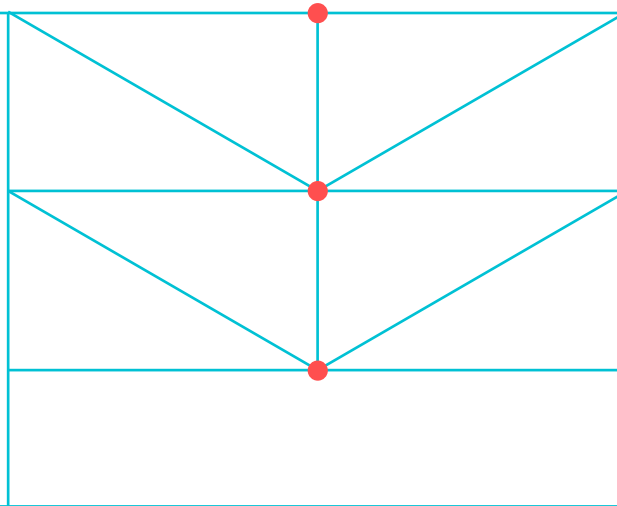
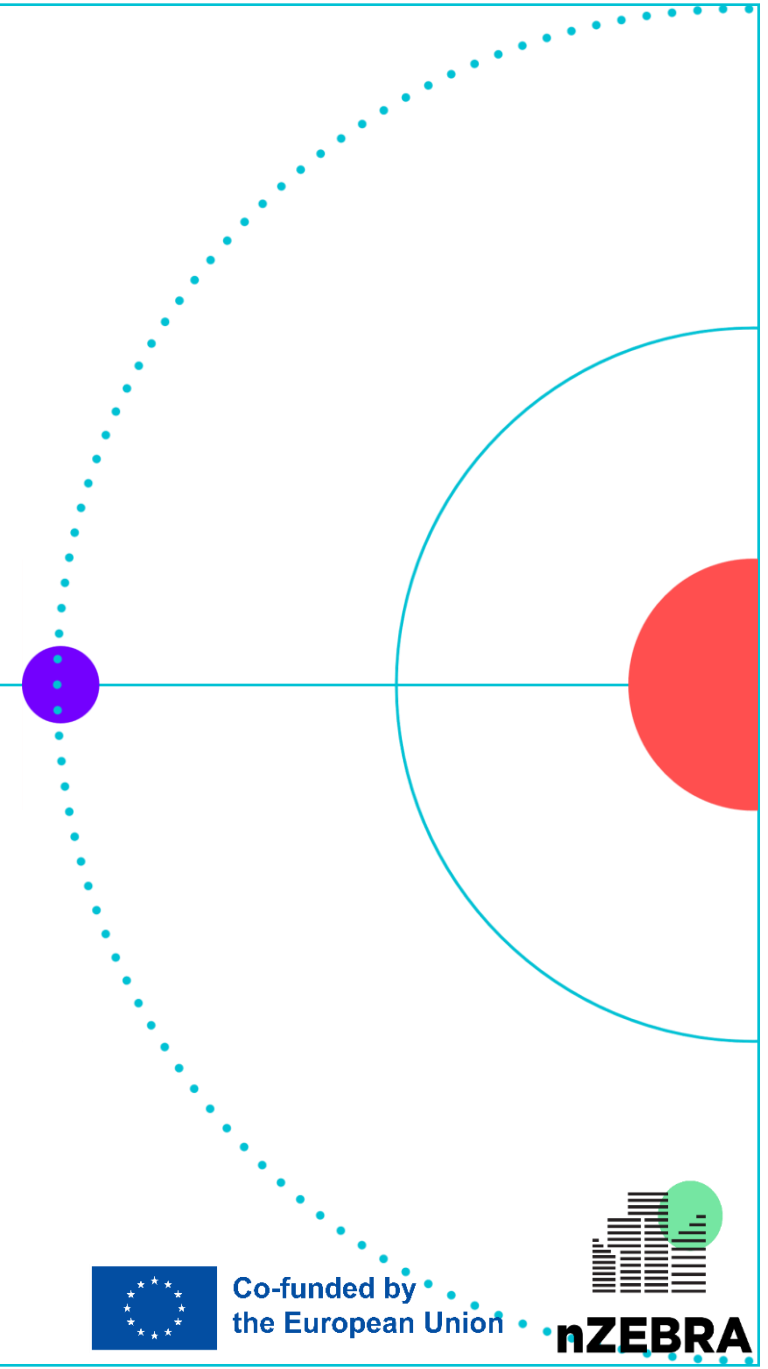


Challenge-Based Learning and Project Assignment

TUHH
Technische
Universität
Hamburg



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Co-funded by
the European Union

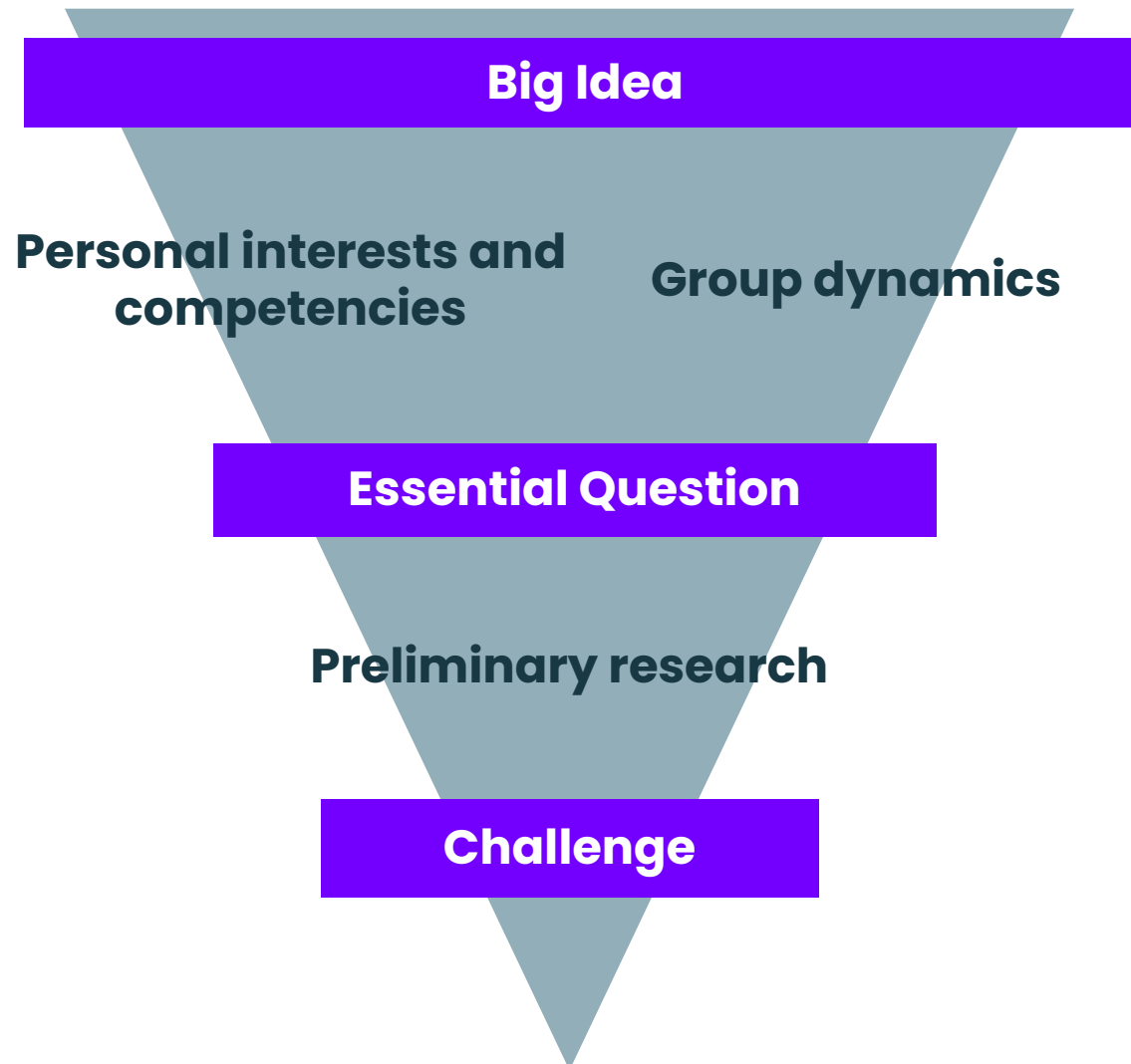


Challenge Based Learning (CBL)

- **Real-life** situations relevant to students
- Interdisciplinary approach and in cooperation with stakeholders
- **Identification** and analysis of a challenge
- **Jointly developed** sustainable solutions



STEP 1. Engage



Example

Big Idea: Sustainability at TUHH

Essential Question: How can the daily life of TUHH students be more sustainable?

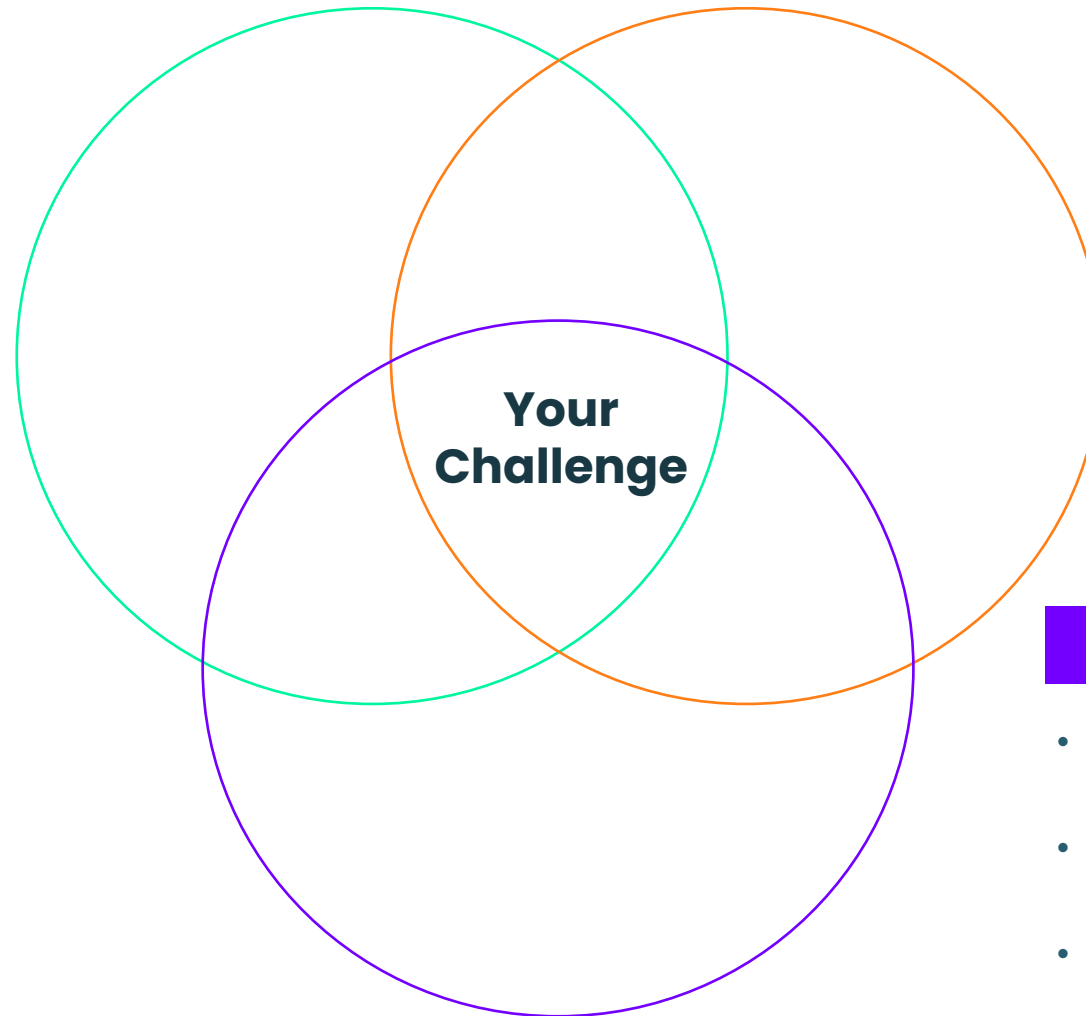
Example challenges:

- Promoting sustainable transportation
- Increasing the share of regionally grown products in the canteen
- Extending the lifetime of textiles through resale or donation

Challenge Definition & Framework

Relevance & Significance

- Why should we focus on this challenge?
- Where are the weaknesses/bottlenecks?
- Is this challenge currently significant?



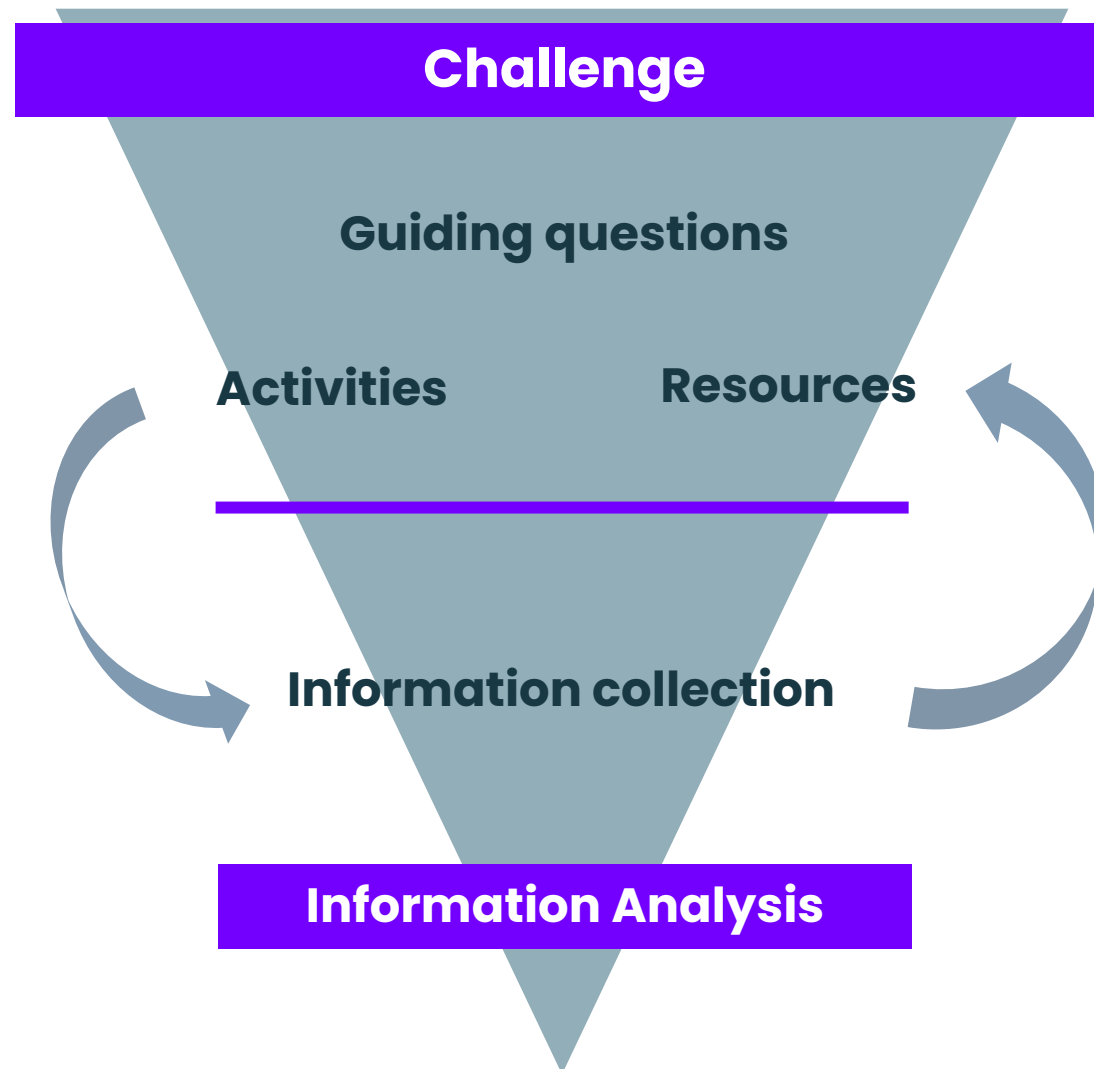
Group competencies & Networks

- Does it align with the team's skills and interests?

Feasibility & Scope

- Are we addressing one or multiple problems?
- Is it achievable within the given timeframe?
- The challenge should have multiple possible solutions

STEP 2. Investigate



- What do we need to know to understand the problem better?
- What do we need to know to propose a good solution?

Example Challenge: Reducing residual waste at TUHH

Guiding Questions	Guiding Activities	Guiding Resources
How much residual waste is produced at the university in one week?	Studying the report	Report from the waste management service
What is the composition of this waste?	Conversation with the waste management service / Conducting a visual analysis	Meeting with the responsible persons / People for visual analysis
...	...	...

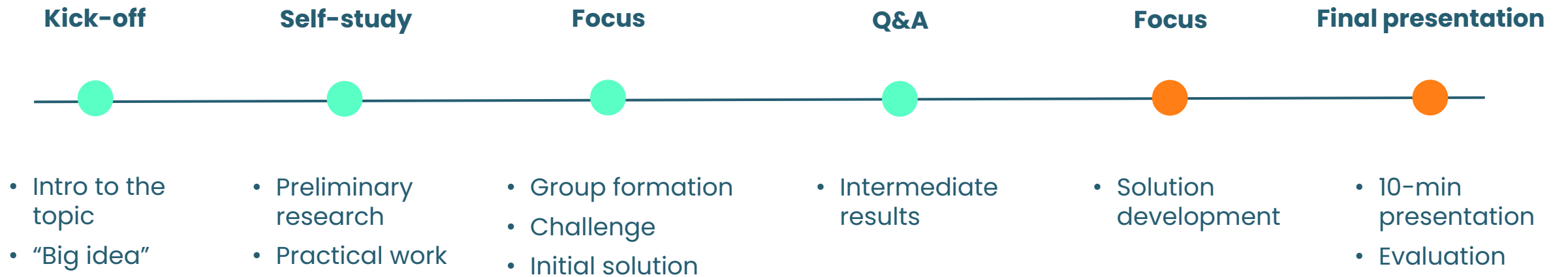
STEP 3. Act

- Developing different solutions
- Selecting a solution and prototyping
- Evaluating the solution

Example Solution: A guide for the university to promote sustainability awareness

- Researching possible measures to promote sustainability awareness among students and staff
- Selecting suitable measures based on criteria such as cost, availability of personnel and expected participation
- Reporting, including expected results and methods for evaluating effectiveness

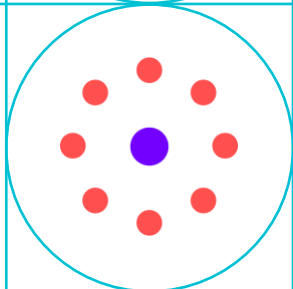
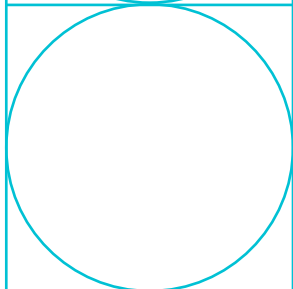
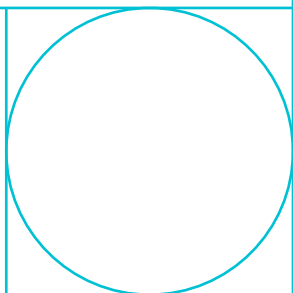
Timeline



Questions?

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