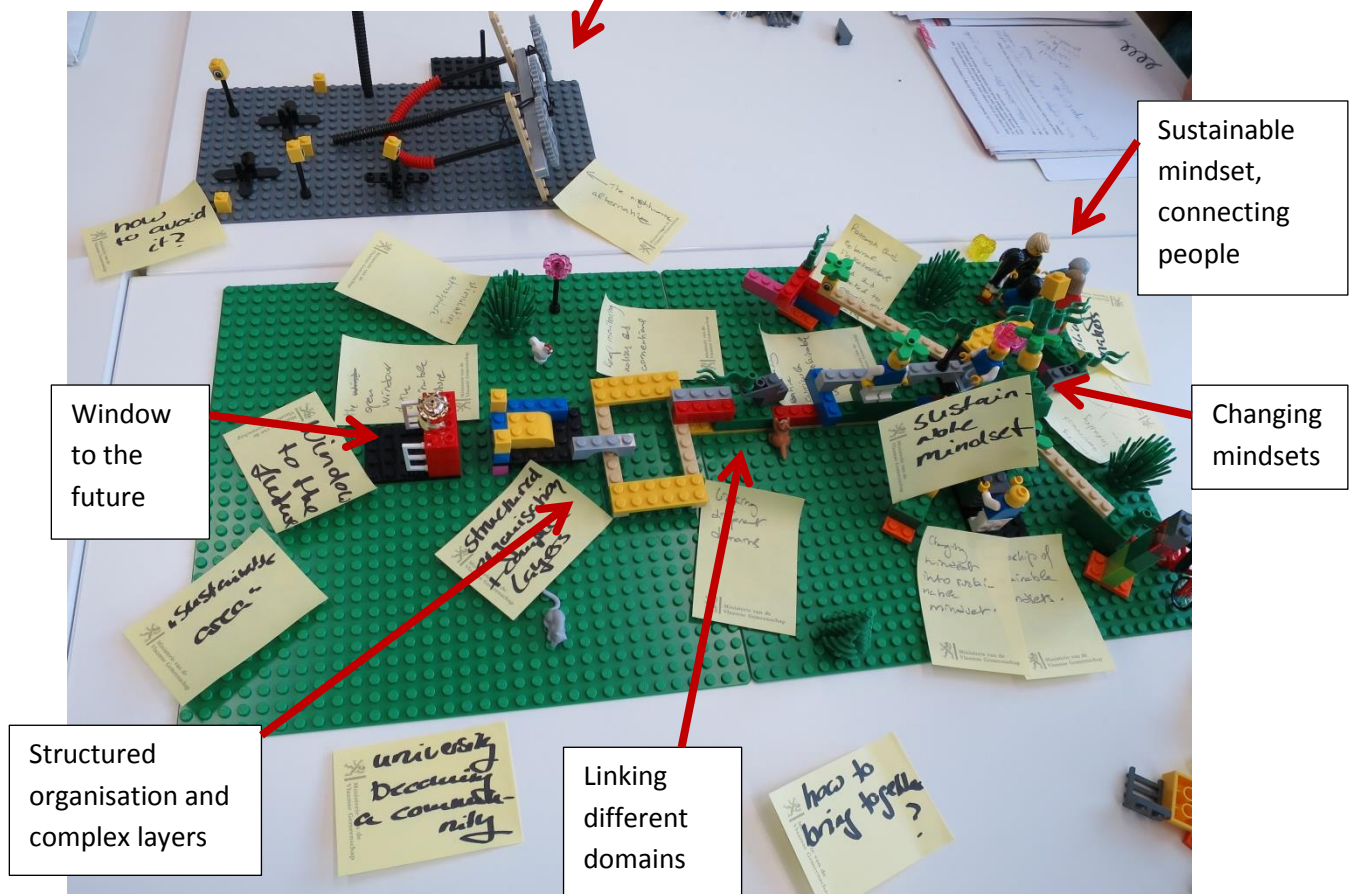


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## „THE UNIVERSITY OF THE FUTURE“

### CORE POINTS

Focus on people and community, as well as the structures that bring them together and mediate the different interests and perspectives

- E.g. through good leadership, councils

Not ignoring the conflicts that arise from different viewpoints

- Use / include conflicts in the design of the institution
- Inclusion of as many perspectives as possible
- Outreach / connection into society at large / “outside world”

Foster sustainable development as a mindset and attitude of interaction

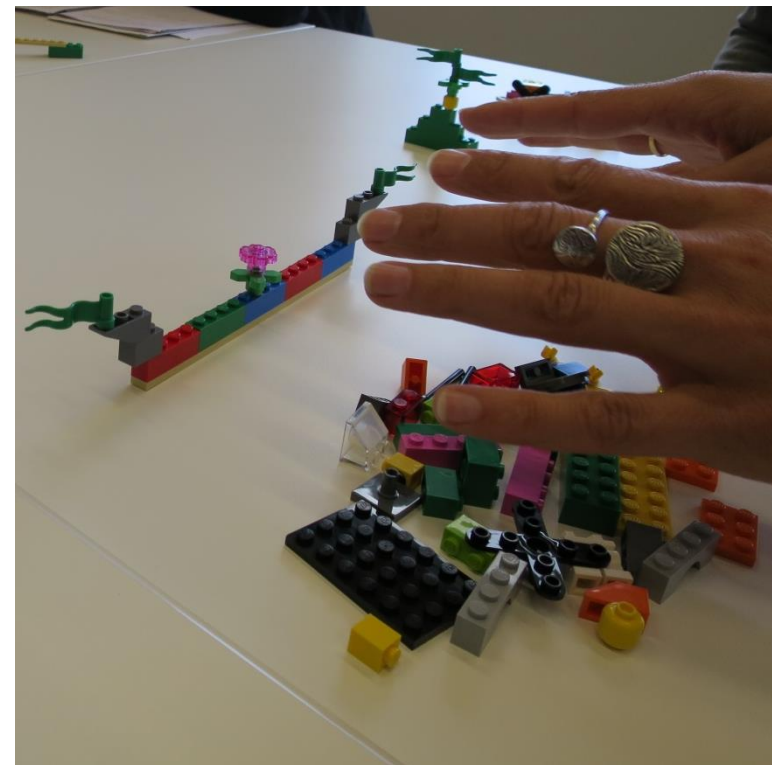


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## Contact and further information

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More results from the **Hamburg Sustainable Development Summit (HSDS) 2017**  
can be found here:

[www.hsds.uni-hamburg.de](http://www.hsds.uni-hamburg.de)