

# Engaging and useful quantitative impact assessments

## - Is it possible?

Kåre Moberg, research leader at the Danish Foundation for Entrepreneurship



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# During the next 20 minutes I will focus on...

- How we can overcome the limitations of traditional quantitative impact assessments
- And how we can make them engaging and useful, while at the same time not compromise with rigour
- Provide some examples from an ongoing impact evaluation

# Kåre Moberg

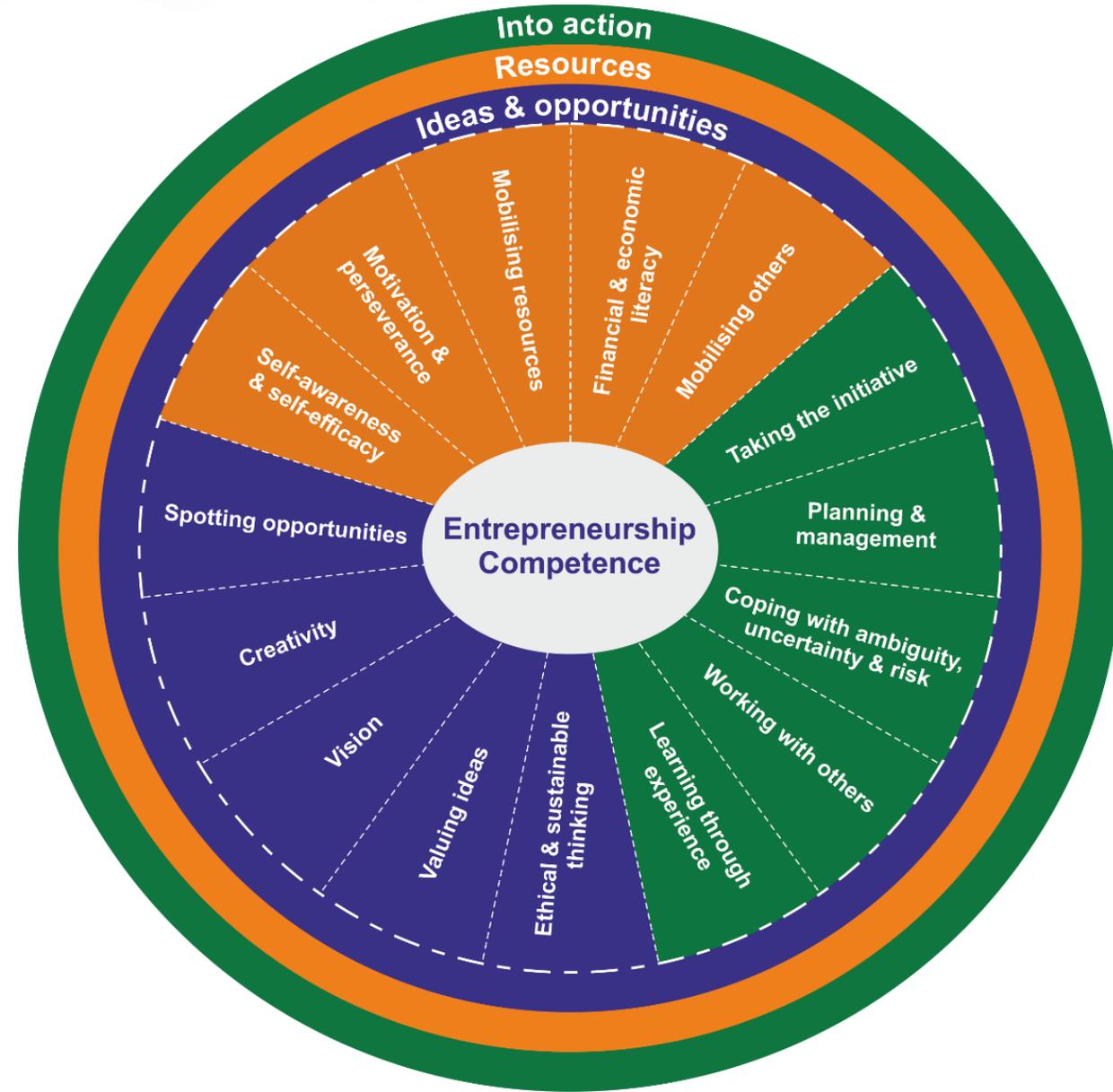
- Research leader at the Danish Foundation for Entrepreneurship
- The Danish Foundation for Entrepreneurship is a national knowledge centre and a fund. It assists schools and institutions with implementing entrepreneurship education, at all levels of education – from ABC to PhD.
- Have worked with entrepreneurship education since 2007
- Wrote my dissertation about how to assess the impact of entrepreneurship education (Copenhagen Business School, 2014)



# Entrepreneurship education influences many competences that are regarded as non-cognitive skills

**Non-cognitive skills:** The residual of an IQ-test, character abilities and social skills.

Challenging to codify, teach and assess with traditional methods.



# Engaging education

- Entrepreneurship education also fulfil many of the elements that educational researchers have identified as creating engagement and motivation
- According to Newmann (1992, 1993), to create engagement, educational assignment should be...
  - Fun
  - Authentic
  - Collaborative
  - Give students ownership over the process
  - And the opportunity to use different talents
- This type of teaching style typically change the relations between students and educators.

# Traditional quantitative impact assessments

- When assessing entrepreneurial education, the focus has typically been on whether the students change their: Entrepreneurial intentions, attitudes and self-efficacy.
- This is assessed with traditional pretest-posttest.
- Which often is impractical when it comes to educational programme evaluations.
- Results have been inconclusive and often of limited use to practitioners since results are provided long after the implementation and the typical target group is policy makers, funding agencies and researchers.
- Suffers from response-shift bias (Little et al., 2020).

**Practical, engaging and  
useful quantitative  
impact assessments  
- How we did it**

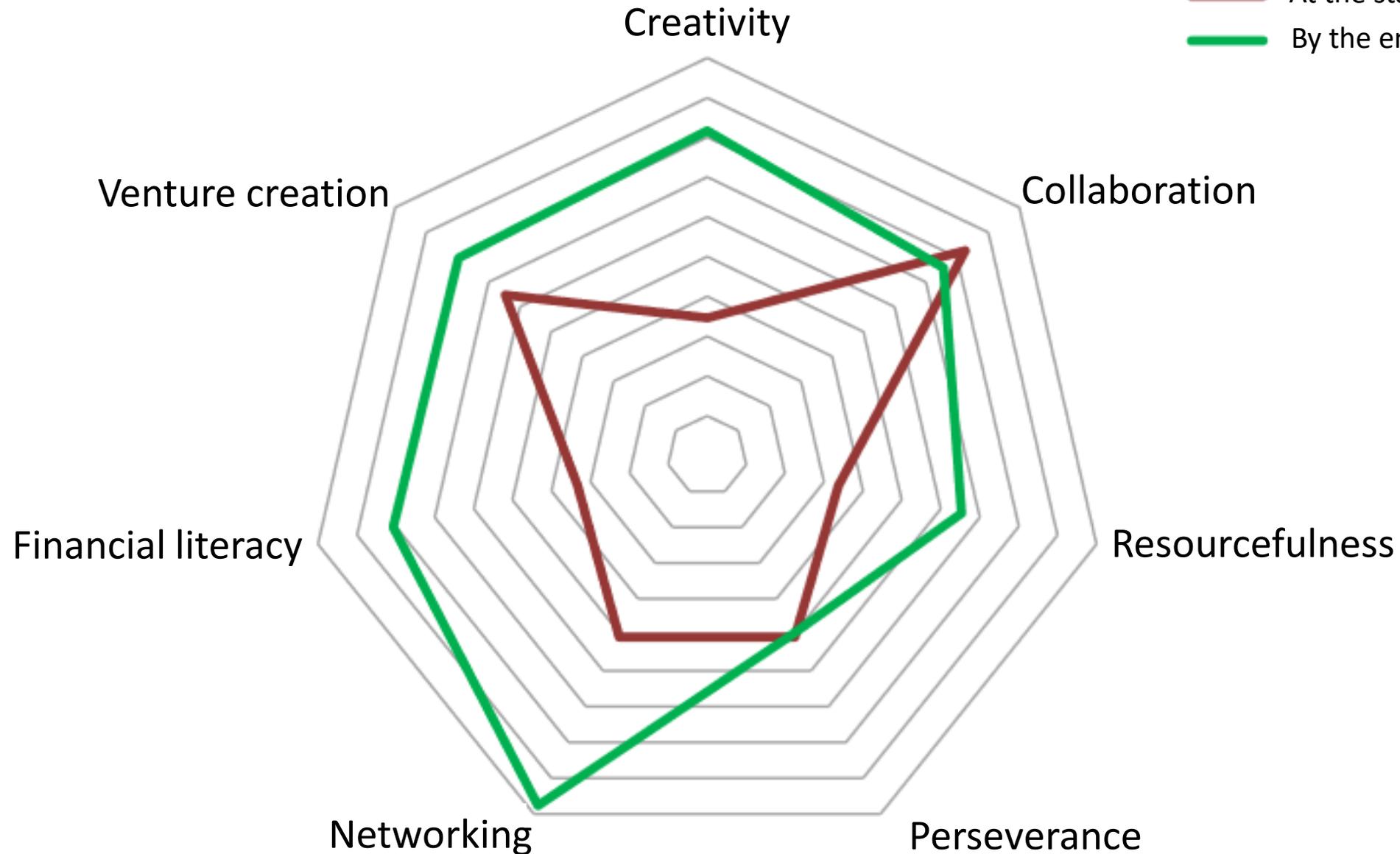
# Practical, engaging and useful quantitative impact assessments

- Focus on entrepreneurial self-efficacy since, when it comes to actually applying and using your abilities your confidence in your ability is more important than your actual proficiency (Bandura, 1973, 1997).
- In addition, the focus is on change in perceived teacher support, school engagement, self-directed learning as well as key competences.
- The focus is on how the students perceive that they have developed.
- By the end of the programme they are asked to assess which level they perceive they were at, at the start of the programme and which level they now perceive they have, by the end of the programme.
- In addition they are asked to indicate which level they want to reach in the future in the competences.
- With one test, which on average takes 18 minutes, three time-points are collected. The wording of the items also makes it meaningful for students in a control group to participate.

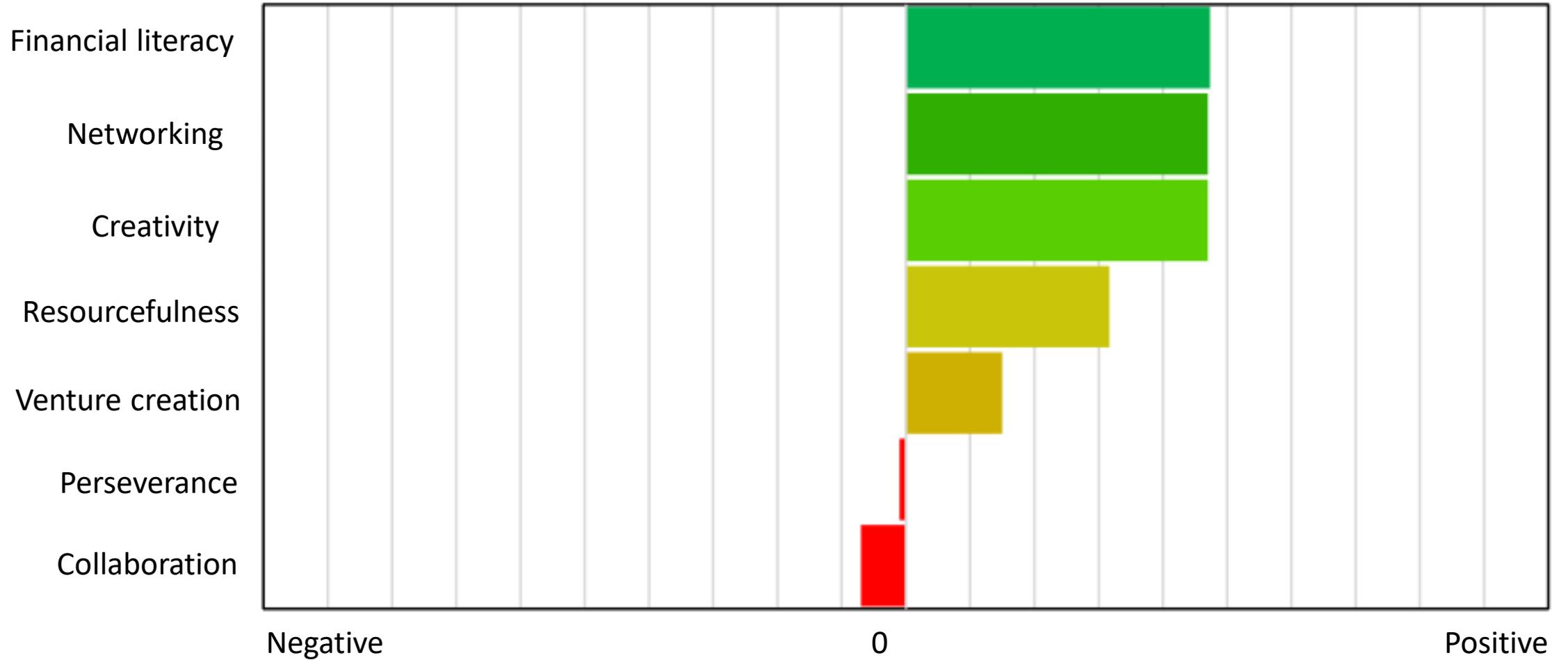
# Personal competence reports

# Entrepreneurial competences

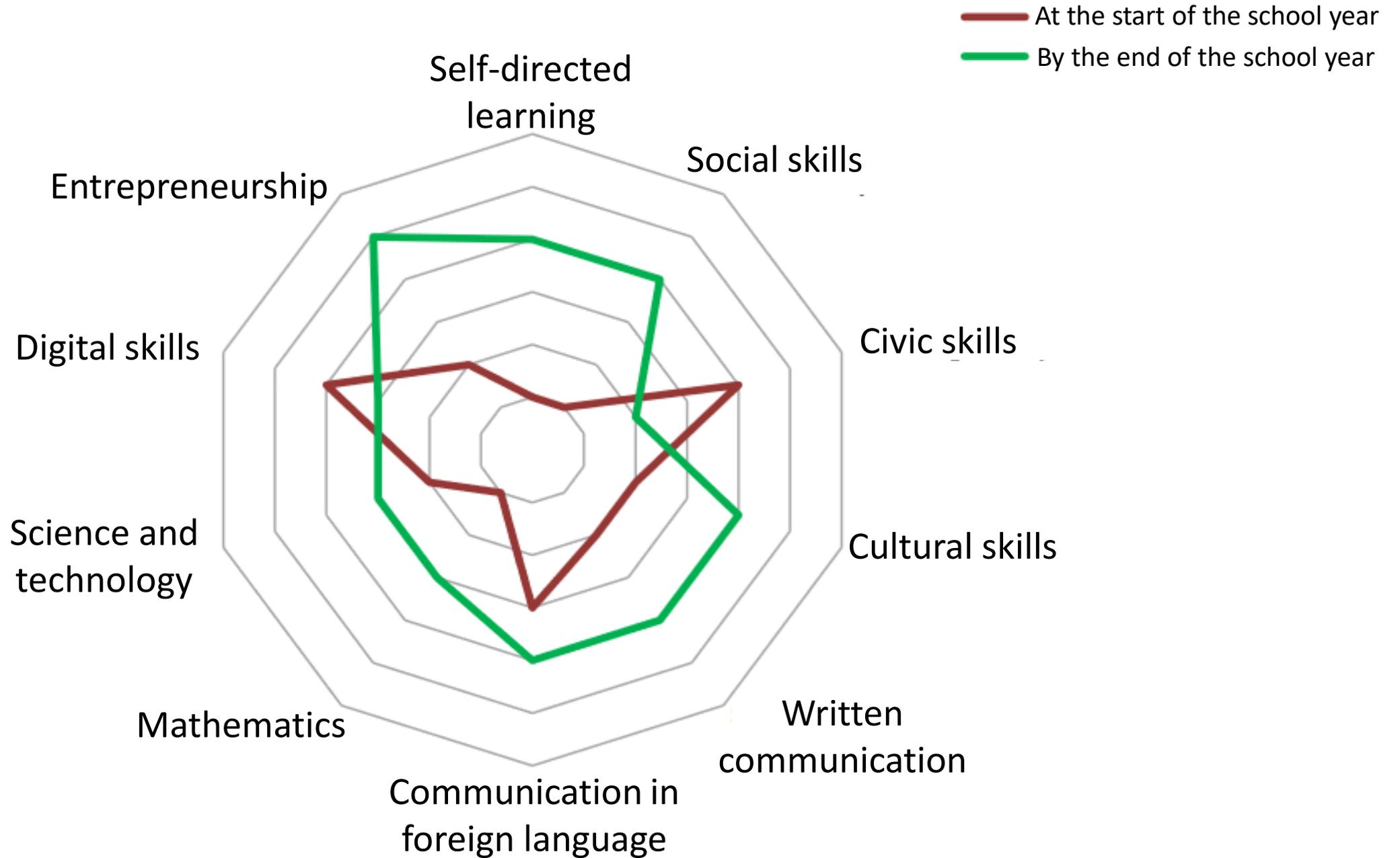
— At the start of the school year  
— By the end of the school year



# Change in entrepreneurial competences



# Key competences



# Reports to educators... and how to use them

- The educators receive similar graphical overviews, but based on the aggregated data of the class
- In addition, the educators receives information about change in variables such as perceived teacher support, school engagement and self-directed learning behaviours
- The results are compared with control classes at the same school
- And, aggregated results of other schools with corresponding programmes
- Can be used to assess whether intended learning outcomes have been reached
- If the student agree, the personal competence reports can be used to discuss differences in perspective between educators and student in regards to development.

# Q & As



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Female entrepreneurship

Policy: [https://www.ffe-ye.dk/media/792752/factsheet\\_how-to-increase-the-number-of-female-entrepreneurs.pdf](https://www.ffe-ye.dk/media/792752/factsheet_how-to-increase-the-number-of-female-entrepreneurs.pdf)

Education: [https://www.ffe-ye.dk/media/791782/viden-om-entreprenoerskab-og-koen\\_forskningen.pdf](https://www.ffe-ye.dk/media/791782/viden-om-entreprenoerskab-og-koen_forskningen.pdf)

Online-baserad entrepreneurship education: <https://www.ffe-ye.dk/media/793485/online-based-entrepreneurship-education-1528-2651-24-2-704.pdf>