

**„THE UNIVERSITY OF THE FUTURE”**  
**Model of the “Sustainable University” in 2030**



Workshop by Dr. Claudia Schmitt, Wolfgang Denzler and Cordula RÜth

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)

Abstract

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

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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.

Workshops I and II will be structured alike and will take into consideration for participants' interests and expectations; procedures and example topics are flexible and will depend on the needs of the participants.

### **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

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. Each group focused on one specific field of action (research, teaching, operations, governance).

## Structure

- Introduction of the theoretical background of the LSP-method
- Playful introduction into the method with a short building exercise (skill-building)
- Introduction of the leading question, individual models to represent the answers
- Building of a shared group model for the university of the future with focus on one of the HOCH<sup>N</sup>-fields of action

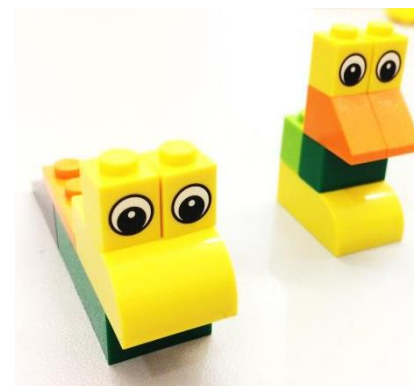
## Results

Results sum up the experience of 1 ½ hours with the LSP-method. After building individual models the participants created their shared models for the fields of operations, education, research, and governance and presented the shared models to the other groups.

## Video and background information

Watch the video of the LSP workshop and read more background information about the event:

<http://uhh.de/knu-hsds-lego>





## „THE UNIVERSITY OF THE FUTURE“

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

How would a model of a “Sustainable University look like”

**Field of action: TEACHING**

New technology  
(fuelled by  
renewable energy)

Colourful curriculum

The old curriculum (in the  
past); not forgotten and still  
valued, but overcome

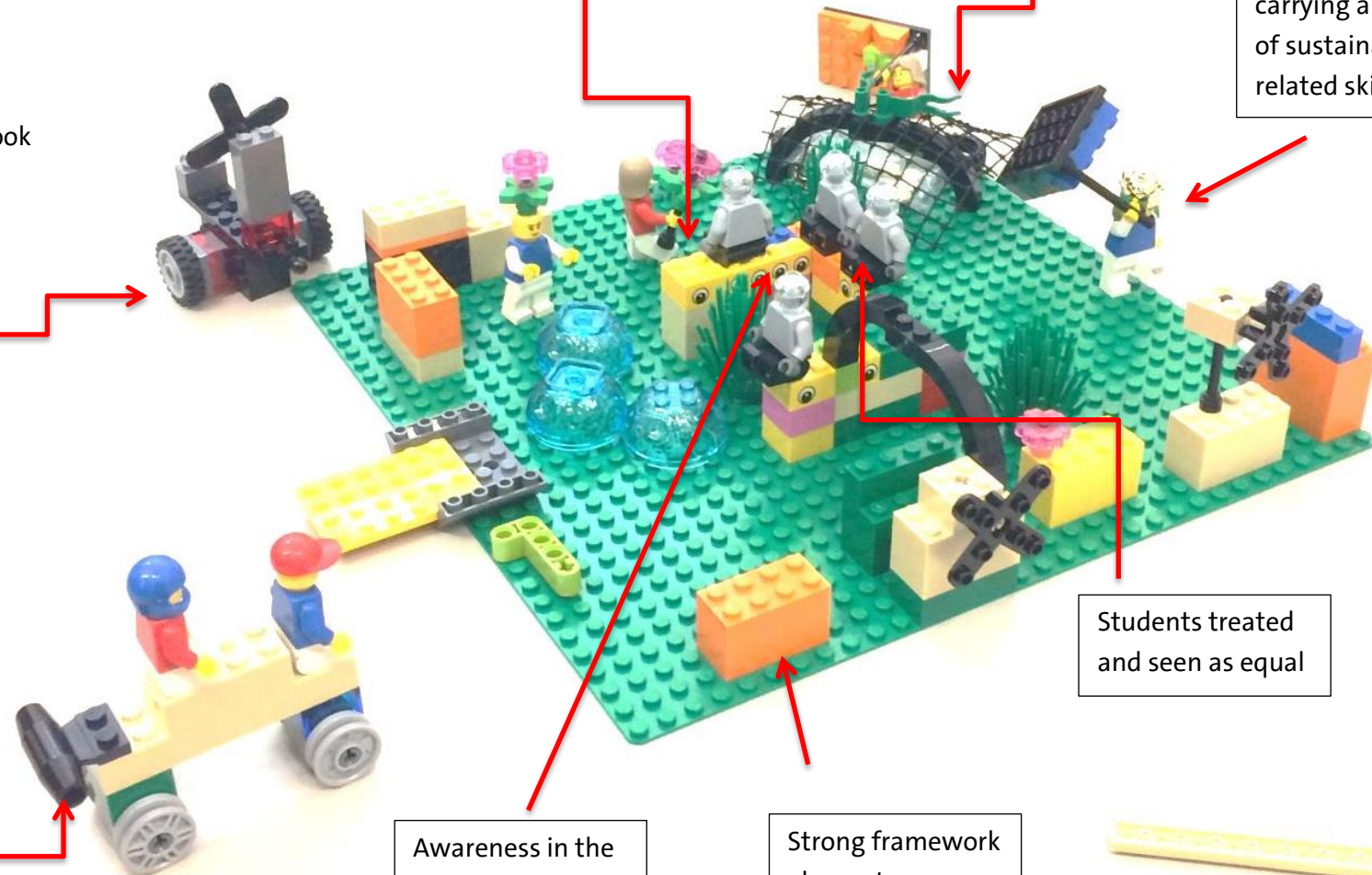
Each one is  
carrying a bundle  
of sustainability-  
related skills

Students treated  
and seen as equal

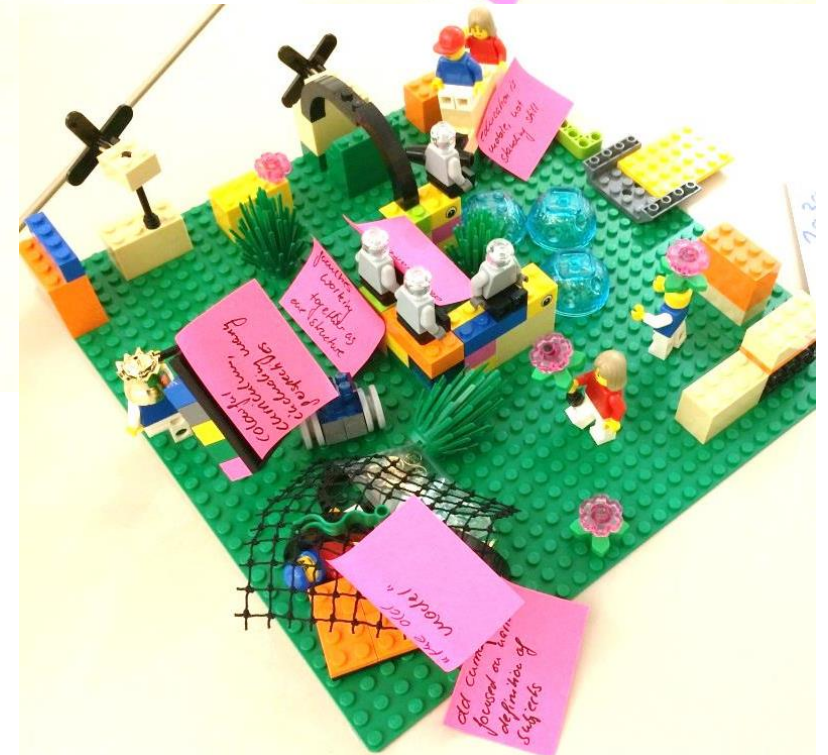
Strong framework  
element

Awareness in the  
center of all  
teaching

Agile / mobile structures



## Lego Serious Play Workshop at 1st Hamburg Sustainable Development Summit 2017



Field of action: TEACHING

Main elements:

- Mobility / agility
- Colorful / diverse education

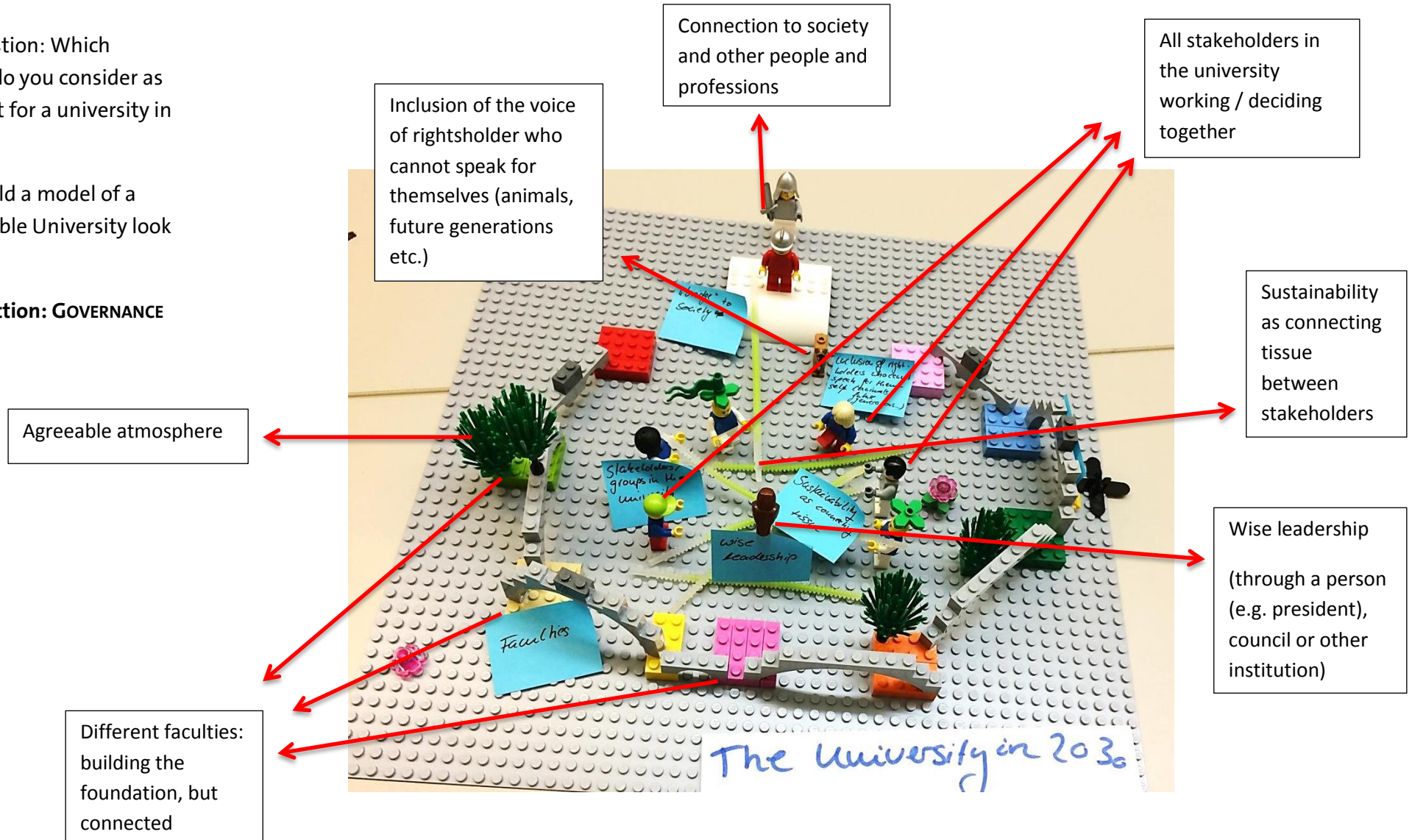


## „THE UNIVERSITY OF THE FUTURE“

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

How would a model of a “Sustainable University look like”

Field of action: GOVERNANCE



## „THE UNIVERSITY OF THE FUTURE“

Field of action: GOVERNANCE

Main element: connection

- Between stakeholders
- Between faculties
- In decision making processes

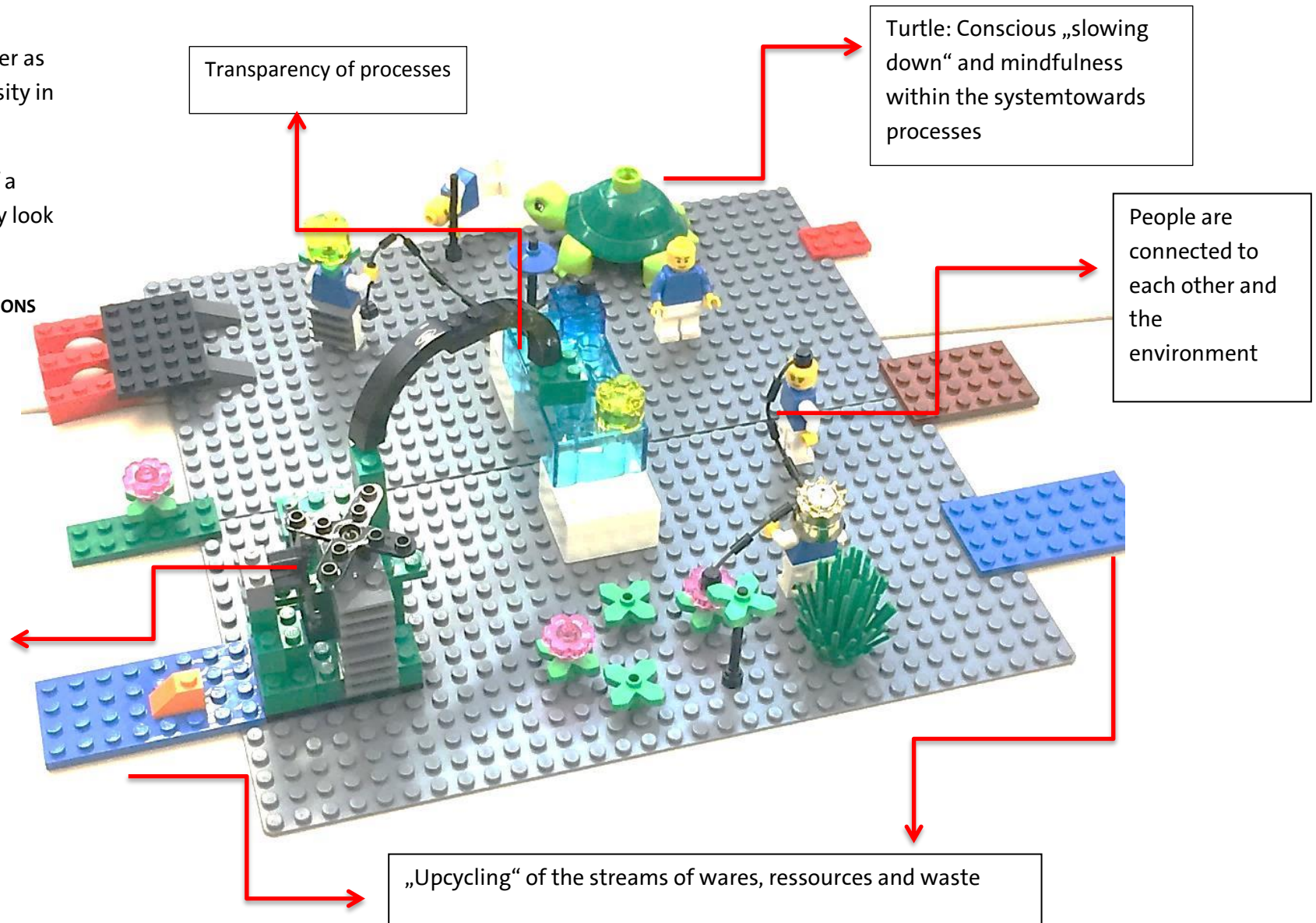




Lead question: Which element do you consider as important for a university in 2030?

How would a model of a "Sustainable University look like"

**Field of action: OPERATIONS**



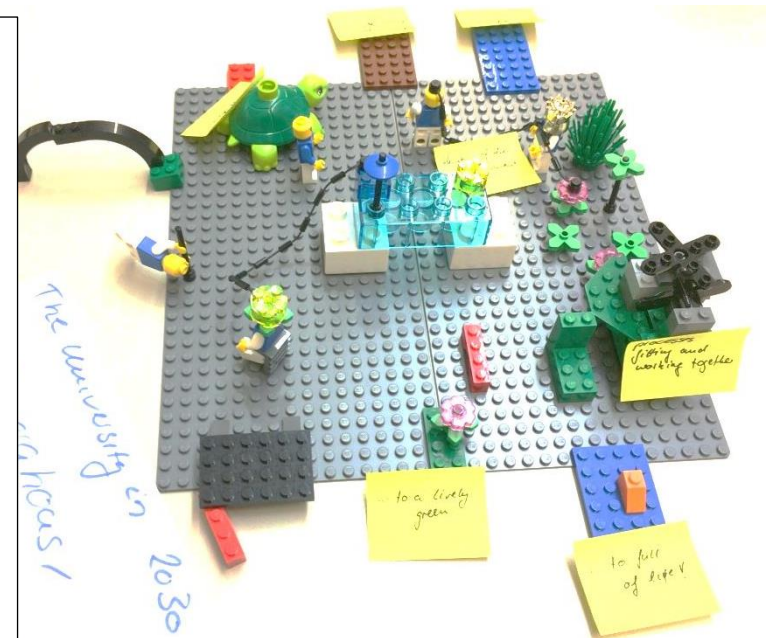




Field of action: OPERATIONS

Main element: processes, visualized as streams

- Idea of upcycling resource-flows ("bringing life to the water")
- Conscious slowing down of processes (symbolized by the turtle)

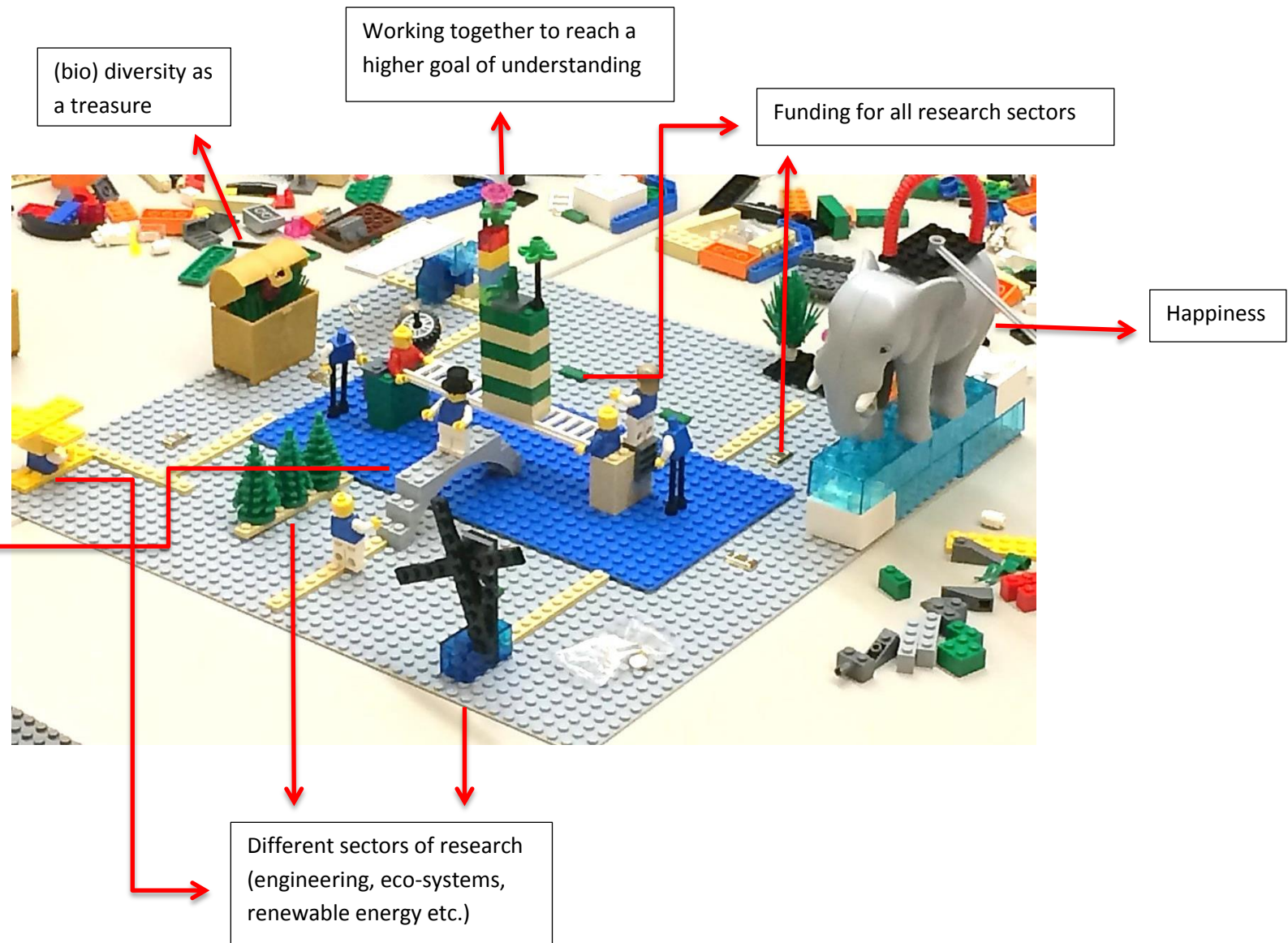


## „THE UNIVERSITY OF THE FUTURE“

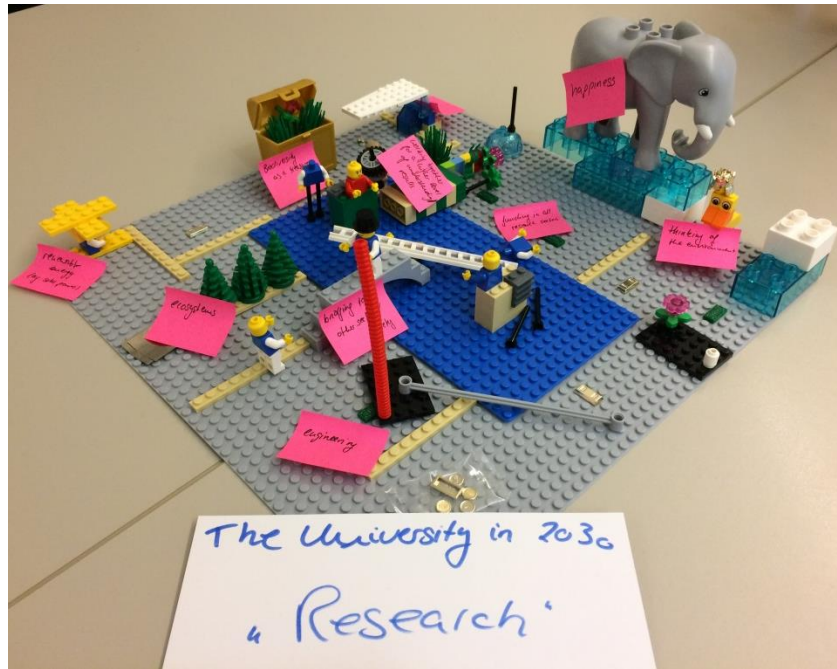
Lead question: Which element do you consider as important for a university in 2030?

How would a model of a “Sustainable University look like”

**Field of action: RESEARCH**





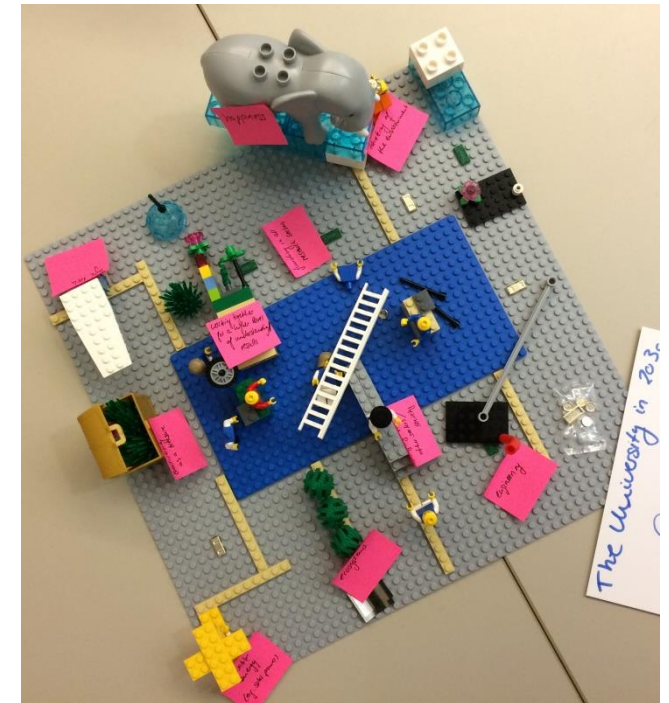


Field of action: RESEARCH

Main element:

Diversity of research projects and topics

- Working together
- Funding of all sectors



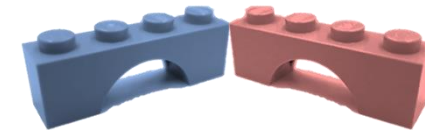
## „THE UNIVERSITY OF THE FUTURE“ – SYNOPSIS

**Lead question:** Which elements do you consider to be important for a university in 2030? How would a model of a “Sustainable University” look like?

The results of the individual models from the various fields of action were clustered according to recurring common elements. All of the referred models share at least the following elements:

### **Transfer:**

Bridges to society and especially stakeholders



### **Interchange:**

Teamwork and participation for interconnectivity and equality



### **Surroundings:**

Colorful feel-good atmosphere, happiness



### **Campus:**

High-tech but at the same time nature-oriented infrastructure and technology

