

Lessons Learned and Changes Implemented in the Frame of an Euro-Inf Accreditation Procedure

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Free University of Bozen-Bolzano
Italy



Outline

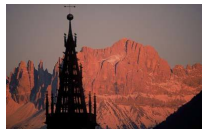
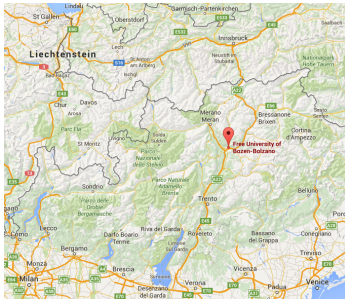
- 1 Free University of Bozen-Bolzano
- 2 Euro-Inf, EQANIE and AVA
- 3 Experience and Lessons Learned
- 4 Conclusions

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Bozen and the Province of South-Tyrol

- Bozen is the capital city of the Autonomous Province of South-Tyrol (Italy)
- Located in the Dolomites – UNESCO World Heritage site
- ... and we have “Ötzi”



Free University of Bozen-Bolzano

- Free University of Bozen-Bolzano
 - Founded in 1997
 - 5 Faculties: Economics, Education, Computer Science, Design and Arts, Science and Technologies
 - Trilingual: English, Italian, German (+ Ladin)
- Study programs
 - 10 Bachelor programs
 - 12 Master programs
 - 2 European Master programs
 - 5 PhD programs
- 3,000 students
- 105 tenured professors
- 430 contract professors

Faculty of Computer Science

- Established in 2001
- Study programs
 - BSc in Computer Science and Engineering
 - MSc in Computer Science
 - EM in Computational Logic, EM in Software Engineering
 - PhD in Computer Science
- Teaching is mostly in English
- 250 students
- Main research areas
 - Software Engineering Research Group (SERG)
 - Information and Database Systems Engineering (IDSE)
 - Knowledge and Data (KRDB)

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Euro-Inf Trial Accreditation

- **Euro-Inf Project:** Aimed at the creation of a framework for setting up a European system for the **accreditation of informatics education**
- **Trial-Accreditation** of our “Bachelor in Applied Computer Science”
 - August 2007: first contact
 - January 2008: self-assessment report
 - February 2008: on-site visit
 - August 2008: Euro-Inf trial-accreditation report

EQANIE Accreditation

- September 2010: first contacts
- November 2010: accreditation offer from EQANIE
- August 2011: accreditation contract signed by the university
- A number of internal issues caused significant delays
 - Change of study regulation, priorities, quality assurance in Italy
- November 2014: self-assessment report (30 pages + appendices)
- December 2014: on-site visit
- April 2015: Accreditation completed

EQANIE Accreditation – On-site Visit/1

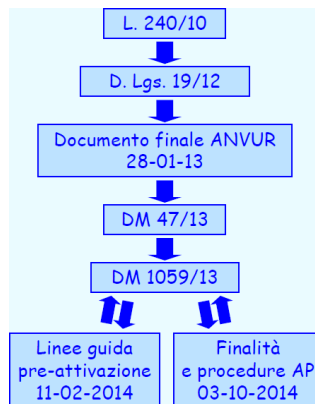
- Meeting with program coordinators and the Rectorate
 - further development of the university
 - position of the programs in the context of the university
 - profile of the programs and perspectives of further development
 - staff (currently and planned development)
 - cooperations
 - perspectives of further development
 - equipment
 - communication and coordination
 - organization of studies and management of teaching
 - quality assurance

EQANIE Accreditation – On-site Visit/2

- Meeting with program coordinators
 - program educational objectives
 - curriculum
 - course of studies
 - contents and methods of teaching
 - counseling and support for students
 - organization of exams
 - study results
 - relevance for the labour market
- Meeting with Students
- Meeting with teaching staff
- Inspection of module- and final exams
- Visitation of participating institutes and laboratories
- Closing meeting with program coordinators and Rectorate

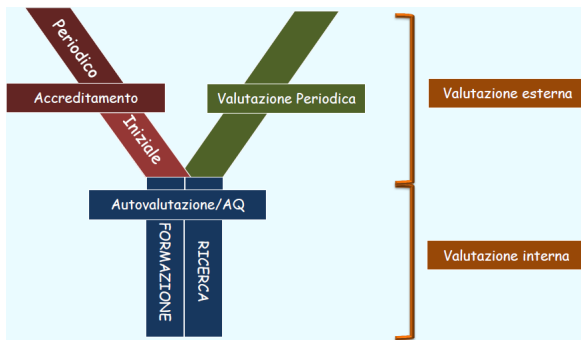
Quality Assurance at Italian Universities

- In **Italy**, a new quality assurance and accreditation system for universities has been introduced in 2010



AVA – Self-evaluation, Evaluation and Accreditation

- AVA: **A**utovalutazione, **V**alutazione e **A**ccreditamento



- In 2013, we did the first **self-evaluation**
 - Reporting ex-ante goals/activities (SUA)
 - Ex-post self-evaluation (Riesame annuale)

Periodic Accreditation (PA)

- **Periodic accreditation** is a further step in quality assurance process
 - New and different from the phases we have experienced so far
 - **Face-to-face external evaluation** done by a committee of 20 experts (CEV), visiting FUB for 1 week
 - PA is a ministerial act **confirming or not** a course/the university
 - In 2015, the first 15 universities did PA; 2016 and 2017 the others
- Periodic accreditation is based on **57 indicators**, grouped into 7 areas
- Result of periodic accreditation
 - **Not accredited**
 - **Conditionally accredited**
 - **Accredited with satisfaction**
 - **Accredited with full satisfaction**
- Is comparable to EQANIE accreditation

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EQANIE Accreditation Experience/1

- Euro-Inf trial-accreditation was the **first comprehensive attempt** towards quality assurance at FUB
 - Before: evaluation of courses since 2003
- Completely **new process** for all people involved
 - No experience and know how was in place
- At the beginning **not everybody was excited**, though at the end effort and results have been appreciated
 - Professors don't want to be disturbed from research with seemingly useless stuff
 - Administration is overwhelmed with other duties

EQANIE Accreditation Experience/2

- EQANIE staff was very **supportive** and **responsive**
- Templates and information for self-assessment report are good
- Panel report is well structured and provides **useful** and **concise** yet **precise** feedback
 - 5 section and 14 subsections
- Nevertheless, it was also **a bit painful** with some headache
 - Writing the self-assessment report is **time-consuming**
- Most difficult tasks
 - **Collecting** and analyzing data
 - Specifying **learning outcomes** (LO) at module and program level
 - **Convincing** some staff members about the importance of quality

EQANIE Accreditation Experience/3

- Overall, a very **healthy** and **insightful** process, which definitely contributed to improve the quality and the awareness for quality
- Enforces to **systematically reflect** about
 - LO, objectives, relationships to stakeholders, numbers, ...
 - comparison to other faculties, universities, ...
- The panel report gives a precise and comprehensive picture about the study **program's strengths** and **weaknesses**
- Euro-Inf/EQANIE experience was **very useful for AVA**
 - We were already **aware** about basic concepts and processes
 - We could mention EQANIE accreditation as **additional quality action**, stressing the policy of the university to aim for quality
 - We had an **external view** from international experts

Euro-Inf/EQANIE Recommendations

- Euro-Inf trail-accreditation
 - Specify better the **learning outcomes**
 - Improve the **exam scheduling**
 - **Ethics course** should be more related to Computer Science
 - ...
- EQANIE accreditation
 - Systematically gather feedback from **stakeholders**
 - Continue increasing the **interdisciplinary content** of the CS curriculum
 - Efforts to attract high numbers of students should be continued together with **subject-oriented entrance requirements**
 - Program outcomes and LO of modules should be **better aligned**

What has been Implemented?

- "... learning outcomes are *informative, coherent and transparent.*"
[EQANIE panel report]
- "The course on ethics had been changed ... to a more suitable course on project management and *professional ethics*"
[EQANIE panel report]
- **Awareness raising** of staff via a number of meetings
 - e.g., meeting with teachers at the beginning of each semester
- A computer program to support **exam scheduling** is in place
- **Course presentation form** improved and is more consistent
 - e.g., more details about LO, assessment criteria and exam procedure
- A new **data warehouse** to support data analysis has been developed

Comparison of EQANIE Accreditation with Others

- EQANIE/Euro-Inf
 - Well-structured process/documents at the appropriate level of detail
 - Useful feedback from an external viewpoint
 - On-site visit: meeting with all important players
- Accreditation in another European country
 - Panel report less detailed and structured
 - Self-assessment report: > 600 pages
 - On-site visit: no meetings with individual groups
- Italian AVA
 - Probably too complex
 - Self-evaluation is a good instrument, but lacks feedback
 - Accreditation: no experience yet

Benefits

- Feedback from international experts (**external/European viewpoint**)
- **Reflection** about important issues in study program
- **Raising awareness** of quality in the faculty
- Positive impact on **visibility and marketing**
- ...

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Conclusions

- Quality assurance is a **cultural process**
- It is important to have all **faculty staff on board**
- EQANIE accreditation was an **important milestone** in this process
 - Forced us to **reflect** about objectives, LO, numbers, . . .
 - The panel report gave a precise and comprehensive picture about the **study program's strengths** and **weaknesses**
 - Well-structured process/documents at the **right level of detail**
 - Provided **external viewpoint** and feedback
 - Was extremely helpful for and **complements AVA**
- Accreditation is like writing a research paper: each feedback from peer reviewers contributes to **improve the quality** of the paper

Thank You!

