

Framework Programme 7
Capacities: Collaborative Project
Project no. 230376
SIS8-CT-2009-230376

Contract start date: April 1st 2009
Duration: 30 months



HELENA
Higher Education Leading to
ENgineering And scientific careers

Deliverable D5.3
Evaluation of interdisciplinary E&T degree
courses from students' perspectives



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Executive Summary

This report presents a secondary analysis of research done for work package 5 “Analysis of students' perception of societal impacts of E&T and their study choices” from the EUproject “HELENA – Higher Education Leading to ENgineering And scientific careers”. The project is carried out within the European Union’s 7th framework programme “Science in Society” (<http://www.fp7-helena.org/>) under the coordination of Šiauliai University (Lithuania). Partners from Austria (Alpen-Adria-Universität Klagenfurt), France (Ecole Normale Supérieure de Cachan and ECEPIE – Égalité des Chances dans les Études et la Profession d'Ingénieur en Europe), Serbia (Mihailo Pupin Institute), Spain (Fundacion TECNALIA LABEIN), and the United Kingdom (Loughborough University) are involved.

The secondary analysis presented in this report uses data base entries from HELENA research as well as country reports (Thaler 2011) in order to compare interview results on a European level to gain new information about students’ perception of interdisciplinarity in engineering study programmes.

As one result it can be stated that quite many of the interviewed E&T students are in favour of interdisciplinarity, but they do not always name it that way. They would like to add non-technical (or to be precise non-SET) subjects to their E&T study programme, especially those obviously and closely connected to future job fields, like languages (e.g. English), management skills and business contents.

In another work package of HELENA (WP4) statistical data showed that in Austria, Lithuania and Spain interdisciplinary E&T study programmes have significantly more women students than rather mono-disciplinary study programmes. But this is just one way of looking at interdisciplinarity. Another more qualitative point of view is taken into account in this report and therefore the result chapter is dedicated to the students' voices, using an interview analysis type called ‘core sentence method’ (in German “Kernsatzmethode”, cf. Löchel 1997).

The last chapter summarises how interdisciplinarity could make a successful difference in engineering education and points out that it is not enough to only add some nontechnical subjects to an E&T study programme to make it interdisciplinary, but rather answers the questions what ‘true interdisciplinary engineering education’ could look like.



Acknowledgement

The HELENA project (SIS8-CT-2009-230376) is co-funded by the European Commission, through its seventh Framework Programme (FP7) under 'Capacities'.

The authors wish to acknowledge the Commission for their support of the project, the efforts of the partners and the contributions of all those involved in HELENA.