



Developing sensor technology innovations with business potential together with students: let's return to the master-apprentice approach

**share your talent.
move the world.**

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Introduction

73 Innovatie-werkplaatsen

Filter op zoekterm

SPEERPUNT

- Energie
- Healthy Ageing
- Ondernemerschap

KENNISCENTRUM

- Centre of Expertise Energy
- Centre of Expertise Healthy Ageing
- Centrum voor Ondernemerschap
- Kenniscentrum Biobased Economy
- Kenniscentrum Kunst en Samenleving
- Kenniscentrum NoorderNunnie

SCHOOL

- Academie Minerva
- Academie voor Architectuur & Built Environment
- Academie voor Gezondheidsstudies

APK Werkscan

Veel sterker dan vroeger is hierdoor een oriëntatie op competenties en rollen bepaald geworden in plaats van op de vaste functierollen en -inhoud...

Accessibility

De participatiemaatschappij dreigt echter de brede groep van mensen - in alle leeftijden - met een psychogeriatrische of psychiatrische achtergrond...

Active Ageing Diabetes

Een actieve en gezonde levenswijze (voldoende beweging en gebalanceerd voedingsgedrag) is één van de beste manieren om de gevolgen van diabetes te...

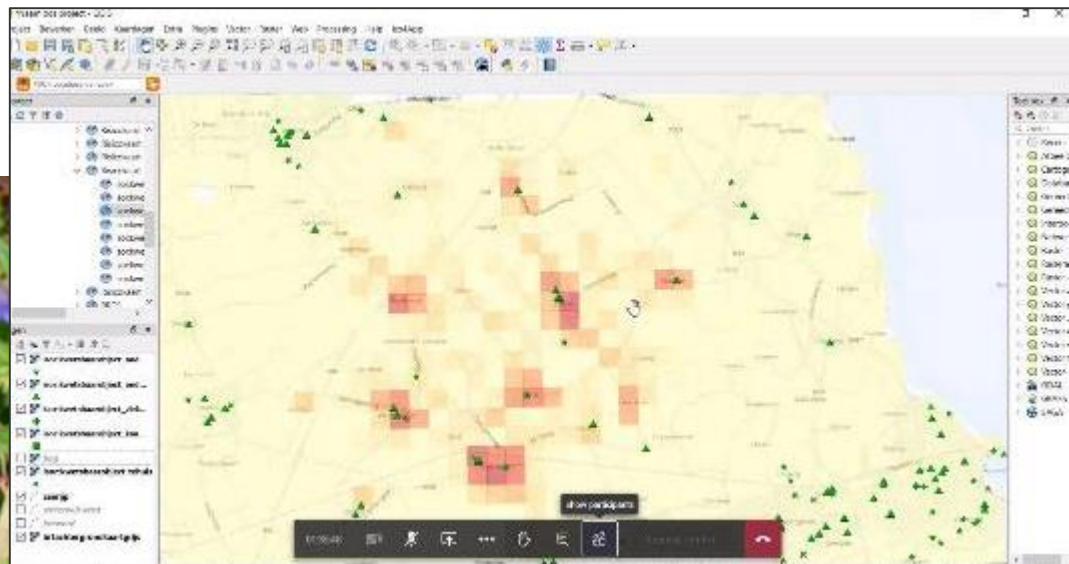
Active Ageing Ouderen

In de innovatie-werkplaats 'Active Ageing Ouderen' werkt de Hanzehogeschool Groningen (Leerstool Healthy Ageing, Allied Health Care and Nursing)...

- Real world learning environments are becoming increasingly popular in higher education¹
- Successful student/tutor participation is key
- How you organise this participation effects success
- Case: ID3AS programme

¹ Cremers et al, Design principles for hybrid learning configurations

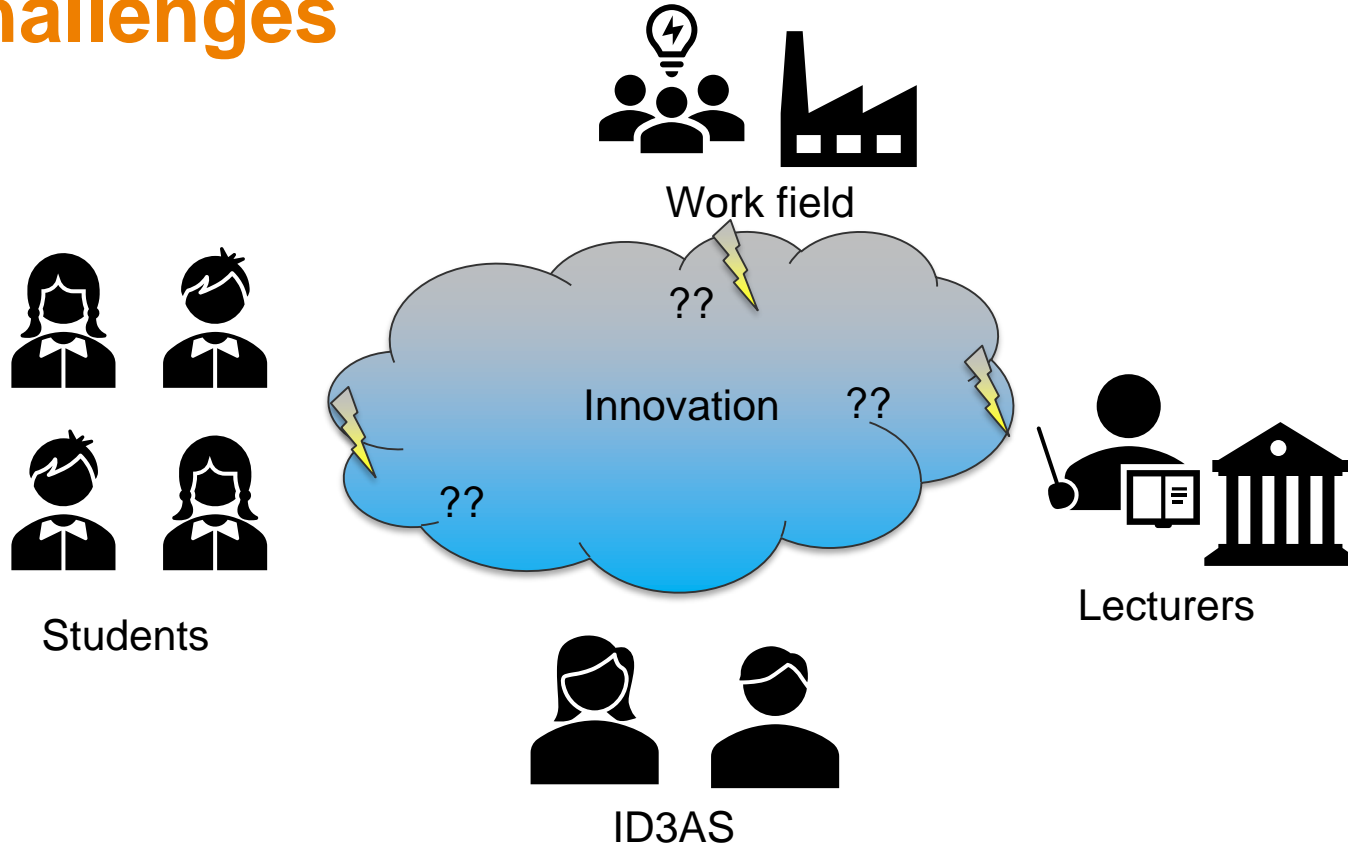
ID3AS



ID3AS

Entities	Nr
Student groups	>20
Individual graduates	5
Total students (Engineering, Business, Law, IT, Communication, Lifesciences)	>80
Lecturer/researchers	13
Companies and research institutions	24
Projects (Hanze only)	10

Challenges



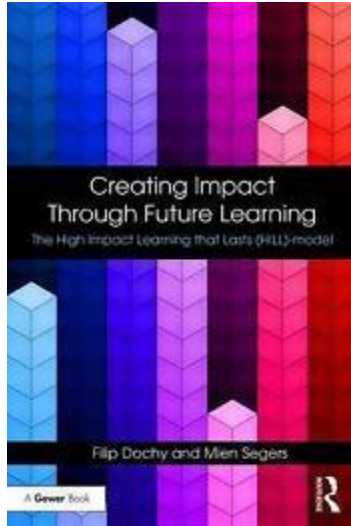
Interventions

Nr.	Intervention
1.	From fixed assignments to 'What do you want to contribute?'
2.	Company and student share office, controlled by system under development
3.	Expert training of students by company
4.	Lecturers active as foreman
5.	Intensive project startup under guidance of AI-experts
6.	Expert guidance on establishing business cases
7.	Involving tutors and students in larger project meetings

Effects and discussion

- Students: more learning, ownership and motivation
- Tutors: more learning, responsibility, growth
- Companies: satisfied with better results

Effects and discussion



From saying to doing interdisciplinary learning: Is problem-based learning the answer?

Diana Stentoft

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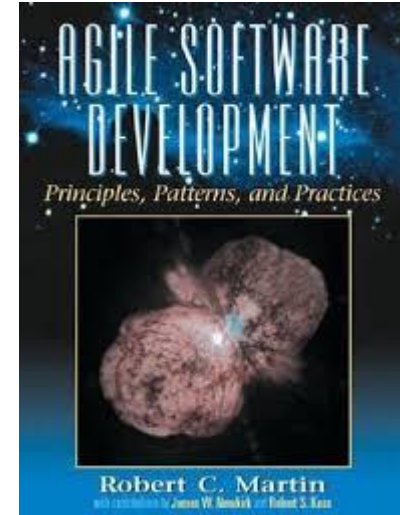
<https://doi.org/10.1177/1469787417693510>

Article information ▼



Abstract

Problem-based learning is often characterised as an approach encompassing interdisciplinary learning; however, little attention has been explicitly paid to what a claim of interdisciplinary problem-based learning means in practice. Even less attention has been given to address the consequences of interdisciplinary problem-based learning for students, teachers and institutions of higher education. This article examines the intentions and principles of interdisciplinary learning and problem-based learning, respectively. This examination reveals considerable overlaps of the



2 Dochy, (2015) High Impact Learning

3 Stentoft (2017) From saying to doing interdisciplinary learning [...]

4 Martin (2002) Agile Software Development

Effects and discussion

- Scalability is valid concern
 - Lecturers gain experience and confidence
 - Economy of scale
 - Better results → companies more willing to contribute

Proposition and further research

- **Proposition:** in complex projects, a more hands-on involvement of lecturer-researchers and a different way of guiding students ('master-apprentice', agile) will give students a better learning experience while also bringing about better project results.
- We are planning further research in a controlled setting of Hanze UAS research group.

Questions?

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