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## The Relevance of Self-Formation in Teaching Structural Design

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### ABSTRACT

The paper presents an effective workflow of teaching Active Bending Structures in long-term stable hybrid solutions. The Self-Formation-Process [1] is used in the first step for form-finding using physical models. In a second step, the architect and the engineer collaborate interactively while controlling the form with parametric design [2] as well as with scaled structurally working models. Feedback loops with partners from the market and with end-users helps to include wide knowledge in an open innovation process, which includes group dynamic aspects of Self-formation.

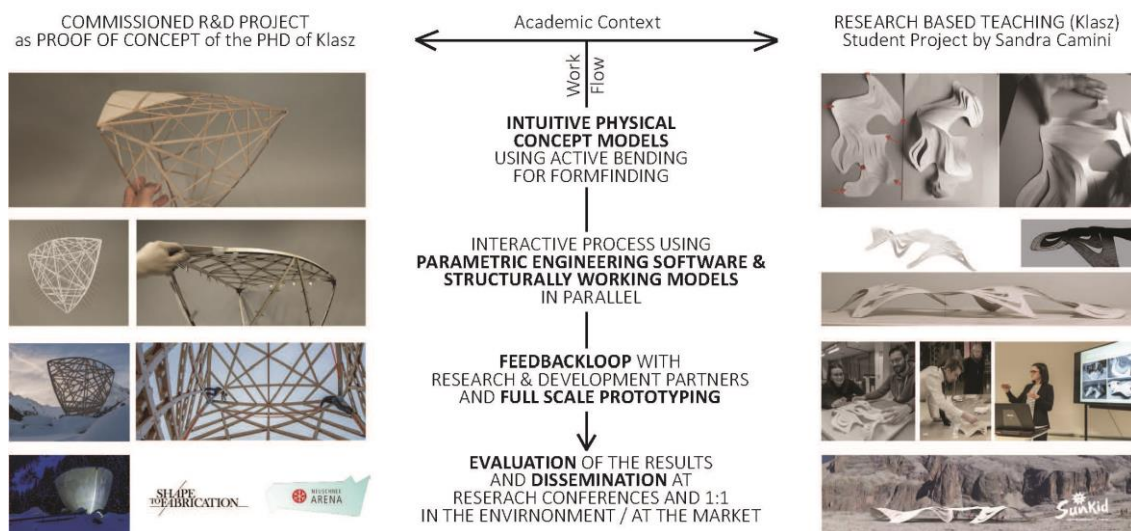


Fig 01: Teaching Workflow of Self-formed Structures using Active Bending for Form-finding; Klasz + Format

### REFERENCES

- [1] Julian Lienhard\*, Holger Alpermann, Christoph Gengnagel and Jan Knippers: Active Bending, A Review on Structures where Bending is used as a Self-Formation Process; University of Stuttgart, Germany; 2013
- [2] Cecilie Brandt-Olsen: Calibrated Modelling of Form-active Structures, Master's thesis in Architectural Engineering, Technical University Denmark, 2016 – Supervisors: S. Melville, J. Solly