



INSTITUTO
SUPERIOR
TÉCNICO

The Elaboration of a Best Practices Manual in Teaching

Edulearn'11

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Quality Evaluation Tools at IST

SiquIST - Integrated Quality Assurance System for IST



QUC - Course Unit Quality Assurance System:

Monitor and **promote upgrades** in the **teaching**, learning and evaluation process involving and accounting students and teachers.



Best Practice Teaching Manual

Promote and disclose Best Teaching Practices used by engineering teachers

Towards a Best Practice Manual

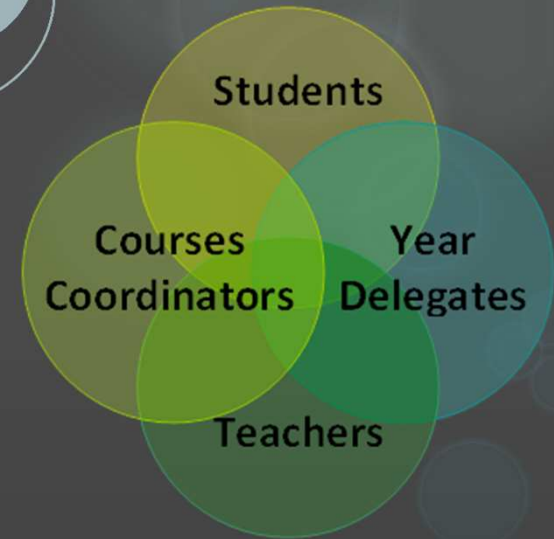
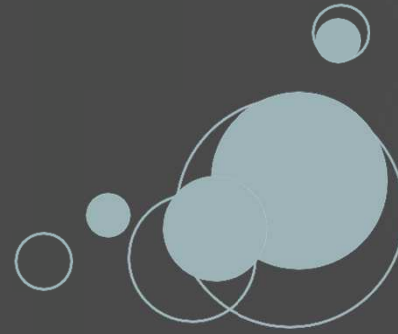
QUC tries to involve all the participants in the pedagogical process.

In the Best Practice Manual construction process teachers, students and year delegates contributions were also considered.



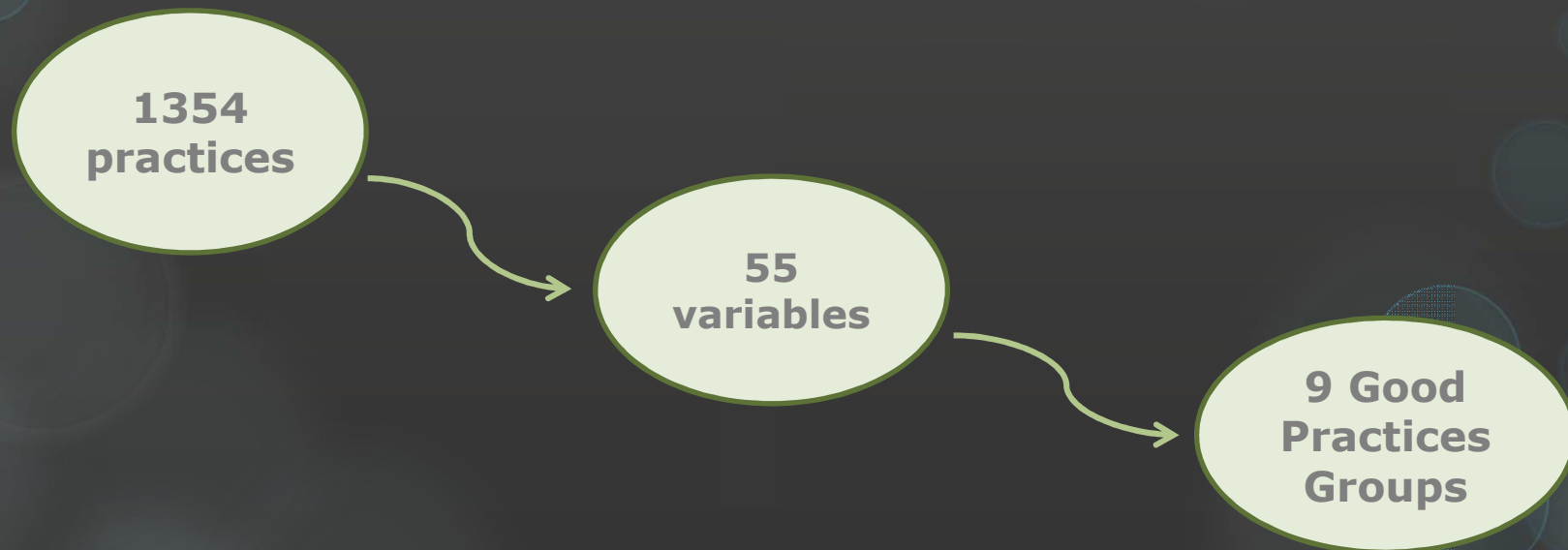
Info in the **Teaching Reports**, relevant applied teaching strategies

Info in the **Students Reports**, assess quality of the information in Subject webpage, among others.



Practices categorization oriented by:

- **7 Principles for Good Practice in Undergraduate Education**, Chickering and Gamson, 1981
- **Constructive Alignment Concept**, Biggs & Tang, 2007



**1.
Encourage
student -
university
interaction**

**2.
Encourage
the student –
student
interaction
and
cooperation**

**3.
The use of
active
learning
techniques**

**4.
Assure
immediate
feedback to
the student**

**5.
Emphasize
the need to
carry out a
task within
sheduled
time**

**6.
Communicate
high
expectations
to the
students**

**7.
Respect
diversities:
of talents,
experiences
and
learning
modes**

**8.
Transmit
unequivocal
learning
objectives to
the students**

**9. Adapt
learning
materials to
the subject
learning
objectives &
assessment**

The integrity of the 9 groups was tested by an on-line questionnaire applied to all IST Excellent Teachers.

86,7%
response
rate

**To identify the best
practices used by
the professors
elected as
excellent teachers
by the students
(a. o.).**

- Practices flagged by a $\geq 35\%$ considered valid and submitted to hierarchical cluster analysis – Furthest Neighbor Method.
- Data reduced to 22 variables, rearranged in 6 Good Practice groups, partially corresponding with initial categorization.

6 new groups indicated **6 teaching profiles**,
distinct between but coherent within.

**Aligned
Teaching**

**Pro-
Active
Teaching**

**Practical
Teaching**

**Inclusive
Teaching**

**Motivational
Teaching**

**Student
Oriented
Teaching**

Communicate high expectations to the students

Respect diversities: of talents, experiences and learning modes

Transmit unequivocal Learning objectives to the students

Adapt the learning materials to the subject learning objectives and the subject assessment

Encourage the student-university interaction

Encourage the student-student interaction and cooperation

The use of active learning techniques

Assure immediate feedback to the student

Emphasize the need to carry out a task within the scheduled time

Courses Web Page Analysis

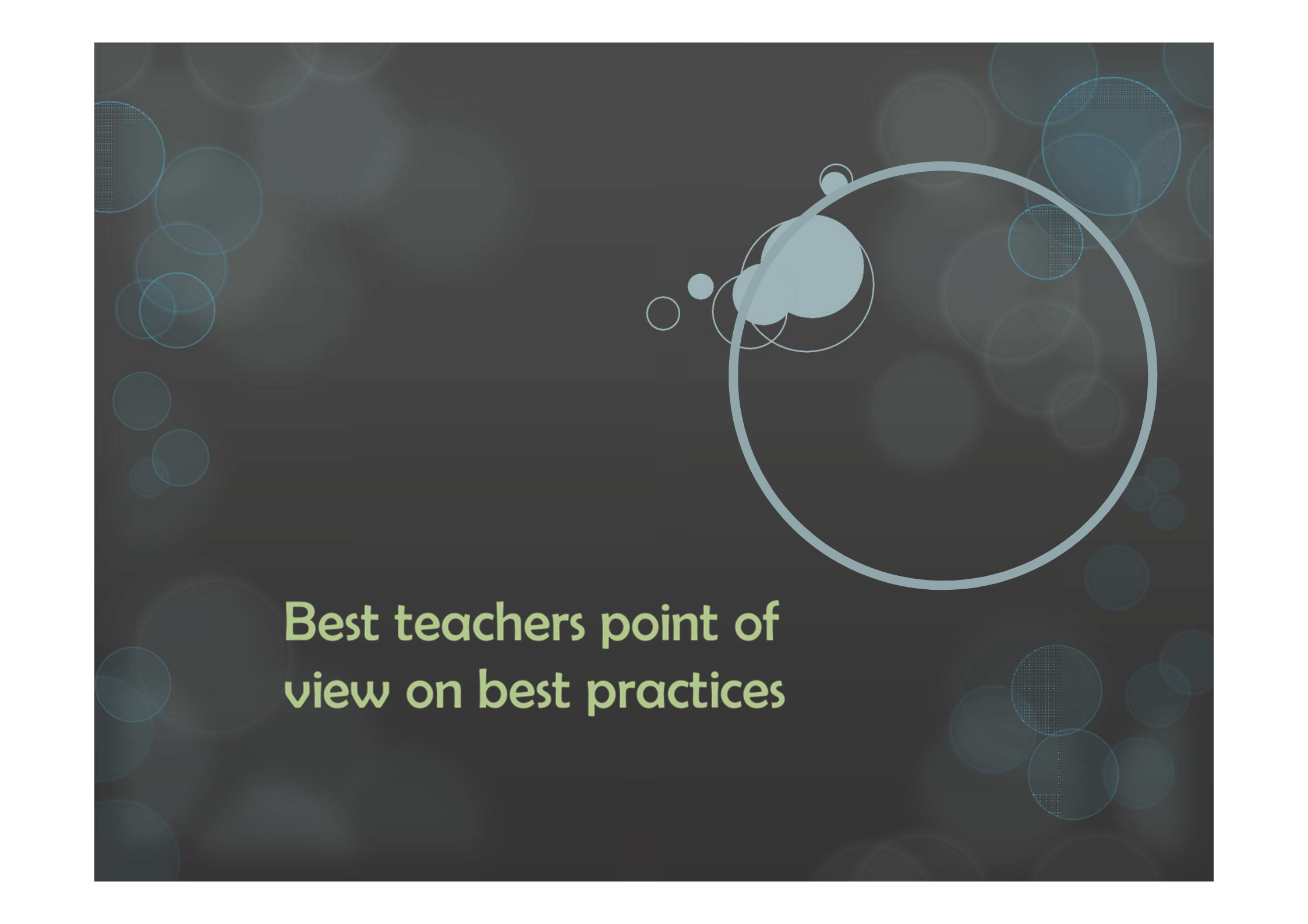
- Web Pages evaluated by the Delegate Students.
- Students perception of the web contents is important.



Pages itself considered as good practice.

Sample included less, averaged and best rated pages.

- Best rated pages stood out for their high availability of:
 - detailed assessment methods;
 - doubt timetable;
 - support material;
 - exercises or tests (in Problems courses);
 - on-line bibliography (even if partial);
 - course objectives adjusted to Dublin Descriptors.

The background is a dark charcoal grey. It is decorated with numerous overlapping circles of various sizes and opacities in shades of light blue and teal. Some circles are solid, while others are just outlines. A prominent feature is a large, thin white circle on the right side of the image. Inside this white circle, there is a cluster of smaller circles, including a solid light blue one and several white outlines of different sizes. The overall aesthetic is clean, modern, and abstract.

**Best teachers point of
view on best practices**

Outcomes

- **Teaching Reports:** where before teachers only found an open Question, they now find a list of pedagogical practices, organized by groups, to pick the ones used.
- **QUC Website:** a new section will be added, dedicated to Good Teaching Practices, with information and materials that help adapting teaching techniques to course objectives.
- **Excellent Teachers Interviews:** a mastered video will be added to the Good Teaching Practices section in QUC website, further disseminating best practices.

Outcomes

- **Pedagogical Seminar:** in November'11 IST will held a Pedagogical Seminar devoted to the Good Practices in teaching.
- **Best Practices Manual in Teaching:** the present research will be finalized upon the release of the Manual to the community.

The background is a dark grey-blue gradient. It features several overlapping circles of various sizes and opacities in shades of light blue and white. A prominent feature is a large, thin white circle on the right side of the slide. The text "Thank You!" is positioned to the left of this large circle.

Thank You!

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