SUSTAINABLE QUALITY ENHANCEMENT IN HIGHER EDUCATION LEARNING AND TEACHING. INTEGRATIVE CORE DATASET AND PERFORMANCE DATA ANALYTICS

9 Participating countries:

- **Start: 01-12-2017 - End: 31-08-2020**
- **Project Reference: 2017-1-DE01-KA203-003527**
- **EU Grant: 405512 EUR**

Programme: **Erasmus+**
Key Action: **Cooperation for innovation and the exchange of good practices**
Action Type: **Strategic Partnerships for higher education**

Topics:

Quality Assurance | Quality Improvement Institutions and/or methods (incl. school development)

ICT - new technologies - digital competences

Motivation & Goals of SQELT Project

Requirements of knowledge societies & socioeconomic mobility in globalized world → Quality management (QM) in higher education institutions (HEIs) more important than ever → **Need for systematic performance monitoring & strategic quality development in learning and teaching** (L&T)

Establish **comprehensive set of performance indicators** (PIs) and **quality evaluation instruments** (QEIs) for assessing HEIs' performance quality in L&T

L&T dataset: Generic core data relevant to any HEI; Toolbox from which HEIs can select 'individual' PIs/QEI according to specific strategic profiles, missions & visions (additional foci: digital performance data management (DPDM) & Learning Analytics; ethical code of practice; stakeholder participation; HEI strategy; operationalization and DPDM software)

Contribute to **'Research on Indicators of Teaching Quality'** (recently recommended to the EP)

Methodology of SQELT Project

Benchmarking on available models and partners' practice of DPDM in L&T; **literature** analysis; **external experts**; **surveys** with the project HEIs about their assessments of relevance and actual use of PIs & DPDM; **impact analysis** to support inductive development of reference framework; corroboration by **comparison to learning models**

Six Transnational Project Meetings; nine Multiplier Events; one International Evaluation Workshop; one International Conference; seven Dissemination Workshops

Main ouputs: **Benchlearning Report(s)**; **Integrative L&T Dataset**; **Ethical Code of Practice for Learning Analytics**; **Manual for the Application of the L&T Dataset**; **Peer-reviewed Publications**

Target groups of SQELT Project

HEIs' actors in L&T and stakeholders interested in L&T quality enhancement (e.g. students, parents, employers, HE politics, QA agencies)

Pilot project with limited capacities: focus on HEIs including **students**, **teaching staff**, **leadership** & **internal QA**
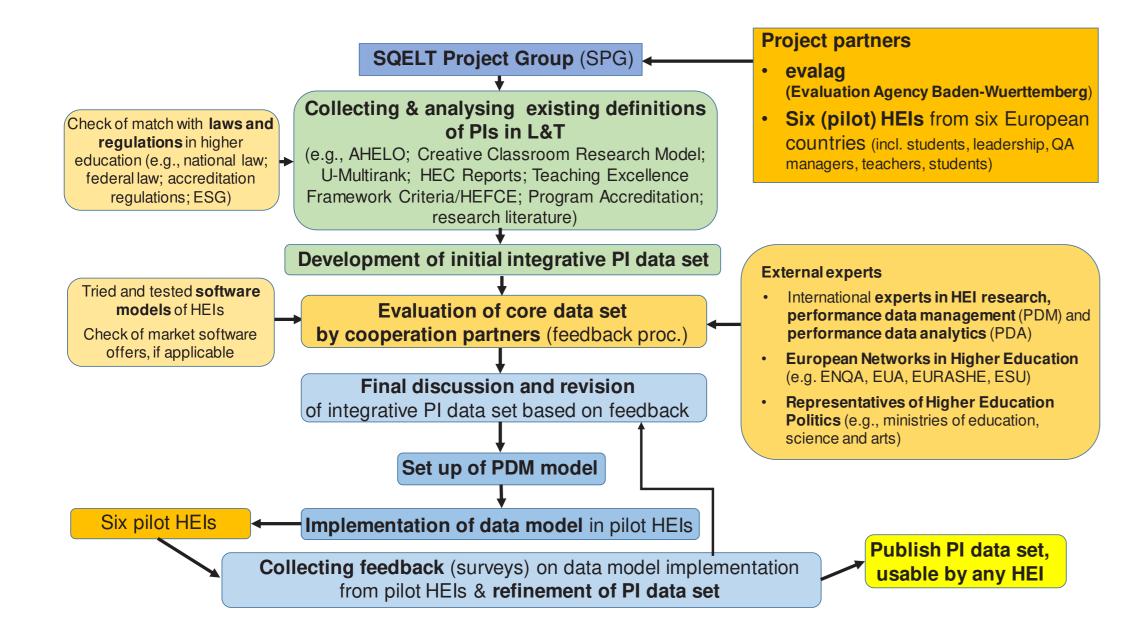

- UNIVERSIDADE DE AVEIRO
- UNIVERSITEIT GENT
- UNIVERSITEIT LEIDEN
- Centro de Investigação de Politicas do Ensino Superior
- UNIVERSITAT FUR WEITERBILDUNG KREMS
- UNIWERSYTET JAGIELLONSKI
- BIRMINGHAM CITY UNIVERSITY
- UNIVERSITA DEGLI STUDI DI MILANO
- UNIVERSITETET I OSLO

Preliminary SWOT analysis of partner universities' performance data management

Strengths	Weaknesses
Mature system of data collection	No shared institutional understanding of the purpose of collecting data
Existing data collection can be mapped across and form the basis of performance indicator development	Little joined-up working within the institution
Recognition that all staff need to be able to access data to inform personal and institutional progress	Existing data collection fails to adequately address current needs
Willingness to build systems that work for all staff	Relevant data is not available to all stakeholders
Recognition of the importance of data analysis/ development of performance indicators	Diversity of the institution lends itself to 'silo' working

Opportunities	Threats
An opportunity to improve the situation: to start from scratch if necessary	Development of performance indicators that do not reflect the reality of the institution
To harness existing functions to support the development of a new system	Excessive reliance on the collection of data: less reliance on interpretation
To ensure that the right data is getting to the right people	Policy changes relating to current debates in higher education systems (e.g. student fees, value for money etc.)

COMPREHENSIVE SET OF PERFORMANCE INDICATORS FOR LEARNING AND TEACHING. Excerpts from a Preliminary Version. Usable as a Toolbox for any HEI

Selection of "core data" from a comprehensive set ("the more uncommon or less widespread or novel items")	
L&T Environment	
Student interactions	Number & duration of student interactions with student admission system (SAS) (**PDRLA**)
	Number & duration of student interactions with student information system (SIS) (**PDRLA**)
	Number & duration of student interactions with students (e.g. via the HEI's learning management system – LMS) (**PDRLA**)
Attraction of master & doctorate students	Number of master students who graduated at another institution
	Number of doctorate students who graduated at another institution
Teaching Competences & Processes	
Quality of teaching staff	Number of teaching staff who participated in formal pedagogical training
	Number of teaching staff who were awarded for their outstanding engagement in teaching based on a merit system
	…
Learning Competences & Processes	
Quality learning & student engagement	Number & duration of student interactions with course activities (e.g. solution of exercises, watching videos, listening to lecture, participation in working groups, etc.) (e.g. via the HEI's LMS) (**PDRLA**)
	Number & duration of student interactions with course contents (e.g. via the HEI's LMS) (**PDRLA**)
	Number of repetitive visits to learning contents (e.g. during online learning) (**PDRLA**)
Learning Outcomes & Learning Gain & their Assessment	
Assessment of learning outcomes	Percentage of credits given in service-learning activities (e.g. students in community service activities & social work), in relation to total number of credits
Contact with work environment	Number of Bachelor degree theses made in cooperation with industry/external organisations
	Number of Master degree theses made in cooperation with industry/external organisations
Gender balance in the transition from students to doctorate graduates	Ratio of female to male students who complete a doctorate
Employability	Number of Bachelor graduates who within a period of time [TBD] after graduation are unemployed
	Number of Bachelor graduates who found their first job (after graduation) in the region where the HEI is located
	Number of Bachelor graduates who within a period of time [TBD] after graduation are enrolled in further study

Selection from a comprehensive set of "performance indicators" ("the more uncommon or less widespread or novel items")	
L&T Environment	
Learning resources	Learning diversity offered with respect to course structures to do justice to different learner types & learning processes (**PDRLA**)
Student interactions	Student interactions with faculty (e.g. communication, work) outside of class & coursework
Teaching Competences & Processes	
Quality teaching	Teaching staff methodological competences
	Teaching staff encouraging students' autonomous thinking & acting
	Teaching staff feedback to students (e.g. on work in progress, test, completed assignments)
Learning Competences & Processes	
Quality learning & student engagement	Quality mobile learning (learning across multiple contexts, through social & content interactions, using personal electronic devices)
Learning Outcomes & Learning Gain & their Assessment	
Constructive alignment of programs/ courses	Design & adjustment of teaching & assessments/examinations to defined intended learning outcomes
Study experience satisfaction	Freshman satisfaction with study experience (**PDRLA**)
	Undergraduate satisfaction with study experience (**PDRLA**)
Learning gain	Student learning gain in methodological competences (e.g. by comparison of knowledge & skills before & after learning phases) (**PDRLA**)
	Student learning gain in learning strategies (e.g. by comparison of knowledge & skills before & after learning phases) (**PDRLA**)
	Student learning gain in social competences (e.g. team, communication & leadership competences; empathy; ability to cooperate; ability to solve conflicts) (e.g. by comparison of knowledge & skills before & after learning phases) (**PDRLA**)
	Student learning gain in self-competences (e.g. self-determination; capability of decision & learning; flexibility of action; ability to reflect; sovereignty) (e.g. by comparison of knowledge & skills before & after learning phases) (**PDRLA**)
Employability	Possibility of inclusion of work experience & elements related to work practice
	Employer satisfaction with graduates

Project partners
- **evalag** (Evaluation Agency Baden-Wuerttemberg)
- **Six (pilot) HEIs** from six European countries (incl. students, leadership, QA managers, teachers, students)

SQELT Project Group (SPG)

Collecting & analysing existing definitions of PIs in L&T (e.g., AHELO; Creative Classroom Research Model; U-Multirank; HEC Reports; Teaching Excellence Framework Criteria/HEFCE; Program Accreditation; research literature)

Check of match with **laws and regulations** in higher education (e.g., national law; federal law; accreditation regulations; ESG)

Development of initial integrative PI data set

Evaluation of core data set by cooperation partners (feedback proc.)

Tried and tested **software models** of HEIs
Check of market software offers, if applicable

Final discussion and revision of integrative PI data set based on feedback

External experts
- International **experts in HEI research, performance data management** (PDM) and **performance data analytics** (PDA)
- **European Networks in Higher Education** (e.g. ENQA, EUA, EURASHE, ESU)
- **Representatives of Higher Education Politics** (e.g., ministries of education, science and arts)

Set up of PDM model

Implementation of data model in pilot HEIs

Six pilot HEIs

Collecting feedback (surveys) on data model implementation from pilot HEIs & **refinement of PI data set**

Publish PI data set, usable by any HEI