

3TU.

Redesigning engineering education

Comparing 3 programme overhauls within the Dutch 3TU coalition



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The need for curriculum innovation

- Attracting students and retention are issues in EE in the Netherlands
- Policies on finance of EE are changing and will impact students and institutions.
- There are barriers in curricula that lead to unnecessary student drop out.

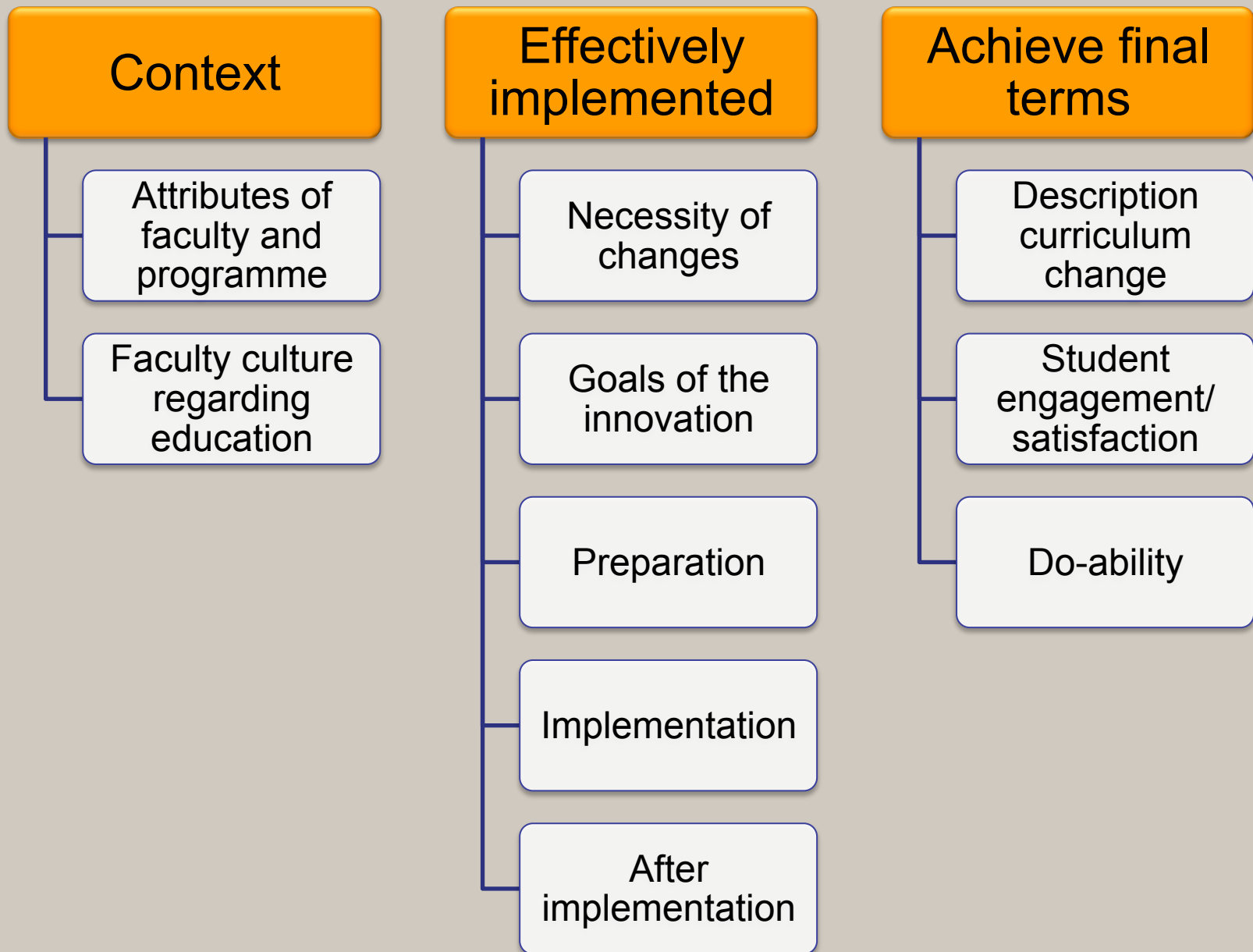
3TU Curriculum Innovations

“Along different lines of reasoning, the three universities have chosen different ways to implement their curriculum change and to structure their modules.

For further research, a recommendation is to find out from the literature in combination with evaluation of experiences what combination of measures works well and what does not, thus allowing the transfer of successful models to each other.” (Klaassen, et al. SEFI 2015)

This project

- Engineering is an interdisciplinary field where scientific knowledge is applied to design solutions to solve complex problems in an “engineering kind of way”.
- In this project we study curriculum overhaul on the programme level: what happened and did it work?



Conclusions

- The heuristic works well as a research tool: it structures the narrative of the interviews
- it helped to clarify omissions and misunderstandings that evolved before, during and after the process
- It served as a baseline to understand where gaps were in the processes followed in the programmes.

What is next?

For more information on the 3TU Centre for Engineering Education and updates on this project: www.3tu.nl/cee

The full report on this project will soon be available on the website.