Impact Evaluation of Programm Accreditacion at UAB

Barcelona, 16/06/2016
Introduction: Spanish QA system

UAB and the Accreditation process

Population and sample

Results

Conclusions
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Licensing - follow up and ex post accreditation

Validation

- Plan
- Act
- Check
- Do

Monitoring

- Site visit
- Monitoring
- Monitoring
- Monitoring

Accreditation

Zero point for impact analysis?
### EQA PROCEDURE
- Validation
- Monitoring
- Accreditation

### MAIN PURPOSE
- Quality of the proposals of degrees
- Public information Indicators -> analysis -> improvement plans
- Quality of the program Focus on the assessment (LO certification)

### IMPACT INDICATORS
- % of proposals directly approved by external Commissions
- % teaching guides published
- Annual improvement plans based on evidences
- Students & Teacher satisfaction
- Sample of executions
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About the Universitat Autònoma de Barcelona

On 26 November 2009, the UAB obtained recognition as a Campus of International Excellence.

Though still a little under 50 years old, the UAB has already consolidated itself amongst the 200 best universities in the world within the main university rankings and is located within the top 10 new universities with greatest international projection and prestige.

<table>
<thead>
<tr>
<th>Teaching</th>
<th>Research</th>
<th>International</th>
<th>Structure</th>
<th>Budget and finances</th>
</tr>
</thead>
<tbody>
<tr>
<td>81</td>
<td>79</td>
<td>5.3%</td>
<td>13</td>
<td>€308 M liquidated expenditure budget (2014)</td>
</tr>
<tr>
<td>143</td>
<td>4,186</td>
<td>32.7%</td>
<td>57</td>
<td>64% public income in total budget (2014)</td>
</tr>
<tr>
<td>26,975</td>
<td>618</td>
<td>25%</td>
<td>44</td>
<td>€44.1 M obtained from competitive research calls (2014)</td>
</tr>
<tr>
<td>2,339</td>
<td>3,240</td>
<td>5.9%</td>
<td>1,621</td>
<td>15% research funds obtained from competitive European calls (2014)</td>
</tr>
<tr>
<td>8,486</td>
<td>9</td>
<td>43.7%</td>
<td>2,350</td>
<td>€16.1 M research agreements and services (2014)</td>
</tr>
<tr>
<td>UAB master’s degrees and graduate students (2013-2014)</td>
<td>New companies at Parc de Recerca UAB (2014)</td>
<td>papers from international collaborations (Scimago SIR 2015)</td>
<td>administrative staff (2014)</td>
<td></td>
</tr>
</tbody>
</table>
Its academic programmes cover all areas of sciences and provide students with a solid training in the fields of research, industry and health.

2015   VICENS VIVES award to the Faculty of Sciences for it’s teaching quality.

### BACHELOR’S DEGREES
(7 degrees + 3 double degrees)

<table>
<thead>
<tr>
<th>Bachelor’s Degrees</th>
<th>Environmental Sciences</th>
<th>Physics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Statistics + Sociology</td>
<td>Geology</td>
<td>Physics + Mathematics</td>
</tr>
<tr>
<td>Applied Statistics - UAB/UVic</td>
<td>Mathematics</td>
<td>Physics + Chemistry</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Nanoscience and Nanotechnology</td>
<td></td>
</tr>
<tr>
<td>Environmental Science + Geology</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### OFFICIAL MASTER’S
(11 masters + 3 Erasmus Mundus)

<table>
<thead>
<tr>
<th>Master’s Courses</th>
<th>Environmental Sciences</th>
<th>Physics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electromagnetism, Electrical and Industrial Engineering</td>
<td>Geology</td>
<td>Physics + Mathematics</td>
</tr>
<tr>
<td>Erasmus Mundus Engineering Nanotechnology and Bioengineering / European Master in Photonics Engineering, Nanophotonics and Biophotonics</td>
<td>Mathematics</td>
<td>Physics + Chemistry</td>
</tr>
<tr>
<td>Estudios Interdisciplinares en Sostenibilidad Ambiental, Económica y Social</td>
<td>Nanoscience and Nanotechnology</td>
<td></td>
</tr>
<tr>
<td>Física d’Altas Energies, Astrofísica i Cosmològia / High Energy Physics, Astrophysics and Cosmology</td>
<td></td>
<td>Physics + Mathematics</td>
</tr>
<tr>
<td>Fotónica / Photonics</td>
<td>Geología Geofísica de Recursos</td>
<td></td>
</tr>
<tr>
<td>Química Industrial y Introducción a la Recerca Química / Industrial Chemistry and Introduction to Chemical Research</td>
<td>Gestió de Sòls i Aigües</td>
<td></td>
</tr>
</tbody>
</table>
Faculty of Sciences

Main research Installation

• ALBA Syncrotron
• ICTA, Research Institute for Environmental Science & Technology
• National Microelectronics Institute
• Institute of Artificial Intelligence
• National Research Institute for Materials
• High Energy Physics Institute

Key Indicators

2673 Bachelor & Master Students
260 Faculty staff

Faculty’s Graduate survey Results

Almost 80% Intention to repeat the program
Almost 80% would choose the same university

Did the program lived up to your expectations? From 1 to 5

Average response of 4

www.uab.cat/ciencies
## Accreditation process

### External Accreditation

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Programa formatiu</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>2. Public Information</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>3. Int. Quality System</td>
<td>Positive with recommendations</td>
<td>Positive</td>
</tr>
<tr>
<td>4. Teaching Staff</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>5. Support systems</td>
<td>Positive with recommendations</td>
<td>Positive</td>
</tr>
<tr>
<td>6. Program outcomes</td>
<td>Positive</td>
<td>Positive</td>
</tr>
</tbody>
</table>

### Positive

- 2014: 5
- 2015: 37

### Positive with recommendations

- 2014: 0
- 2015: 20

### Positive

- 2014: 0
- 2015: 30

### Procés d'acreditació

Número de titulacions per any

<table>
<thead>
<tr>
<th>Year</th>
<th>Graus</th>
<th>Màsters</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>2015</td>
<td>25</td>
<td>20</td>
<td>45</td>
</tr>
<tr>
<td>2016</td>
<td>30</td>
<td>30</td>
<td>60</td>
</tr>
</tbody>
</table>
Introduction: Spanish QA system

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Population and sample

Results

Conclusions
Note: we cannot ensure that the same people are answering the same questionnaire.

<table>
<thead>
<tr>
<th></th>
<th>Population</th>
<th>Sample</th>
<th>%Response</th>
<th>Sample error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>389</td>
<td>129</td>
<td>33%</td>
<td>7%</td>
</tr>
<tr>
<td>Midline</td>
<td>389</td>
<td>88</td>
<td>23%</td>
<td>9%</td>
</tr>
<tr>
<td>Endline</td>
<td>462</td>
<td>64</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td>Total</td>
<td>1240</td>
<td>281</td>
<td>23%</td>
<td>5%</td>
</tr>
</tbody>
</table>

We have collected 281 surveys.

The response rate, as usually happens in longitudinal studies, has slightly declined.

Globally a quarter of the respondents are members of the study commission of their study program.
### Population and sample (II)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Midline</th>
<th>Endline</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Population</td>
<td>Sample</td>
<td>%Response</td>
</tr>
<tr>
<td>Students</td>
<td>55</td>
<td>10</td>
<td>18%</td>
</tr>
<tr>
<td>Teachers</td>
<td>234</td>
<td>77</td>
<td>33%</td>
</tr>
<tr>
<td>Staff and QA</td>
<td>100</td>
<td>44</td>
<td>44%</td>
</tr>
</tbody>
</table>

- Good response rate, specially between teachers
- Mild involvement of students (18% response rate)
- Expected decrease of response rate in Midline and Endline

The more the disaggregated the results, more caution is needed.

Note: we cannot ensure that the same people are answering the same questionnaire.
Sample distribution by stakeholders

Teachers are over-represented

Analysis will differentiate between these collectives
A plethora of degrees: bachelors and masters

Different educational traditions

E.g. practical dimension:
- “Boots” (field trips): Geology
- White coats (labs): Chemistry
- Problem solving / Theorems proving: Physics
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No changes in the type of courses

- Students have not seen changes neither in the baseline (5 out of 5), nor in the midline (5 out of 5), nor in the endline (with the exception of 1 out of 8).
- A few teachers state they have seen changes, mainly in the baseline (13 out of 70), but none of them in the endline.

Whenever there are changes, they are linked, mainly with the decrease of frontal teaching.

The assessment methodology is not directly related to the training methodologies, with the exception of 2 selected subjects. Furthermore, no substantial changes are allowed during the accreditation process.
Students: attitude and changes in attitude

Student’s attitude towards QA is generally positive or neutral.

The change towards a more positive attitude is higher between those students involved in the Study Commission of their programs.
Students: changes in attitude

There is a rise in the positive attitude in the midline followed by a return to the baseline results in the endline.

Honey moon effect?
“Training programs might start with improvement immediately following the program, but within months it drops precipitously” (Campbell et al, 1970)
Students: Do QA procedures have observable effects?

There is a rise in the positive attitude in the midline followed by a return to the baseline results in the endline.

Honey moon effect?
Teachers: attitude and changes in attitude

Teachers are more critic than students towards QA.

The change of attitude in a positive direction occurs in the baseline (preparation of the self-report).

- Yes, in a negative direction (less approval).
- No, no change in my attitude.
- Yes, in a positive direction (more approval).
Teachers: changes in attitude towards external QA

The change towards a more positive attitude is higher between those teachers involved in the Study Commission or their programs.

- **Member Commission**
  - Yes, in a positive direction (more approval): 52.4%
  - No, no change in my attitude: 38.1%
  - Yes, in a negative direction (less approval): 9.5%

- **Not member**
  - Yes, in a positive direction (more approval): 44.4%
  - No, no change in my attitude: 51.3%
  - Yes, in a negative direction (less approval): 4.3%
Teachers: Do QA procedures have observable effects?

There is a minority of teachers that state that QA procedures have observable effects.

There are more “believers” in the endline.

Being a member of the Study Commission of their program is also associated with the perception of observable effects.
Teachers: internal vs external QA

Attitudes towards IQA are more positive that toward.
Being in a Study Commission seems to have a slight positive effect towards EQA.
Teachers: what triggered the changes in attitude?

The experience with EQA (writing self-reports, on-site visits) is what mainly triggers a change in the attitude, followed by experience with IQA (course surveys, module evaluations) and peer reports.
Teachers: assessment of attitude of HEI leadership towards QA in teaching and learning

The assessment of the attitude of HEI leadership towards QA seems related to the EQA.

The more time -> more positive assessment.

Furthermore, half of them say there is more support towards QA.
Quality Assurance Staff

Good attitude ("Apostles of QA" ;-) )

- 73% state they have not changed their attitude last year.
- The other 27% state they have changed it in a positive direction.

- Very positive attitude
- Generally positive attitude
- Neutral
- Generally negative attitude
The discovery of IQA instruments: survey of students

Increase in the knowledge of the regular use of student surveys in the monitoring of the program.
Teachers: the discovery of IQA instruments

Which instruments of quality assurance are used in your study program?

<table>
<thead>
<tr>
<th>Observation of performance indicators</th>
<th>Written reports</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline</strong></td>
<td><strong>Midline</strong></td>
</tr>
<tr>
<td>Never</td>
<td>Occasionally</td>
</tr>
<tr>
<td>43,8</td>
<td>44,9</td>
</tr>
<tr>
<td>37,5</td>
<td>31,6</td>
</tr>
<tr>
<td>18,8</td>
<td>14</td>
</tr>
</tbody>
</table>

Steep increase in the knowledge of the regular use of both performance indicators and written reports in the study program.
Teachers: Are the responsibilities in the QA processes transparent?

In the endline, 2/3 of teachers believe that responsibilities in QA are transparent. This is a clear improvement compared with previous phases.
Which instruments of quality assurance are used in your study program?

Meetings with focus on QA

Students -> honey moon effect
Teachers: % state there are regularly meetings is clearly associated with the fact that they are members of the Commission of the Study program.
Teachers: Cost - Benefit

**Expenditure**
- Very high: 10.6
- High: 41.3
- Low: 36.5
- Very low: 11.5

**Benefit**
- Very high: 6.8
- High: 22.9
- Low: 47.5
- Very low: 22.9

**Perception of expenditure and time**
- Low + very low:
  - Baseline: 54.2%
  - Midline: 48.7%
  - Endline: 70.6%

**Perception of benefit and time**
- Low + very low:
  - Baseline: 69.8%
  - Midline: 72.9%
  - Endline: 64.7%

High + very high:
- Baseline: 30.2%
- Midline: 27.1%
- Endline: 35.3%
Teachers: Module examinations reflect learning objectives

Module examinations little reflect the learning objectives of the modules.

Module examinations partially reflect the learning objectives of the modules.

Module examinations largely reflect the learning objectives of the modules.

No clear tendency between EQA phase and coherency between exams and LO

Changes happened during the baseline. When they happen, they are towards stronger relationship between LO and examinations-
Suggestions for improvement of procedure of quality assurance and quality development

**STUDENTS**

“Most students would like to know and notice the impact of quality processes”

**TEACHERS**

“Put into value the quality of teaching, the degree coordination and faculty meetings”

“The simplification of administrative procedures would benefit quality assurance processes”

“The process is positive as it allows a profound reflection to improve the quality of studies”

“There is not an equal recognition for teaching quality as it is for research”

**QUALITY ASSURANCE STAFF**

“The support of the government team is a key factor to develop processes and quality assurance”

“Quality process awareness should be increased within the faculties and among all stakeholders”
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Conclusions (1/2)

- In Spain, **main changes of the study program occur necessary in the baseline**, since it is not allowed to change the program during the accreditation.

- There is a relation between the phase of the EQA procedure and stakeholders' attitude towards its usefulness and its worth.

- There is also a relation between the phase of EQA and the perception of the commitment of HEI leadership towards QA.

- For teachers, attitude towards IQA is more positive than attitude towards EQA.

- Teachers do perceive higher costs than benefits regarding the accreditation process.

- Need of a major closeness between faculties, teachers and leadership.
Conclusions (2/2)

- The **involvement in Study Commissions is associated with a better perception of EQA**, and more accurate perception of existing IQA instruments.

- The **experience with external and internal Quality Assurance is also associated with positive changes in attitude**

  Participation in Quality assessment overcomes initial skepticism over QA

**Participating in the IMPALA project has been a highly enriching experience**

**But this is only the beginning ...**

Volume 39, Issue 5, 2013
Trullen, Rodríguez (2011). Faculty perceptions of instrumental and improvement reasons behind QA
Thank you for your attention

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