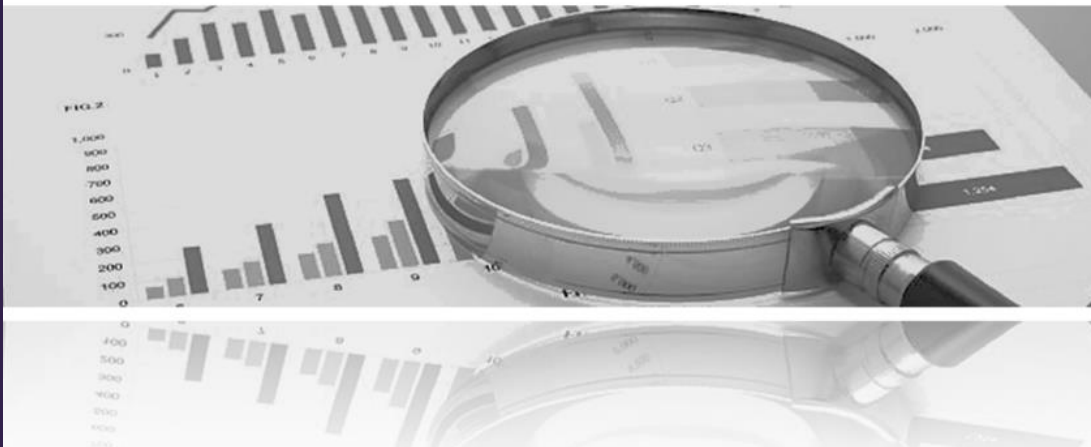




The Danish  
Accreditation Institution

CALCULATING QUALITY: AN OVERVIEW OF INDICATORS USED  
IN EXTERNAL QUALITY ASSURANCE OF HIGHER EDUCATION IN  
THE NORDICS



ENQA Webinar: The use of indicators in higher education  
23 October 2020

Steffen Westergard Andersen  
Director of Operations, The Danish Accreditation Institution, AI

# Background

- Statistics are increasingly used by EQAAs, by Nordic government bodies and by higher education institutions
- The aim is to shed light on the statistics used by EQAAs of Denmark, Finland, Norway and Sweden
- EQAA's of Finland, Norway and Sweden contributed to the data collection and later engaged in interviews
- The analysis was funded by the Nordic Council of Ministers for Education

# Outline

- Briefly about this study of statistics by AI
- Methodology
- Indicators and statistics used in external QA
- Exemplification of how data is used in Denmark
- First visit - Focus on overall system
- Second visit – Audit trails
- Sum up

# Methodology

- Survey
- Supplements by interviews
- Learning experience:  
*This is complex*



*Statistics as..*

*Indicators >< Background*

# Total list of indicators and other statistics in EQA

EQAA	Indicators	Background information
AI	<ul style="list-style-type: none"> <li>Dropout rate for first year students</li> <li>Estimated teaching and guidance hours</li> <li>Exceeded study time</li> <li>Publication points</li> <li>Share of part-time faculty</li> <li>Ratio of students to researchers</li> <li>Share of students completing in nominal time or + one year</li> <li>Unemployment rate of graduates<sup>3</sup></li> </ul>	<ul style="list-style-type: none"> <li>Dropout rate for all students</li> <li>Number of examines in the area of Continuing Vocational Training</li> <li>Number of new students</li> <li>Number of students</li> <li>Unemployment rate of graduates<sup>4</sup></li> </ul>
FINEEC	None	<ul style="list-style-type: none"> <li>Graduation rate by year of enrollment and field of education</li> </ul>
NOKUT	<ul style="list-style-type: none"> <li>Exam fail percentage</li> <li>National student survey</li> <li>New credit point production per full time student each year</li> <li>Number of full-time academic employees</li> <li>Number of new PhD students</li> <li>Number of PhD graduates</li> <li>Number of PhD students in total</li> <li>Publication points</li> <li>Ratio of students to teachers</li> <li>Share of academic employees with HEI as main employer</li> <li>Share of academic staff with a PhD degree</li> <li>Share of full professors among academic staff</li> <li>Share of publications in highest ranking journals</li> <li>Share of students completing in nominal time</li> <li>Share of students completing in nominal time plus one year</li> </ul>	<ul style="list-style-type: none"> <li>Average number of gross or net years used to complete a PhD</li> <li>Grade distribution</li> <li>Grade point average from secondary school among new students</li> <li>Internationalization: Share of students on exchange</li> <li>Number of new students</li> <li>Number of students</li> <li>Number of discontinued PhD agreements</li> <li>Number of qualified applicants ranking a study program as first preference when applying</li> <li>Share of academic staff in permanent positions</li> <li>Share of academic staff in recruitment positions</li> <li>Share of students receiving grade A and B</li> </ul>
UKÄ	<ul style="list-style-type: none"> <li>Establishment of graduates in the labor market</li> <li>Graduation rate</li> <li>Graduation rate for PhD students</li> </ul>	<ul style="list-style-type: none"> <li>Internationalization: Number of foreign exchange students coming to Sweden</li> <li>Number of active licentiate and doctorate students by area of research</li> <li>Number of bachelor and master students</li> <li>Number of examinations at bachelor, master, licentiate and doctorate level</li> <li>Number of full-time employees in research and teaching positions</li> <li>Number of full-time students at bachelor and master level divided by study programs</li> <li>Number of male and female students</li> <li>Number of students divided by areas of education</li> <li>Revenues for education at bachelor, master and doctorate level, and for research</li> <li>Share of female professors</li> </ul>

Table 1, page 5, Calculating Quality

# Simplified presentation of key indicators

<b>INPUT</b>	<b>ENVIRONMENT</b>	<b>OUTPUT</b>
Student characteristics (NOKUT, UKÄ)	Student assessments (NOKUT)	Employability (AI, UKÄ)
	Retention (AI, FINEEC, NOKUT, UKÄ)	
	Student-teacher contact (AI, NOKUT)	
	Research environment (AI, NOKUT)	
	PhD programs (NOKUT, UKÄ)	
	Internationalization (NOKUT, UKÄ)	

*Table 2, page 10, Calculating Quality*

# Different use of indicators

## *Retention as an example*

	AI	NOKUT	UKÄ
<b>Attrition</b>	Dropout rate for first year students <sup>2</sup>	-	-
<b>Progression</b>	Exceeded study time <sup>2</sup>	New credit point production per full time student <sup>2</sup>  Exam fail percentage <sup>2</sup>	-
<b>Completion</b>	Share of students completing in nominal time <sup>1, 3</sup>  Share of students completing in nominal time plus one year <sup>1, 3</sup>	Graduation rate <sup>2</sup>  Share of students completing in nominal time <sup>2</sup>  Share of students completing in nominal time plus one year <sup>2</sup>	Graduation rate <sup>2</sup>



# A current example: Use of data in Danish EQA

## Institutional accreditation in Denmark

– Based on a current case of use of quantitative data

### Includes two site visits

- First visit: Focus on the overall QA system
- Second visit: Audit trails

SAR includes key indicators and general statistics



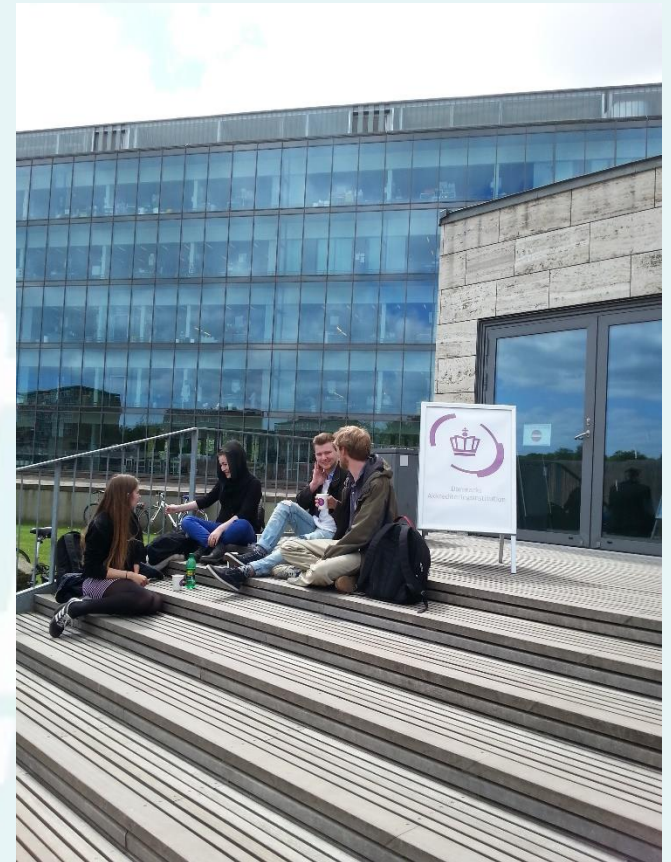
# First visit

## *Focus on overall system*

Expectation that HEIs makes:

- *Ongoing monitoring of all programmes*
- *A holistic assessment of each programme and plan for any necessary action*
- *Ensure reporting to relevant actors in the internal QA system*

All based on key indicators *as well as* qualitative data, incl. student assessments



# Key indicators

## Typical data in internal programme monitoring at universities

- *Dropout rate for first year students*
- *Estimated teaching and guidance hours*
- *Exceeded study time*
- *Publication points*
- *Share of part-time faculty*
- *Ratio of students to researchers*
- *Share of students completing in nominal time or + one year*
- *Unemployment rate of graduates*

As well as qualitative data and other quantitative data sources, including student assessments

# Second visit

## *Audit trails*

The panel looks into a selection of specific programmes to scrutinize how specific thematic issues are dealt with in practice.

### Audit Trails selected in current Institutional Accreditation:

- Audit trail 1: Research coverage of teaching areas  
Audit trail 2: Students' contact with the research environment  
*Focus in AT1+2 is on how key indicators and qualitative data plays together*
- Audit trail 3: Pedagogical and didactical quality in teaching  
*Policies, course descriptions, faculty approaches, student assessments..*

### Statistics used in selection of programmes to be included in these audit trails, e.g.:

Size of programme (*i.e. no. of students*)

Key internal QA indicators (*on internal "observation list 2018*)

Campus size *...in addition to subject areas*

# Wrapping up..

- I have shared some insights from the survey of key indicators in the Nordic countries
- Provided you with an example of the use in Danish EQA

Quantitative data must be used cautiously:

- Many aspect cannot be quantified, some proxies are poor
- Availability of data should not distort proportions in analysis
- But data and indicators can be highly useful in monitoring and be one solid point of departure in quality assurance if complemented by qualitative information