Enhance the Attractiveness of Studies in Science and Technology

PROJECT OVERVIEW

STUDENT RETENTION

P. Lourtie, C. Patrocínio, I. Gonçalves, A. Lucas

BACKGROUND

Funded in **2009** under EU flagship programme "Lifelong Learning". **Concluded** in October **2012**. http://www.attractproject.org/about-attract

Follow up of a **Swedish national project** which **objective investigating attractiveness of engineering studies for young students**.

Project partnership by a sub-group of **universities members** within **CLUSTER** Network. www.cluster.org

OBJECTIVES

The idea was to **IMPROVE** the **UNDERSTANDING** of **WHY** young **PEOPLE** are becoming **LESS ATTRACTED TO ENGINEERING EDUCATION THAT** would **ENABLE** a range of **MEASURES** to be undertaken **TO** ultimately **INCREASE** the **ATTRACTIVENESS**.

METHODOLOGY

The project activities carried out within four work packages :

THE ATTRACTIVENESS OF BEING AN ENGINEER – focus on the background to how to recruit more talent and motivated students to engineering education by looking into the perception on engineering and engineers in the society

> *Engineering has a positive image and other encouraging aspects that are identified by, not only secondary school students, but by a range of social groups. The perception of engineers in media is different within different parts of Europe. Based on results the overall picture of engineering in the media is positive.*

BARRIERS – examination of the formal barriers to engineering education at third-level

> *The **particulars of the high school systems vary from country to country**, but in all students have some degree of choice over what they study. **Male students significantly outnumber females** in the uptake of engineering places, and students from lower socio-economic backgrounds are disproportionately under-represented among engineering students. Targeting students from these groups also presents an opportunity that should not be ignored.*

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METHODOLOGY

ATTRACTION – focus on how to interest young people in S&T/E, attract candidates to the higher education S&T/E programmes and balance gender representation in S&T/E programmes.

RETENTION – aimed to identify key aspects in the literature on retention, investigate how partners' statistics match rising concerns about drop-outs, compare current retention-increasing strategies, discuss curricula, student learning experiences and tutoring & mentoring systems, design and field-test interventions.

OVERALL IDEA UNDER RETENTION WP:

- TO **INCREASE COMPLETION RATES** WITHOUT LOWERING STANDARDS
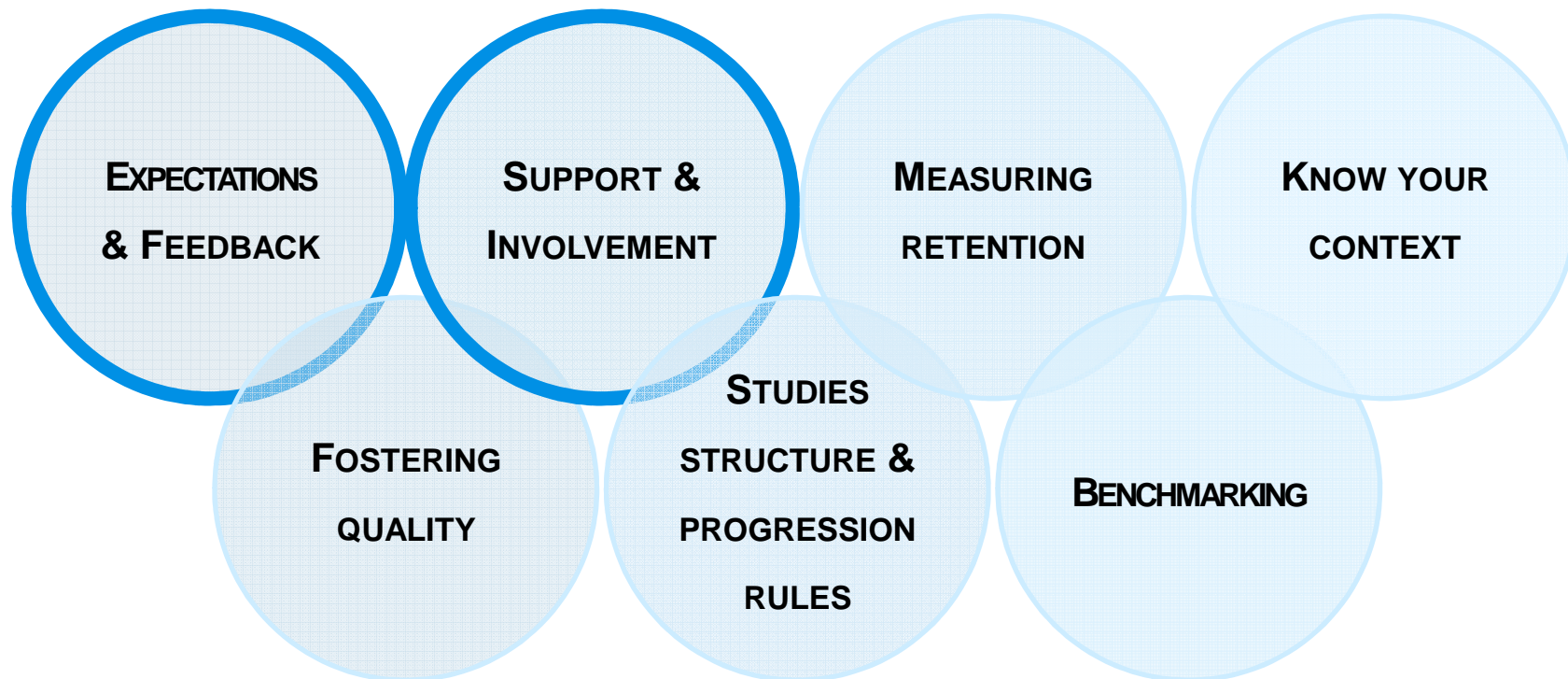- FINDING AND TESTING **GOOD PRACTICES**

STUDENT RETENTION - GENERAL DEFINITION:

The ability of institutions to KEEP their STUDENTS and help them to REACH their EDUCATIONAL GOALS.

Student retention is therefore part of a GREATER CONTEXT OF A UNIVERSITY – a CONSTRUCTIVE educational ENVIRONMENT that facilitates STUDENT LEARNING SUCCESS.

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STUDENT RETENTION

Constructive environment underlying student retention must be integrated in a **quality culture** composed of:

EXPECTATIONS & FEEDBACK

SUPPORT & INVOLVEMENT

MEASURING RETENTION

KNOW YOUR CONTEXT

FOSTERING QUALITY

STUDIES STRUCTURE & PROGRESSION RULES

BENCHMARKING

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EXPECTATIONS & FEEDBACK

EXPECTATIONS: should be **high**, **realistic** and **clearly communicated** to all parties as soon as possible, mainly to **1st year students**.

FEEDBACK: communicate results to enhance development.

FEEDBACK SYSTEM (INTERVENTIONAL): reporting results.

FEEDBACK FORWARD SYSTEM (PREVENTIVE): identifying critical changes in student population before phenomenon reaches critical point ➡ foresights & prevention

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**SUPPORT &
INVOLVEMENT**

SUPPORT: can assume **formal** and **informal** forms. Help students to **reach goals**, **clarify expectations** and provide feedback. Must **include academic, well-being & teaching support**.

INVOLVEMENT: of all stakeholders is vital for a productive educational culture. Important to consider all participants in the process and maintain an active feedback loop.

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BARRIERS ON STUDENT RETENTION ANALYSIS

Multiple retention **definitions** and performance **indicators assessed differently**.

Multiple approaches to retention based on ≠ retention rates and importance of the issue to each school.

Absence of a full responsible for the retention matter.

Absence of retention rates clear targets: when does it become a matter of intervention?

KEY POINTS ON STUDENT RETENTION INTERVENTION

Early identification of individual and institutional challenges

Human support

Monitoring of students results at key points in the academic life

IMPROVED 1ST YEAR EXPERIENCE

Changes in the structure studies and progression rules

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