

Future education at ES

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Short and long term challenges to ES educations

- ES has a portfolio with **many degrees**. This has not been economically **sustainable** for several years, mainly due to **too few students** at the top level.
- This has changed to the worse due to **reductions** in government per student funding (STÅ).
- It is not unlikely that the future will see **further reductions**...
- A recent report by the Danish Academy of Technical Sciences (ATV) predicts that the Danish university system might be facing **structural changes** with substantial cuts.
- This might in part be implemented by **eliminating** whole **faculties** or even **universities** across the nation.

Meeting the challenges ...

There is a couple of potential approaches to meet the above-mentioned challenges, including:

- **Status quo**
- Improving sustainability by attracting **more students** - Danish and/or international
- Improving sustainability by **merging specializations**
- Making current educations **more efficient**, e.g. by flipped classroom, supported by new technology
- Innovate novel **scalable educational paradigm**, supported by new technology
- **<YOUR IDEA>**

Scenario 0 - Status quo (do nothing)

Description For a number of years, we have modified larger and smaller components of our educational portfolio but kept the overall structure. We can probably continue to do this for some time.

Pros The specializations of our current portfolio add value to the research groups - and 'customers'.

Cons The budgets will eventually become so small that only a small number of employees can be funded. Those will have to become full time educators.

Scenario 1 - Attract more students

Description Since a main challenge is that classes (etc.) have too few students, increasing the overall volume of students will go a far way towards sustainability. We can e.g. try to attract more international students.

Pros We won't have to make substantial changes to our current portfolio.

Cons This strategy has been pursued in the past with limited success. There are no obvious reasons, why we would be more successful now.

Scenario 2 - Merge educations

Description Overall, our total educational allowance combined with several large research grants can support a fair proportion of our current staff. By merging degrees into a small number, we will have better time to obtain the research grants required.

Pros We will get a better balance between time paid and time spent on education.

Cons Reducing the number of degrees might also cause a reduction in student numbers, challenging the sustainability in the end.

Scenario 2 - Flipped classroom / new technology

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Henrik C. Wegener er lun på ideen om at droppe den klassiske forelæsning for at få mere kvalitet ind i de studerendes undervisning.

UDDANNELSE

han, hvad han kalder »en tjans« for EU-kommissionen, hvor han som en af de øverste forskningsrådgivere er med til at rådgive kommissærerne på alle politiske områder om komplekse ting, eksempelvis faren ved sprøjtemidler.

»Jeg er altid endt med at knytte bånd til forskning, der har anvendelse i en samfundsmæssig kontekst«, siger den kommende rektor, der er 58 år, har en ph.d. i mikrobiologi, blandt andet har forsket i

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Scenario 4 - Novel scalable educational paradigm?

Description AUC started with a highly innovative educational concept that became POPBL, and this is still strong in the most recent AAU strategy. ES has a strong history of AAU leadership. Could we come up POPBL 2.0?

Such a model could e.g. take an *extreme project centric approach* and make everything else in support of the projects ('PE' courses) - offered in flipped classroom style.

Pros If we have a unique scalable concept, we might be able to attract students from across the world!

Cons It might be non-trivial to get accreditation for an education without pre-defined courses.

Scenario 5 - Your Idea!

Description Your Idea. The total amount of creative brain power at ES is overwhelming. If we all try to think 'out of the box', we might just come up with a solution that meets the challenges in an unexpected way...

Pros ?

Cons ?

Workshop - work on a scenario...

Description Select one of the five scenarios and create a 'rich picture' of our future educational at ES!