

Enhancing EIA and SEA education in Denmark: Collaborative competence-building



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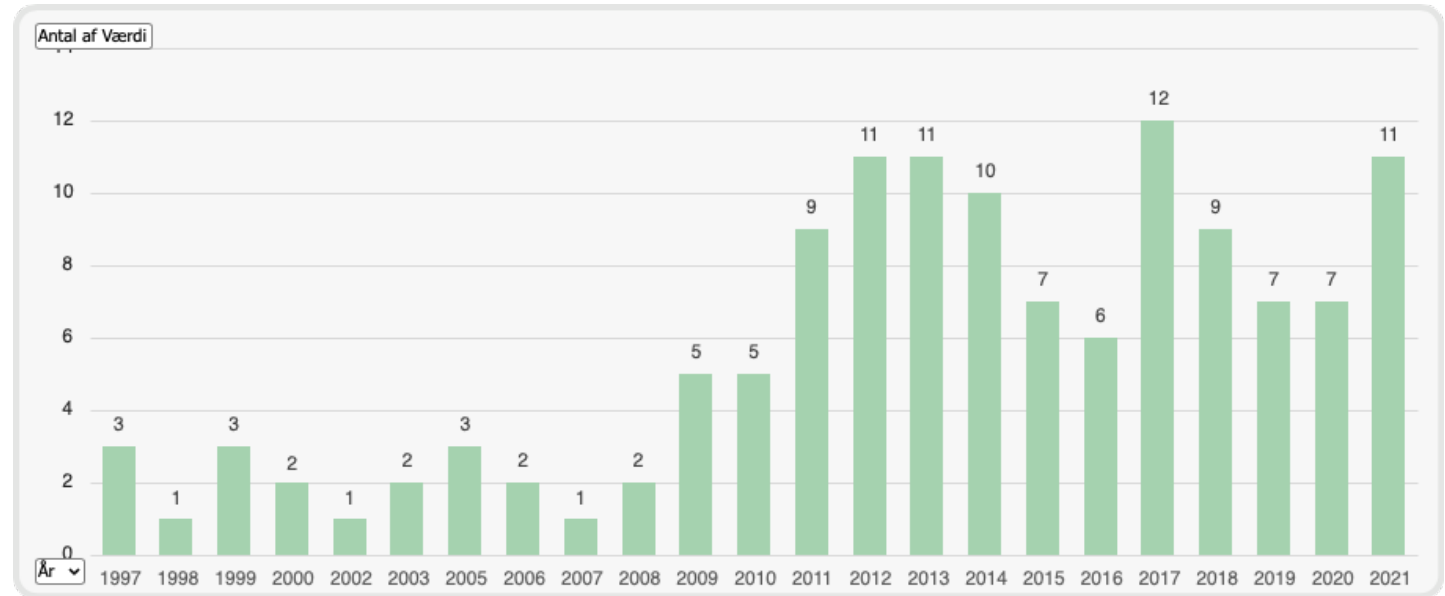
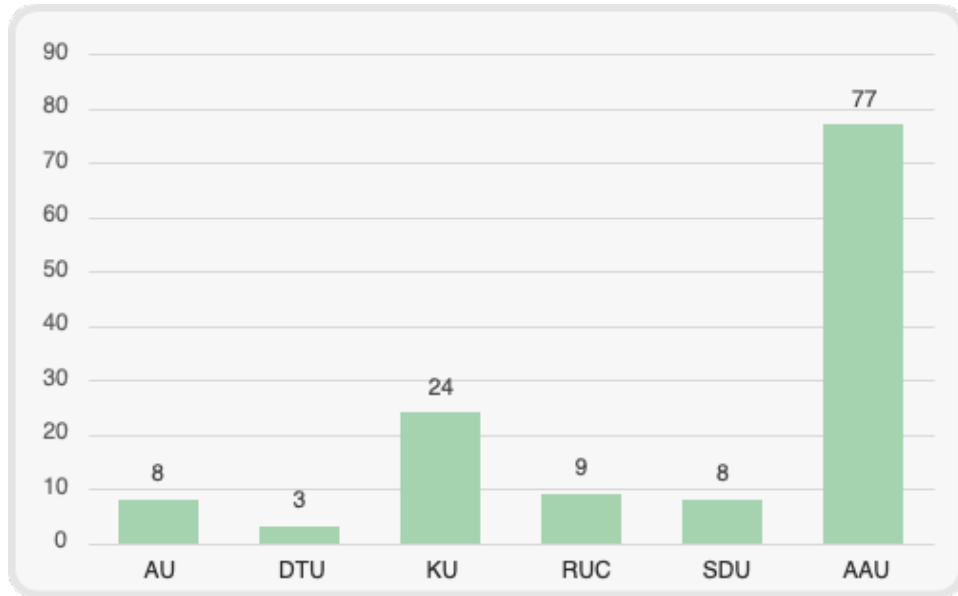
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A few results from mapping 20 years of Danish IA research (1997 – 2021)



Peer-reviewed articles within IA (excluding LCA)

Significant call for continuing education

Research

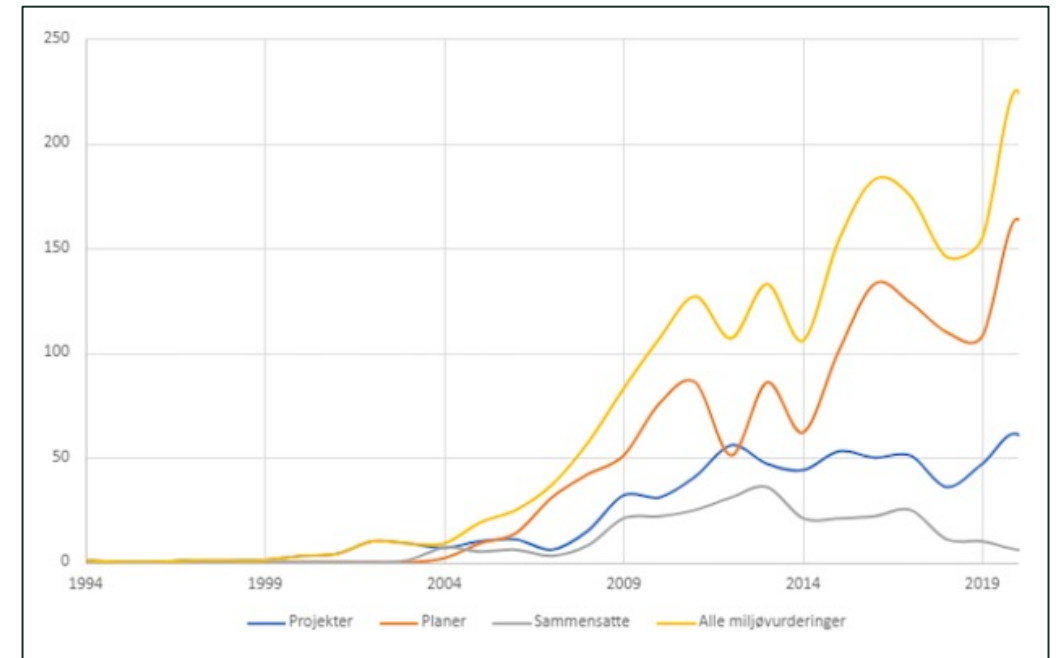
1. Revealing significant challenges and potentials for practice

State of practice

1. Significant increase in the need for environmental assessments – doubling over 10 years
2. Practice in the field require greater scope and detail
3. Massive shortage of labour

Policy context

1. Shorten or reorganizing master programmes
2. Cutting study places



Further, more than 20.000 screenings per year

(Source. The DREAMS project, <https://dreamsproject.dk/reports/>)

Professional development & continuing education

Professional development

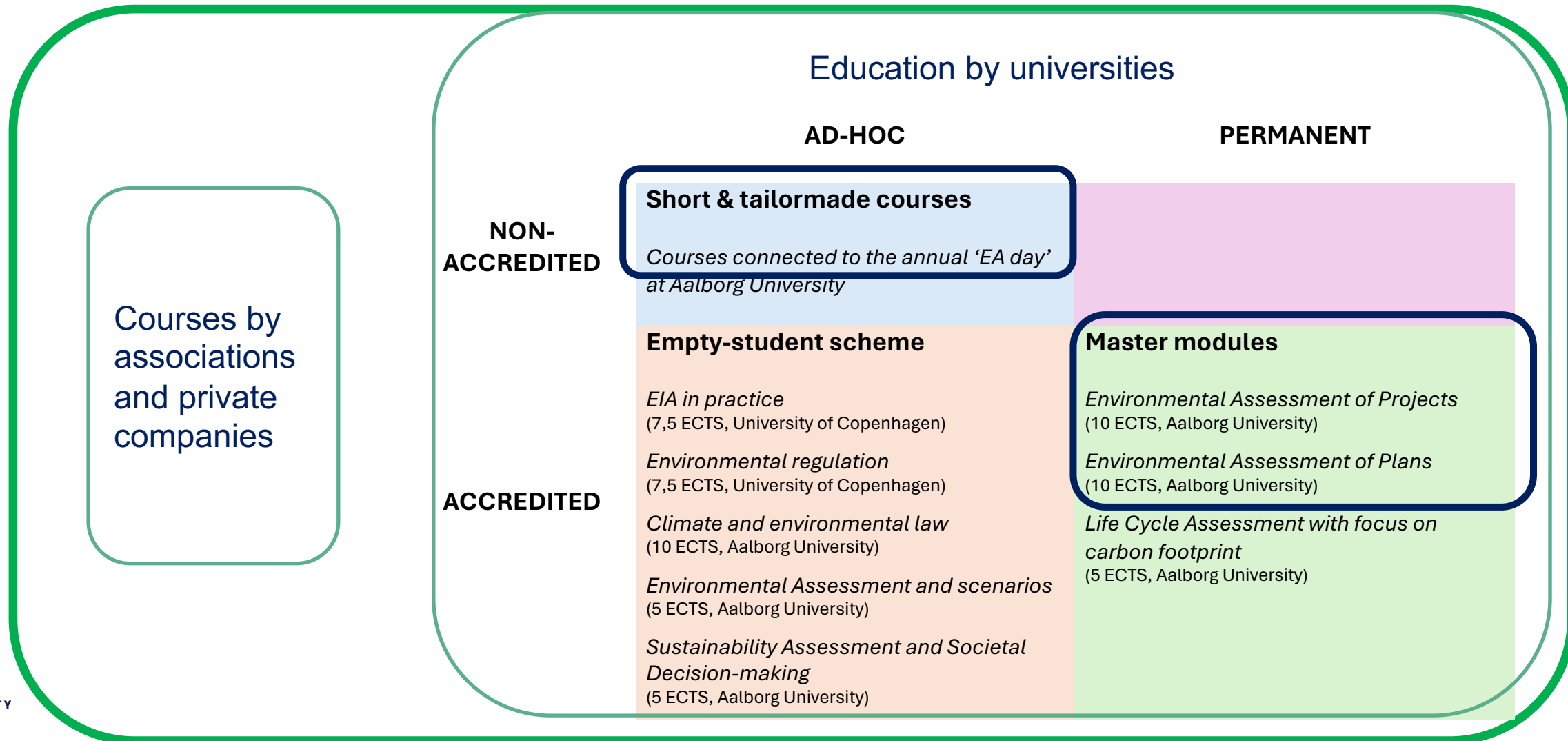
- Umbrella term describing ongoing learning process where practitioners enhance skills and knowledge.

Continuing education

- Formal learning activities, often provided by higher education institutions, that practitioners with a completed degree undertake.



Elements composing the Danish ecosystem of continuing IA education





**Problem-based
learning as the
educational method**

Main characteristics of PBL

| | |
|---|--|
| Problem orientation | Students work with authentic, complex problems – theoretical or practical |
| Project organization | Students independently plan, carry out, lead, and communicate about a project process |
| Experience learning | Students integrate their own experiences and interests |
| Student-directed learning | Students have the leading role and ownership of the learning process |
| Team-based collaboration and social learning | Students collaborate to solve problems in an interpersonal way learning from each other |
| Interdisciplinary learning | Students deal with complex problems and thus need to apply interdisciplinary studies |
| Exemplary practice | Students can transfer the learning outcome to other situations, including transferring theoretical knowledge to practice |

Table 1. PBL principles in short (Barge, 2010; Kolmos, Fink and Krogh, 2006; Kolmos et al., 2008).

'The Aalborg Model'

Through PBL, students:

- Work with real-world problems related to environmental assessment and sustainability (SDGs),
 - Collaborate with societal actors,
 - Attempt to find solutions,
 - Develop teamwork ability,
 - Develop the agency towards sustainable development.
-
- Main EIA and SEA teaching and learning takes place within the projects

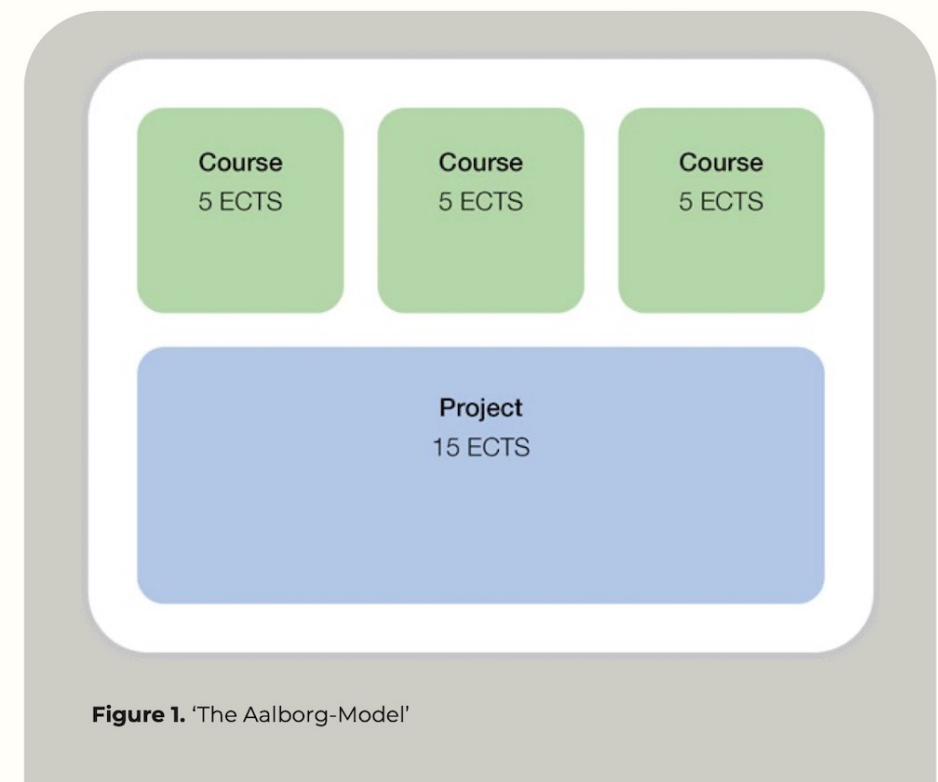


Figure 1. 'The Aalborg-Model'

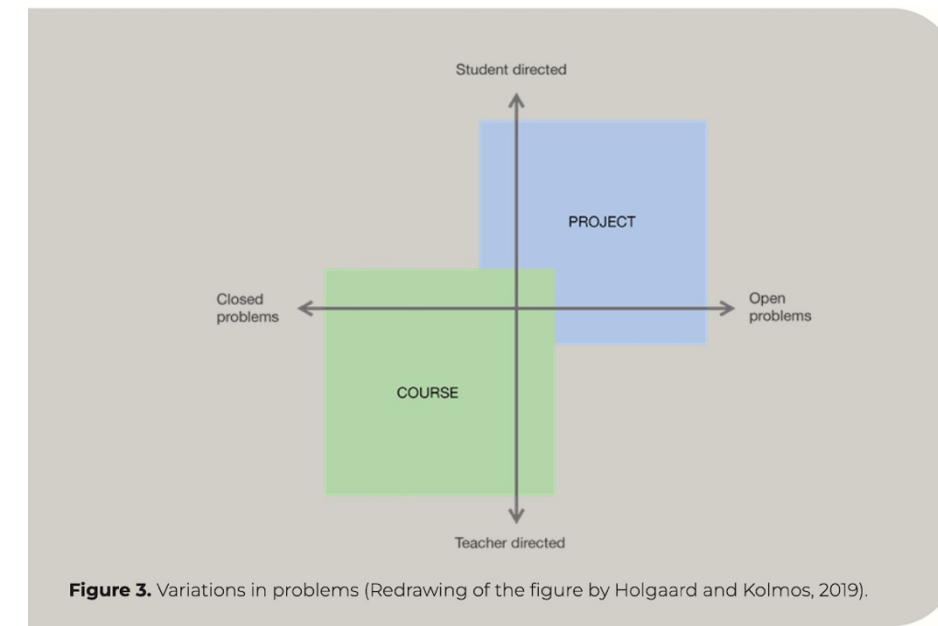


Figure 3. Variations in problems (Redrawing of the figure by Holgaard and Kolmos, 2019).

Core values embedding PBL

(1) Growing the Pie

Actors in the ecosystem collaborate to produce education-growing strategies and initiatives – honouring each other's contribution.

(2) Bridgebuilding research and practice

Continuing education is an arena for making research and practice meet to inspire and qualify each other's work.

(3) Inclusiveness and transdisciplinarity

Participants and teachers represents all the IA actor

(4) Knowledge sharing

Honest sharing of experiences, perspectives, and challenges.

(5) Leadership and agency

Supporting IA actors to explore and seek agency through their own practice and organization

(6) Relevant for society

Guided by contemporary societal concerns and challenges for IA to proactively engage with

(7) Sustainability at the forefront

Underlying WHY we are having IA - and the underlying environmental policies and objectives related to the environmental factors




Impacts of the ecosystem and value based collaborative competence development


- Rich and diverse educational landscape based on mutual respect and shared goals of developing capacity and competence.
- Arena for making research and practice meet to inspire and qualify each other's work.
- Space for exchange across authorities, consultants, researchers and developers builds a sense of community and shared meaning.
- Creating trust and network – also beyond the educational arena.
- By ensuring that education is responsive to societal challenges, EIA and SEA stay relevant as an agent for change.
- Indices of significant impact on the development of EIA/SEA practices in Denmark.

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Collaboration through environmental assessment networks: Co-creating space and cultivating a joint learning mindset

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| ARTICLE INFO | ABSTRACT |
|--|---|
| <p>Keywords: Change agency Change agents Environmental assessment Collaboration Societal impact EA networks</p> | <p>The sustainability challenges tackled in environmental assessments (EA) call for transdisciplinary cooperation linking research and practice in a joint change agency. This article explores the researcher's agency through the development of an EA network that seeks to support collaboration between researchers and practitioners, mutual learning, and change with a view to sustainability. We are conducting a case study of 'The Environmental Assessment Day' (EA-Day), an annual Danish conference that has been held for 10 years and attracts representatives from public and private organisations relevant to EA. The article is centred around the questions: How and why has the EA-Day network developed, and with what value creation for individual participants and for the general Danish EA practice? A mixed-methods approach is utilised to garner insight into the role and effects of the transdisciplinary conference. The results show that EA-Day is characterised by many different organisations giving presentations and a strong network of participants. The results also reveal how EA-Day provides an important platform for mutual inspiration and the qualification of research and practice. The results are relevant for all actors interested in networks and conferences in the EA field, and especially those interested in how to promote collaboration between research and practice.</p> |

Illustration of a PBL framework for SEA/EIA teaching

PBL implementation examples through:

1. Project work
2. Courses and lectures
3. Engaging with stakeholders

Link to: [Sourcebook](#)

Strategic Environmental Assessment Curricula & Problem-Based Learning

A Sourcebook for Capacity Building



Let's invest in the cyclist and the team



Impact Assessment and Project Appraisal

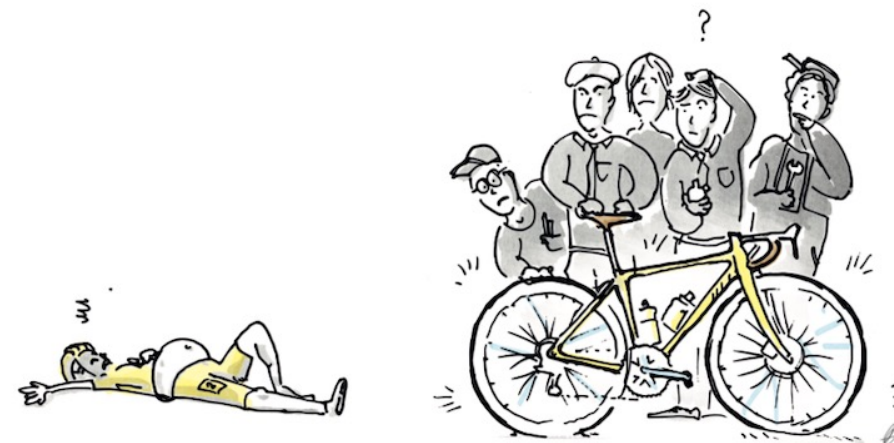
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Can Tour de France inspire SEA effectiveness? An analogy to encourage a broader systems thinking

Ivar Lyhne, Lone Kørnøv & Hens Runhaar

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Let's continue the conversation!

Post questions and comments in the IAIA24 app.



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