

ANALYSIS OF THE SOCIAL PERCEPTIONS ON THE ENGINEERING PROFESSION AND ON HOW ENGINEERING IS TAUGHT

PG4 – Quality Management Process → SP4 Surveys on the Evaluation on How Processes and put into Practice - Teaching/Learning

1- Objectives

Under the ATTRACT project, which aims at reversing the trend at European level of decrease in demand for higher education in the area of engineering, the purpose is to understand how Engineers and Engineering are perceived by society in each country. More specifically, we would like to know the opinion of the different stakeholders of what an engineer is, the image they are projecting into the Portuguese society, their social role and the existing perception on how engineering is taught (admission to education, to the labour market, etc). The end purpose is to obtain information on the social representations of the engineering profession and, based on that, to try to identify which factors may influence those perceptions.

2- Methodology

a. data collection

Application of a short survey through a questionnaire (mini-survey), electronically, to a non-probability sample, which covers most of the stakeholders that are defined in the ATTRACT project.

For the purpose, a computer application - Limesurvey (*opensource*) – will be used to make the questionnaire available on-line (<http://www.limesurvey.org/>).

b. target population

- i. Stakeholders that contribute to the definition of the social representation of the engineering profession in Portugal, and that somehow contribute to the attractiveness (or the lack of it) of education in engineering:
 - Secondary education students
 - Higher education students
 - Teachers (secondary/higher education)
 - Non teaching staff of the higher education institutions
 - Representatives of Professional Associations

c. period of application

- i. 2nd week of September, 2010

d. questionnaire dimensions

Dimension	Indicator
Perception on Education	Relative difficulty in relation to other study areas
Perceptions on the social image of the Engineering profession	“How do we look at the Engineering profession” + Respected professions in the Portuguese society + contribution of engineers to society
Perceptions on the Labour Market/Engineer relationship	Conditions for the Access to the labour market + importance given to the engineering profession by employers
Perceptions on the performance of the Engineering profession	Difficulty to exercise the profession as compared to other areas

3- Outputs – application of indicators

The information collected via this survey will be useful to be compared with objective data (Statistics) in order to allow for a wide-ranging vision, which integrates the field of perceptions and the field of facts and the gap that might exist (or not) between the two. This information will be valuable to identify the factors that influence social representations with the purpose of listing a set of measures in order to make education in engineering attractive.

4- Questionnaire

See annex.