

EUR-ACE Accreditation and the IMPALA Study in JAMK School of Engineering

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Background

- The impact evaluation carried out in the IMPALA Finland was connected to the EUR-ACE accreditation process of the JAMK's Bachelor Degree Programme in Mechanical Engineering
- 240 ECTS, 4 years, full-time studies
- Product Development and Production Engineering



Engineering Programme Accreditations in Finland by FINEEC

- FINEEC was authorised to award the EUR-ACE label to 4 year Bachelor's degree programmes in summer 2014
- Accreditations are voluntary for the institutions, offered by FINEEC as paid services
- 5 completed accreditations (2016)



Role of JAMK in IMPALA

- Partner of FINEEC in the project
- Participated in the development of study procedure and e.g. study questionnaires
- Participated in the project meetings
- Carried out the base-, mid- and endline studies in the university
- Analyzation of the data was mostly carried out by FINEEC
- Uses the study findings in the programme development



Schedule of the Accreditation Process and IMPALA Study in JAMK

- **Oct 2014:** The IMPALA baseline study
- Nov 2014-Feb 2015: The EUR-ACE self-evaluation phase
- Mar 2015: The EUR-ACE review team's visit to JAMK
- **Apr 2015:** The IMPALA midline study
- June 2015: The review report and a formal decision on the result of the EUR-ACE accreditation
- Autumn 2015: Implementation of the development measures after the EUR-ACE accreditation
- **Nov 2015:** The IMPALA endline study
- **June 2016:** Presenting the first IMPALA findings

IMPALA Online Questionnaire

- **Questionnaire items**
 - Course types in study programmes
 - QA instruments used in programmes
 - Alignment of examinations and learning objectives
 - Frequency of development discussions of study programmes
 - Observability of QA effects and quality improvements
 - Transparency of responsibilities
 - Attitude towards internal QA
 - Attitude towards external QA
 - Perceived attitude of leadership towards QA
 - Assessment of cost/benefit ratio of QA
 - Plans for major programme changes
 - Suggestions for QA improvement

Some Results



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EUR-ACE Accreditation Reached

- The Accreditation of the programme was awarded in June 2015 and it is valid for six years, up to year 2021



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Questionnaire Response Rates in IMPALA (Base-End)

Baseline study

- Students: $41/61 = 67.2\%$ (partly compulsory)
- Teachers: $16/21 = 76.2\%$
- Management and Quality Administration: $7/8 = 87.5\%$
- Total: $64/90 = 71.1\%$

Endline study

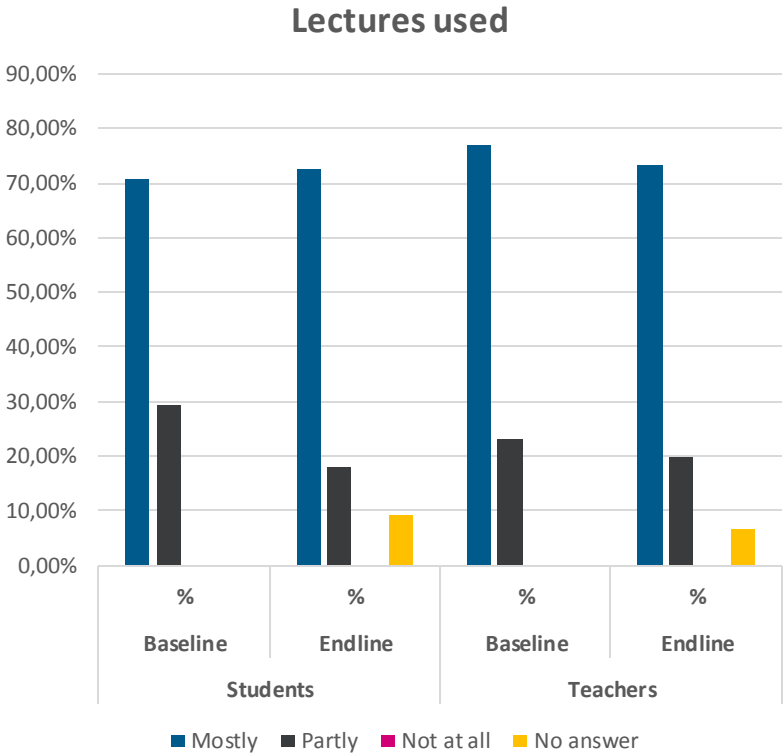
- Students: $11/60 = 18.3\%$ (voluntary)
- Teachers: $13/21 = 61.9\%$
- Management and Quality Administration: $8/8 = 100.0\%$
- Total: $32/89 = 36.0\%$

Something About Educational Process



Methods of Delivery

- Mech.Eng. uses mainly lectures
- Seminars, presentations and group work are used partly (students 85-81% / teachers 77-73%)
- Also project working and online studies are used



Changes during Process

- Slight development in amount of lecturing between baseline and endline studies (during accreditation process) was found out with the teachers
- Students did not totally agree
- The pressure for teachers to develop teaching methods is high and seems to come everywhere: students, other teachers as well as internal and external quality assurance



Something About Quality Management



Quality Procedures Used

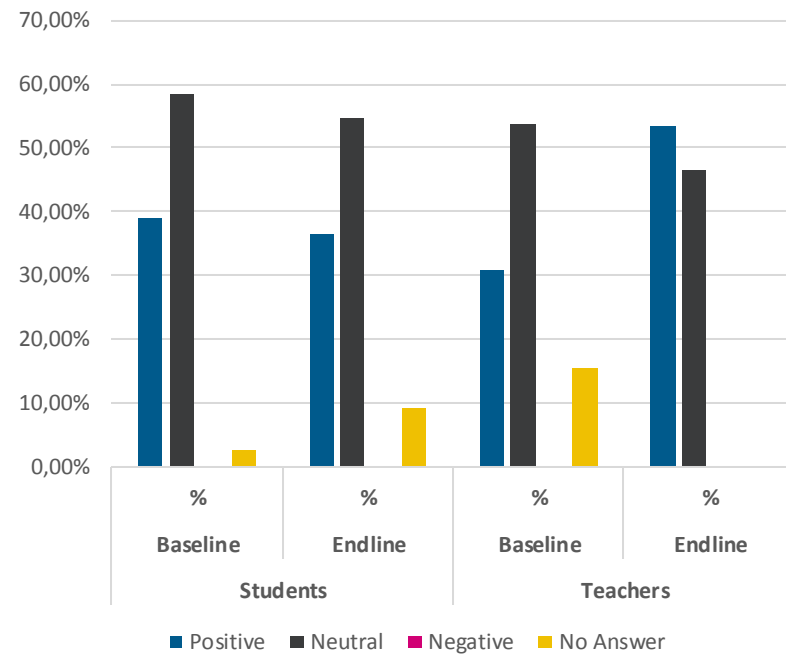
- Student feedback questionnaires and quality indicators are used consistently
- Questionnaires to teachers and stakeholders, quality meetings and written reports are produced but less consistently
- Students are fully aware of only their feedback questionnaires



Attitudes Towards Quality Management

- Teachers and students reported positive or neutral attitudes towards quality work
- Teachers showed increase in positive attitudes in the endline study

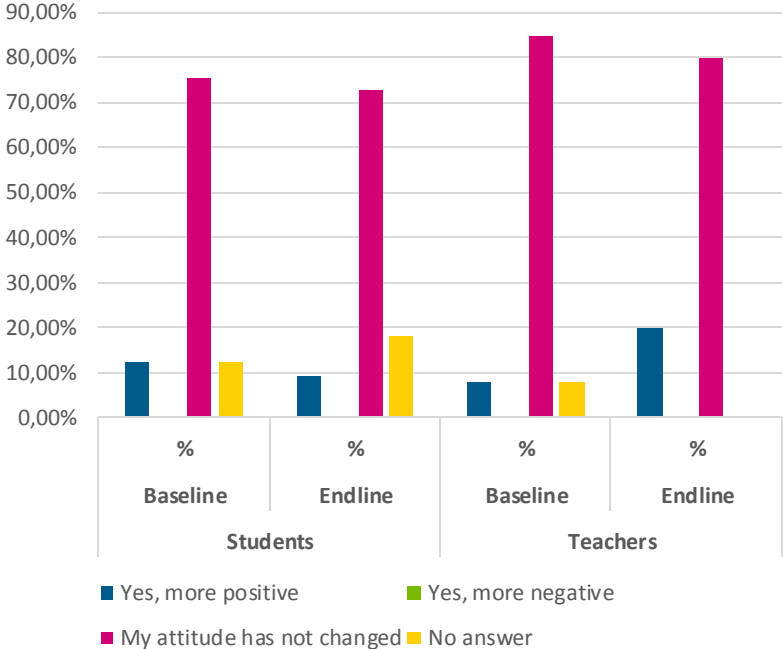
Students' and Teachers' attitudes towards QM



Attitudes Towards Quality Work

- Change in attitude can be seen with teachers also here
- Change has been with no one negative

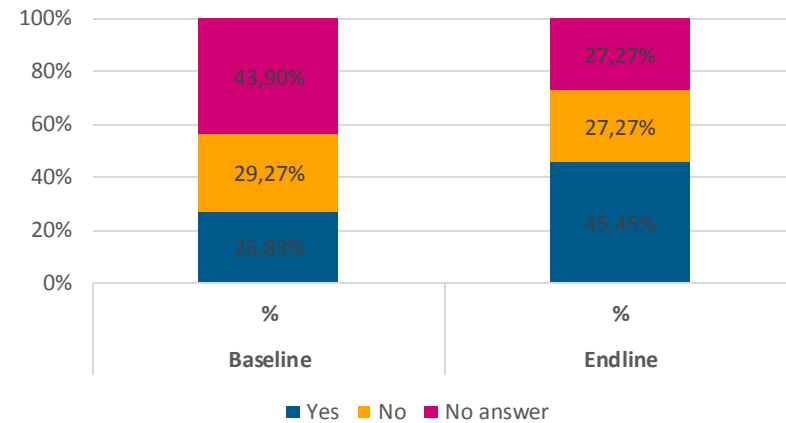
Students' and Teachers' change of attitudes towards QM



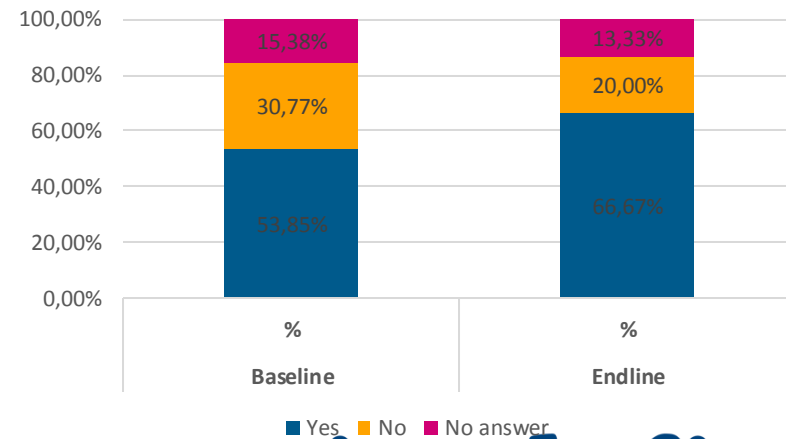
Impact of QM

- Students reported QM having growing impacts during the accreditation process (baseline 27% / endline 45%)
- Also teachers reported QM having growing impacts during the accreditation process (baseline 54% / endline 67%)

Students' experience of QM having an impact



Teachers' experience of QM having an impact



Suggestions Reported

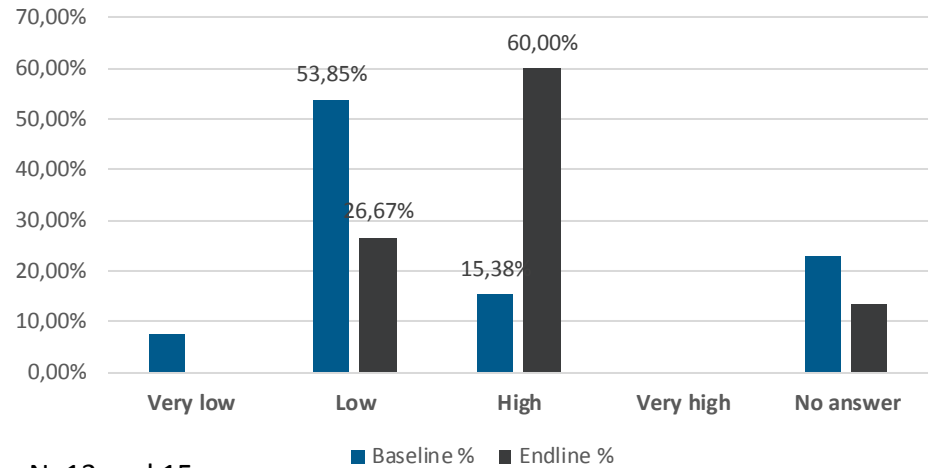
- The students want feedback questionnaires early in the course, so they will also see the improvements
- They would also like to see teachers taking the feedback more seriously



Cost – Benefit Ratio

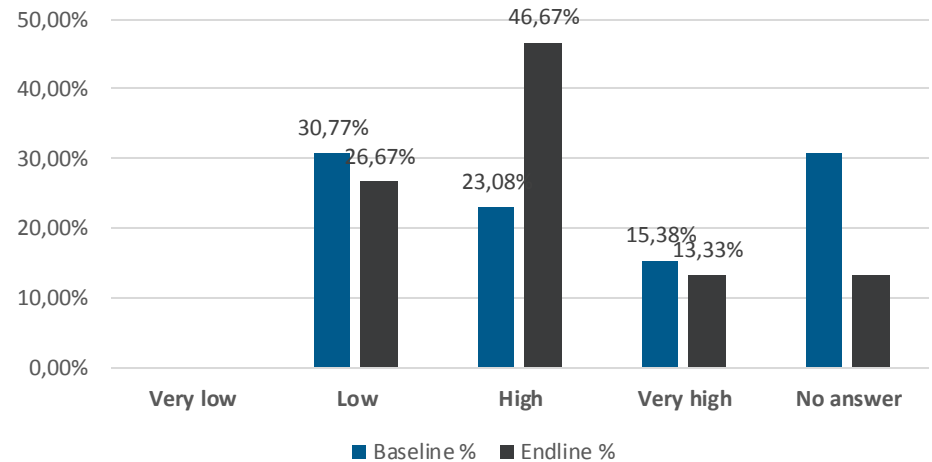
- Teachers’ assessment of the cost of QM rose during the process
- Also the assessment of the benefits rose

Teachers' view on the cost of QM



N=13 and 15

Teachers' view on the benefit of QM



Quality Management in JAMK

- The role of university's quality management is seen by the teachers (surprisingly) positive
- Based on the study, the teachers seem to experience that they have strong support from the JAMK top management in quality development work



Conclusions



- The quality management system of the JAMK seems to be fairly mature system: it seems to work even no high feelings have been involved in it
- The pressure for teachers to develop their teaching methods is high
- The involvement of the students in the quality management process as well as to make the quality management work more noticeable for them seems to be challenge as well as some individual teachers' involvement to quality and education development processes
- The difference in knowledge and awareness of the development of the programme between average students and student activists seems to be big

Thank You!



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