

## Assignment student EnTranCe Energy Transition Community

<b>Project title: Transition of future proofing school-building design</b>
<p><b>Suitable for students of:</b> <i>Multiple choices are possible</i></p> <ul style="list-style-type: none"> <li><input type="radio"/> MBO</li> <li><input checked="" type="checkbox"/> BuitenWerkPlaats Built Environment (2<sup>nd</sup> yr, 1 block)</li> <li><input checked="" type="checkbox"/> Vastgoedlab V&amp;M (3<sup>rd</sup> yr)</li> <li><input checked="" type="checkbox"/> Bachelor graduation assignment (4<sup>th</sup> yr)</li> <li><input type="radio"/> Bachelor internship (limited possibility in daily guidance)</li> <li><input checked="" type="checkbox"/> Research assignment in curriculum year 4</li> <li><input checked="" type="checkbox"/> Honours research assignment</li> <li><input checked="" type="checkbox"/> Master thesis</li> </ul> <p><b>Study Program: Built Environment (SABE), IPD, Facility Management, Vastgoed&amp;Makelaardij, PABO, Technische Bedrijfskunde, e.a.</b></p>
<b>Period:</b> februari 2018 – juni 2018
<b>Language:</b> NL/ENG
<p><b>Client:</b> ETC sustainable buildings transition group future changes Veenstra (Integrated product design; quantified-self institute)</p>
<p><b>Internal client:</b> Ron de Vrieze; lector Mieke Oostra</p>

### **Background (facts, situation sketch and parent/organization goals)**

Fast global changes affect not only the climate but also the construction industry. New questions arise, for example, how to deal with these changes and all different and even contradictory interests, fast changing needs and unknown future changes. In order to come to a real (energy) transition, construction industry has to reconsider its regular and mainly technical oriented processes of (school) buildings design. Construction industry wants to increase their focus on end-users interests, on a circular approach of construction materials and energy resources, and wants to be more adaptive for future changes. To succeed into a real innovation it needs a multi-disciplinary approach.

Earlier research points out that new interests might not come from construction industry only, but from other disciplines (see IKEA product development of houses). It might be seen as a kind of infill industry that is adaptive for future changes. To establish a balanced programme of requirements it needs more research from this 'open building' approach of design (e.g. prefabricated elements, components, modular buildings). There are no preliminary researches available at ETC, but a programme of requirements to establish a new school-building is available.

### **Problem (description of the undesirable situation)**



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University of Applied Sciences

The problem is that construction industry might be too conservative to incorporate fast changes from new technological developments. Other disciplines, for example, industrial product design of consumer market approaches, might be far more adjusted to incorporate this challenge and add their knowledge into construction industry.

## Objective (description of the desired situation)

Desired is to design some (modular) building components that are adjusted to end-users and society, and flexible enough to change their form and/or function.

## Result deliverable/product (what is ready if the project is finished) with list of part results

Study report of the three designs of a classroom/project room that consists all requirements needed for end-users in primary schools.

## Competence level

2, 3

## Connected to Change Agency ETC

*Multiple choices are possible*

- Sustainable Building
- Sustainable Mobility
- Local Communities

## Interested or further information

You will be working in the context change agency sustainable buildings on EnTranCe. You will be working in a multidisciplinary team. For detailed information on this assignment contact R.de. Vrieze (EnTranCe); [r.de.vrieze@pl.hanze.nl](mailto:r.de.vrieze@pl.hanze.nl); M 06 22399269

## How to respond to the vacancy

Send a motivation letter and CV to EnTranCe, Energy Transition Community, [etc@org.hanze.nl](mailto:etc@org.hanze.nl) Attn. Mrs. Jacqueline Joosse, Office Manager EnTranCe. **Note:** If the job does not fit directly with your specific interest, please contact via [etc@org.hanze.nl](mailto:etc@org.hanze.nl) or 050-5954708

**Website:** <http://en-tran-ce.org/for-students/assignments/>

