



# The HEIDA Project Data driven decision making for internationalization of higher education institutions

#### Melissa Abache

Global Engagement Coordinator, Office of Vice-President for Research and Development

Koç University

Turkey









## What is the HEIDA Project?

- Funded by: <u>Erasmus+ KA2 Strategic Partnerships</u>
- **Duration**: 24 months (Dec 2014 Oct 2016)
- Partners: Koç University (Turkey), Universidad Autonoma de Barcelona (Spain), International School for Social and Business Studies (ISSBS, Slovenia)
- Background: builds on previous EU funded projects like <u>IMPI</u>, <u>DELECA</u>, <u>MOEBIUS</u>
- Key topics:
  - Data Driven Decision Making
  - Internationalization of Higher Education Institutions
  - Organizational management



Today's realities	Challenges faced by universities
HEIs are more complex	Monitoring information about internationalization activities and outcomes beyond student mobility, international students or other basic indicators
Most institutions list internationalization as a strategic goal	Limits to what faculty and staff are prepared or able to do with limited time, resources and awareness of past, current and future efforts
Senior managers are now trying to make decisions based on experience and data	<ul> <li>Demand for efficiency and effectiveness with smaller budgets</li> <li>Increased expectations for greater transparency and accountability</li> <li>More competition than ever before to attract talent and funding</li> <li>Potential for more and better services to students based on predictive analysis</li> </ul>



## What do we expect from the project in the short term?

#### **KEY OUTPUTS**

- HEIDA TOOL: to choose and record relevant indicators according to institution's goals, compare and visualize performance across time and internal units
  - Web- based
  - Open access software free to install, use and maintain
  - Adaptable to institutional needs
  - Easy to add, search, visualize and export data
- HEIDA Online Training Module: training resource for staff and faculty
  - Hosted on Moodle e-classroom in **English**, Turkish, Slovenian, Spanish
  - Topics: internationalization and use of indicators and data, data management practices and free tools, decision making in organizations
  - Suggested and complementary readings, case studies and exercises



## Project activities

Phase	Activity	Status
1st Phase  Design	Literature review and 3 case studies	Completed – available <u>here</u>
Dec'14-May'16	Stakeholder focus groups in Turkey, Slovenia and Spain	Completed – available <u>here</u>
	Online survey of European universities	Completed 100+ responses – available <u>here</u>
2nd Phase <b>Testing</b>	Refine the HEIDA data management tool	Ongoing: web-based, open source software tool
May –Aug'16	Develop online training module	Ongoing – Moodle classroom format in EN, TR, SL
3rd Phase <b>Dissemination</b>	Dissemination in each partner country	Completed – available <u>here</u>
July – Oct'16	HEIDA conference in Istanbul	September 22_information <u>here</u>
	Final reporting	End of October



## Why internationalization at institutional level?

• "The process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of post-secondary education" (Knight, 2004)

 "internationalization in universities shifts from being a marginal to mainstream activity, no longer located exclusively in the international offices, but an integral part of University strategy" (de Witt, 2014)



## Who should be using the HEIDA tool and online training in the future?

- Higher Education Institutions:
  - Senior Managers (Presidents/Rectors/Vice Presidents or Vice-Provosts)
  - **Directors of Administrative Units** (Alumni, Careers, Admissions, International Office, Academic Affairs, Communications and Marketing)
  - Professors with international cooperation responsibilities (Deans, Directors, Erasmus Coordinators)
  - Coordinators at administrative and academic units



## heida. Perspectives in internationalization

Perspectives	Defining elements
As an activity	International activities that are developed: teaching, research, technical structures and international students, collaboration programs, inter-institutional agreements, projects and campus, other.
As a competence	New knowledge, competences and skills, students' and professors' attitudes and values required by the internationalization. The focus is on human dimension rather than on academic activities or organizational aspects.
As an ethos	It assumes a culture that permeates all international and intercultural initiatives. Some authors consider this perspective as too limited since it does not include details about how the internationalization objectives could be achieved.
As a process	The integration of the international and intercultural dimensions through combining a series of activities, policy and procedures. The internationalization appears as an integration process of different dimensions and activities in Higher Education Institutions.

Source: Delgado-Márquez, Hurtado-Torres cited in Bondar (2011).



### a. Type of management activities in HEIs and use of data

#### Type of management activity

Diagnosis of teaching-learning problems (individual or group decision-making)

Establish alternative lines of action (internal use)

Justify taking decisions (external purposes)

Contrasting with other information requests (especially for external purposes)

Report daily practice (internal purposes)

Manage meanings, culture and motivation (internal purposes)

Source: Verbiest & Mahieu 2013, 22.



### What we know so far...

- Understanding strengths and weaknesses depends on having access to all data within the institution
- Data tells us what has happened and improves strategic planning moving forward
- The hardest part is always **asking the right question**, because if you don't ask the right question, almost any answer will do.
- Where **analytics** is concerned, investment is the area in which higher education institutions are making the **least progress**.
- Having an Internationalisation Strategy helps to have clear goals, operational objectives, activities to develop and the indicators that can measure the results but #It'sMoreComplicatedThanThat



## Data, Big Data and Analytics in higher education institutions

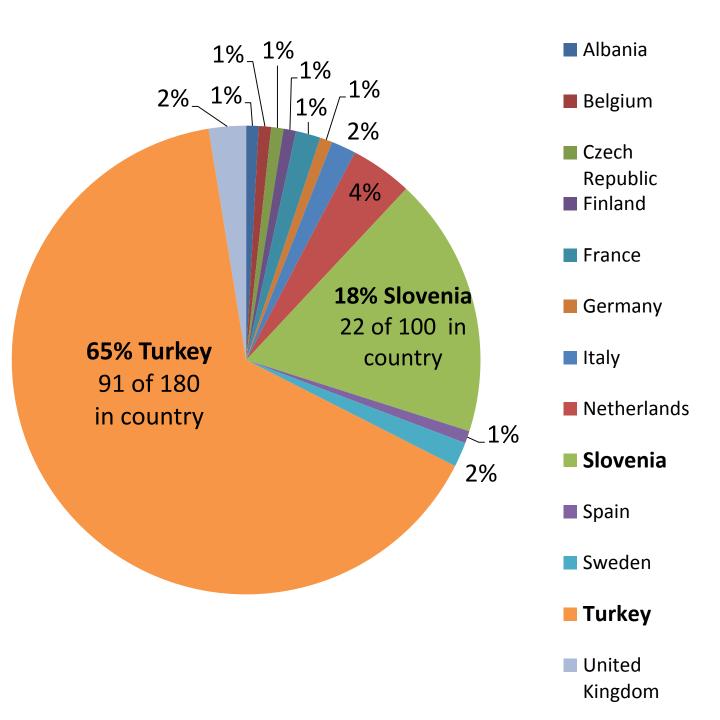
#### Challenges in collection of data

- Data resides across various functions who owns the data?
- Quality is poor when is it collected how is it processed?
- What does a certain indicator exactly mean are we comparing apples with oranges unknowingly?
- Endless data requests with different formats is there an **incentive or mandate** to collect and provide the data? (accreditation, reporting, projects, budgeting, planning, service or program improvement, measuring student outcomes/achievements)



## HEIDA Online questionnaire

- Administrative senior manager with responsibility for internationalization at central or faculty level
- 1 month (Feb-Mar 2016)
- 117 responses from in 13 EU countries (141 valid questionnaires)





## Online questionnaire Top 5 most common internationalization dimensions /aspects

Internationalization aspects or dimensions	Frequency	Percentage
International partnerships	108	92,31%
International students (full time degree and credit mobility)	99	84,62%
International student, faculty and staff services	92	78,63%
International research projects (funding, collaboration)	91	77,78%
International programmes	80	68,38%



## Online questionnaire

## How is internationalization data managed at your institution?

- 69% of the respondents agree that they are able to find internationalization data and indicators easily (18% disagreed)
- 67% of the respondents think that their universities keep internationalization data up to date (14% does not agree)
- 56% of the respondents think their data collection formats are easy for queries and reporting (16% disagree)
- 72% respondents believe that university senior managers use internationalization data for strategic decisions (10% disagree)
- 78% of the respondents agree that university staff are able to collect, analyse and report internationalization data whereas 8% do not agree



## What were the 10 most "popular" indicators? Which dimensions do they refer to?

Indicator	Frequency	Percentage
Does the university advise students on study abroad opportunities?	72	61,54%
What proportion of students from the university participates in outgoing exchange or mobility programmes in a year?	66	56,41%
Does the university have a clearly defined strategy for internationalisation?	49	41,88%
Does the university provide international students with comprehensive pre-arrival information (covering such topics as visa procedures, cost of living, tuition fees, accommodation options, university services, sports and cultural activities);?	43	36,75%
Does the university have a specific organisational structure to support internationalisation?	43	36,75%
Does the university provide specific contact information for international internships?	42	35,90%
What is the proportion of international students that graduates from the university in a year?	39	33,33%
Out of all courses offered by the university, what is the proportion of courses taught in a foreign language?	34	29,06%
Out of all students in the university, what proportion studies abroad in a year?	32	27,35%
Does the university have a defined strategy to develop the participation of staff in internationalisation activities?	29	24,79%



## What were the bottom 5 «least popular» indicators? Which dimensions do they refer to?

Indicator	Frequency	Percentage
In a year, what is the ratio of conference presentations delivered abroad (or in the context of international conferences) to the number of researchers in the university?	8	6,84%
In a year, what proportion of researchers in the university author (or co-author) pieces (books, journal issues, articles, etc) is published internationally?	8	6,84%
In a year, out of all of the university's academic staff members, what proportion are members of at least one international academic or professional association?	8	6,84%
In a year, out of all of the university's academic staff members, what proportion is involved in international joint doctoral supervision/co-tutelle?	4	3,42%
In a year, out of the university's total budget for scholarships, what proportion is dedicated to scholarships for international students?	4	3,42%

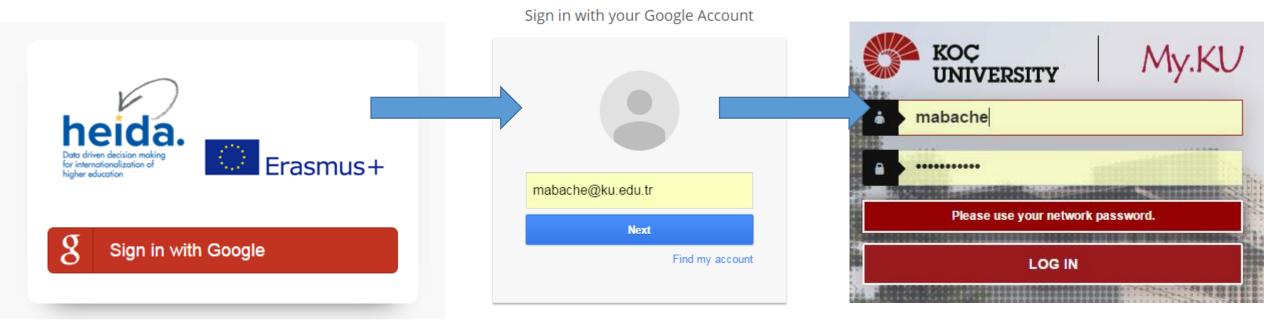


### Level of awareness of internationalization

- Being a young/small/public institution: lack of resources (budget, time, staff) or not a priority yet
- We need a better international strategy / there is no strategy
- Lack of communication between departments/units
- Internationalization comes as a product of many activities and it is hard to monitor all aspects
- Some academic/administrative units still have doubts on some of the activities which may be placed under internationalization such as development of international curriculums
- Location of our university is a disadvantage for internationalization



### The HEIDA Tool

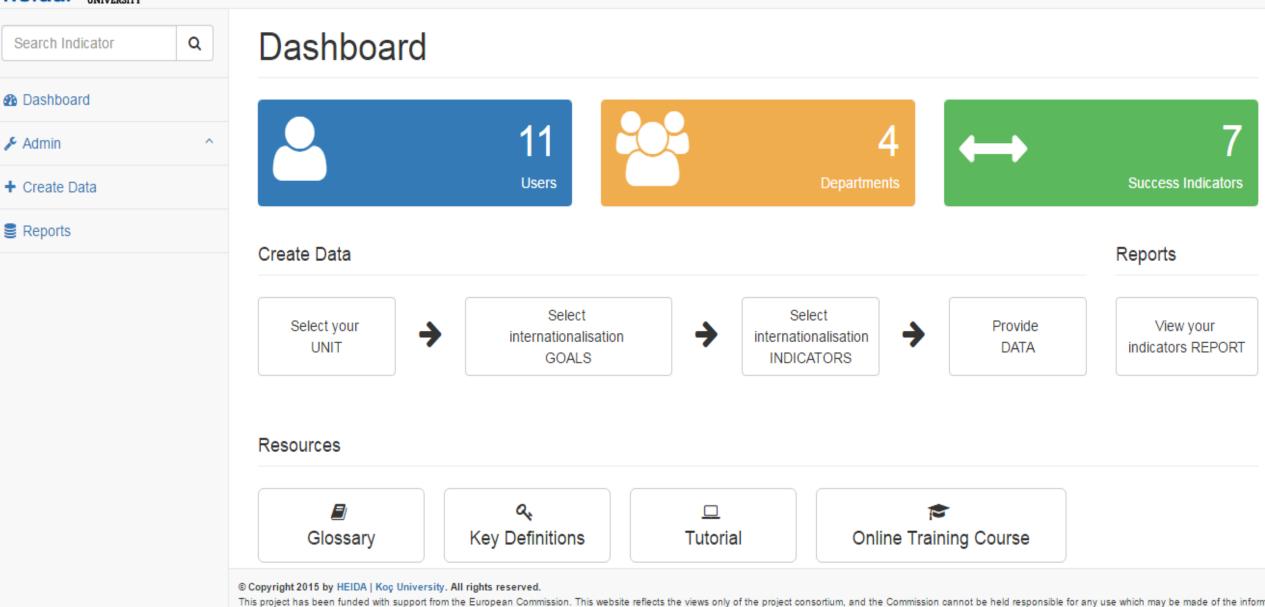


Web-based tool

Login using existing university profile/username







## 3 types of users:

Admin: «owner»

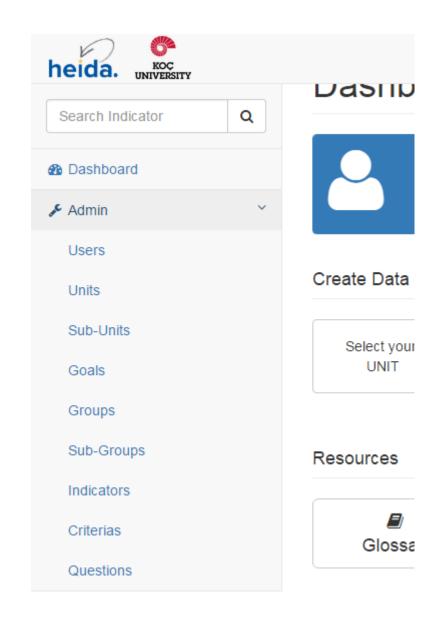
- Example: International Office and IT

**Editor**: «content providers»

Examples: Academic Coordinators

Viewer: «users»

Examples: Rector, Directors, Professors,
 Comms, Marketing, Grant support,
 Accreditation, Planning, students









Add New Unit

Q Search Indicator

Dashboard

Users

Admin

Units

Sub-Units

Goals

Groups

Sub-Groups

Indicators

Criterias

Questions

+ Create Data

Reports

#### Units



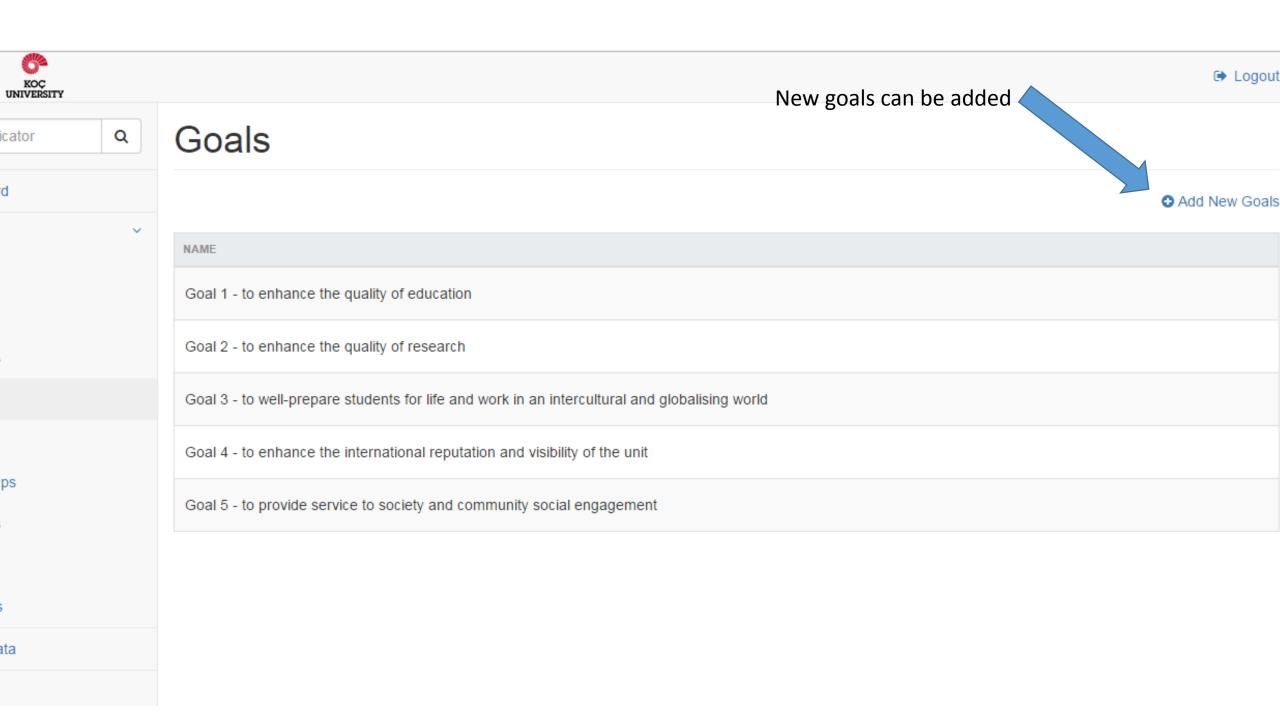
New units can be added





01111 211011 1	
Search Indicator	Q
♠ Dashboard	
<b>≯</b> Admin	~
Users	
Units	
Sub-Units	
Goals	
Groups	
Sub-Groups	
Indicators	
Criterias	
Questions	
+ Create Data	
Reports	

NAME	UNIT
Department	Academic Unit
Faculty	Academic Unit
College	Academic Unit
Graduate School	Academic Unit
Other	Academic Unit
Rector/President/Vice-Chancellor's Office	Non-Academic / Administrative Unit
Vice-President/Vice-Rector's Office	Non-Academic / Administrative Unit
Corporate Relations Office	Non-Academic / Administrative Unit
Communications / External Relations Office	Non-Academic / Administrative Unit
Student Services / Student Affairs Office	Non-Academic / Administrative Unit
Facilities and Operations Office	Non-Academic / Administrative Unit





Dashboard



represents an aspect of a higher education institution 9 Groups

Logoι

◆ Add New Group

Q Search Indicator

Groups

🔑 Admin Users Units Sub-Units

Goals

Groups

Sub-Groups

Indicators

Criterias

Questions

+	Create	Data

Reports

NAME	SUBGROUP COUNT
STUDENTS	3
STAFF	5
ADMINISTRATION	1
FUNDING AND FINANCE	1
CURRICULA AND ACADEMIC SERVICES	1
RESEARCH	6
PROMOTION AND MARKETING	1
NON-ACADEMIC SERVICES AND CAMPUS AND COMMUNITY LIFE	3



## represents more specific aspects/dimensions of internationalization 22 Sub-Groups

#### ◆ Add New Sub-Group

NAME	GROUP	INDICATOR COUNT
Study Abroad	STUDENTS	30
International Students	STUDENTS	30
General Student Data	STUDENTS	30
Academic and Non-Academic Staff General Data	STAFF	30
Academic and Non-Academic Staff - Outgoing Staff	STAFF	2
Academic and Non-Academic Staff - Staff from Abroad	STAFF	10
Academic Staff	STAFF	30
Non-Academic Staff	STAFF	18

Study Abroad

#### 489 Indicators in total

neida. woc university

Search Indicator Q

### Indicators 4

01-001

Add New Indicator

PUBLIC

VALUE TYPE

22	Dashboard	
æC	Admin	~
	Users	
	Units	
	Sub-Units	
	Goals	
	Groups	
	Sub-Groups	

Indicators

Criterias

Questions

+ Create Data

Reports

CODE	unique code	SUBGROUP
01-077	What is the proportion of students with special needs who study abroad?	Study Abroad
01-074	What is the percentage development of the proportion of students in the unit graduating with a study abroad experience in a given year compared to the proportion of such students in the previous year?	Study Abroad
01-064	In a given year, to how many different countries do the unit's students go?	Study Abroad
01-075	What is the proportion of female students who study abroad?	Study Abroad
02-071	What is the proportion of female staff members from abroad?	Academic and Non-Academic Staff - Staff from Abroad

Does the unit advise students on study abroad opportunities?



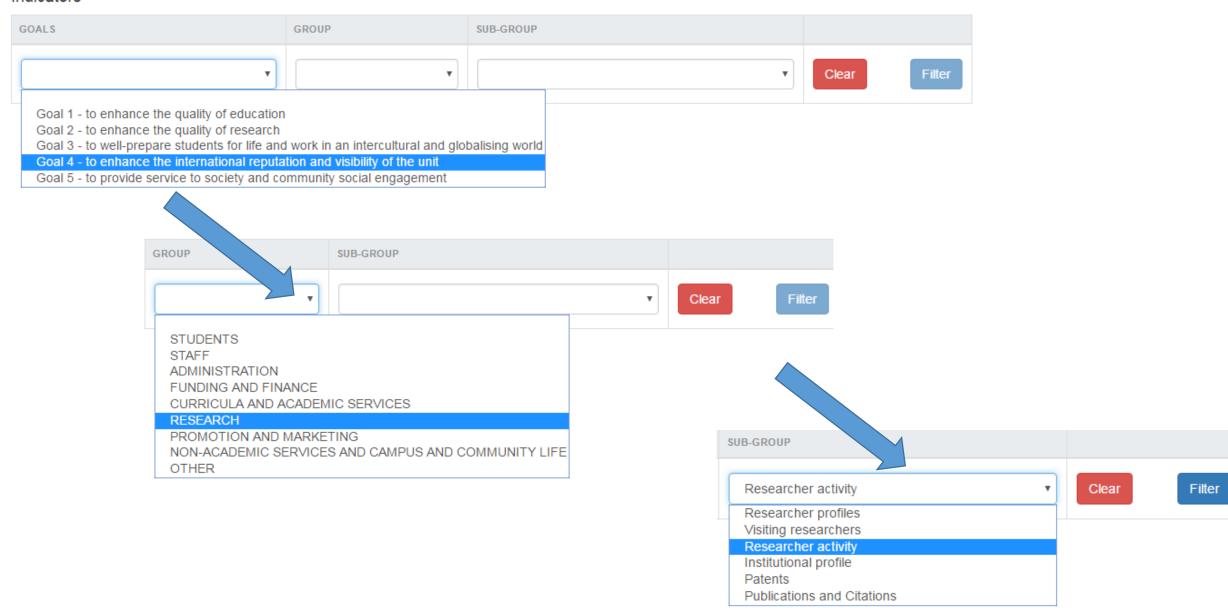
## Internationalization Indicators

INPUT	"In a given year, what proportion of FTEs does the unit employ for international student visa applications?"
OUTPUT	"In a given year, what is the ratio of conference presentations delivered abroad (or in the context of international conferences) to the number of researchers in the unit?"
OUTCOME	"In a given year, out of all of the unit's academic staff members, what proportion is involved in international joint/double degree programmes?"
QUALITATIVE	"Does the unit have defined regulations, procedures enabling and supporting internationalisation?"

Results	Goal 1: To enhance the quality of education	Goal 2: To enhance the quality of research	Goal 4: To enhance the international reputation and visibility of the unit			
Output	In 2006, Institution X sent 10 bachelor-level students on a student exchange program to Institution Y in another country.	In 2005, the unit received 12 international visiting researchers from different countries.	Each year from 2002-2010, Institution Y increased the number of highly qualified international professors it employs by 10-15%.			
Outcome	In 2008, 4 of the students graduated from institution X after completing an in-depth Bachelor level research Project, focusing on topics they were introduced to in institution Y.  2 of these students went on to Master's level study in the field related to this undergraduate research.	In 2010, 7 of these international visiting researchers continue to collaborate with the unit upon return to their home institution	In 2008-2010 institution Y achieved accreditation in several high-visibility fields and raised its standings in key rankings, in part due to the rising quality of the academic programs offered by its increasingly International professoriate.			
Impact	By 2012 one of these students was an advanced PhD candidate, carrying out research in cooperation with both institution X and Y.  This doctoral project provided the impetus for the launch of a new joint Master's course between these institutions.	By 2012, the unit's domestic researchers had published 10 different pieces (books and peer reviewed articles) with the visiting researchers in international scientific publications.	In 2011, institution Y demonstrated clear market advantage over competitor institutions in its country, attracting high levels of research funding, new faculty, and highly competitive students.			

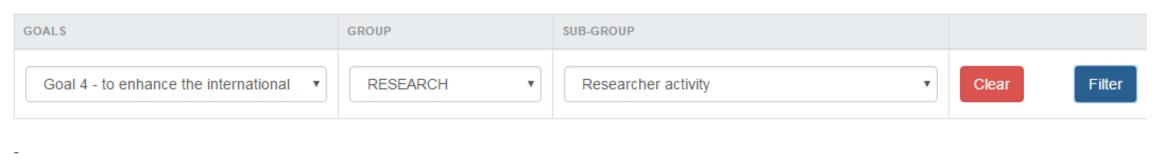
#### Add Data

#### Indicators



#### Add Data

#### Indicators



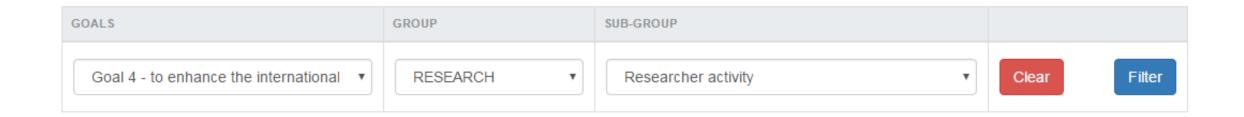
Out of all the researchers in the unit in a given year, what proportion has spent at least one semester conducting research abroad at any point in time during their period of employment at the unit?

In a given year, what proportion of researchers in the unit goes abroad as visiting researchers for some period of time?

Number of internationally funded (i.e. within EU programmes) research projects

In a given year, what proportion of researchers in the unit is involved in at least one research project with an international partner?

Out of all the researchers in the unit in a given year, what proportion engages in at least three months of professional experience abroad?



Out of all the researchers in the unit in a given year, what proportion has spent at least one semester conducting research abroad at any point in time during their period of employment at the unit?

In a given year, what proportion of researchers in the unit goes abroad as visiting researchers for some period of time?

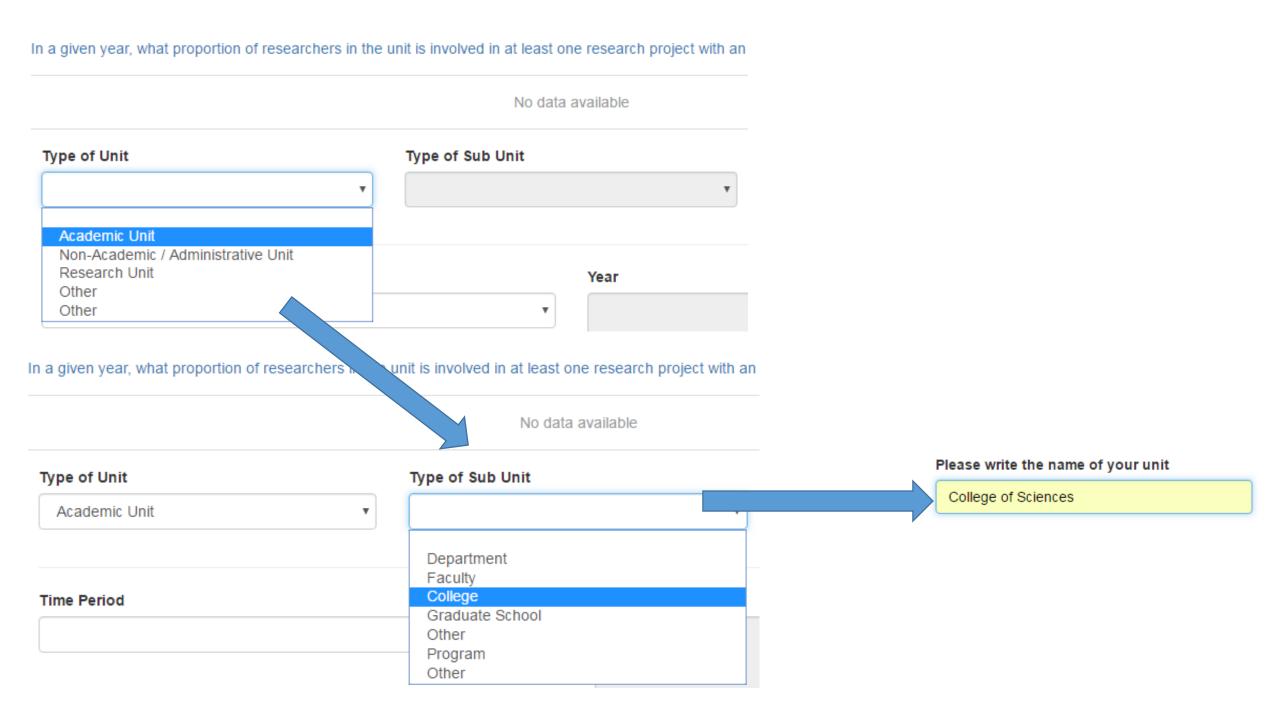
Number of internationally funded (i.e. within EU programmes) research projects

In a given year, what proportion of researchers in the unit is involved in at least one research project with an international partner?



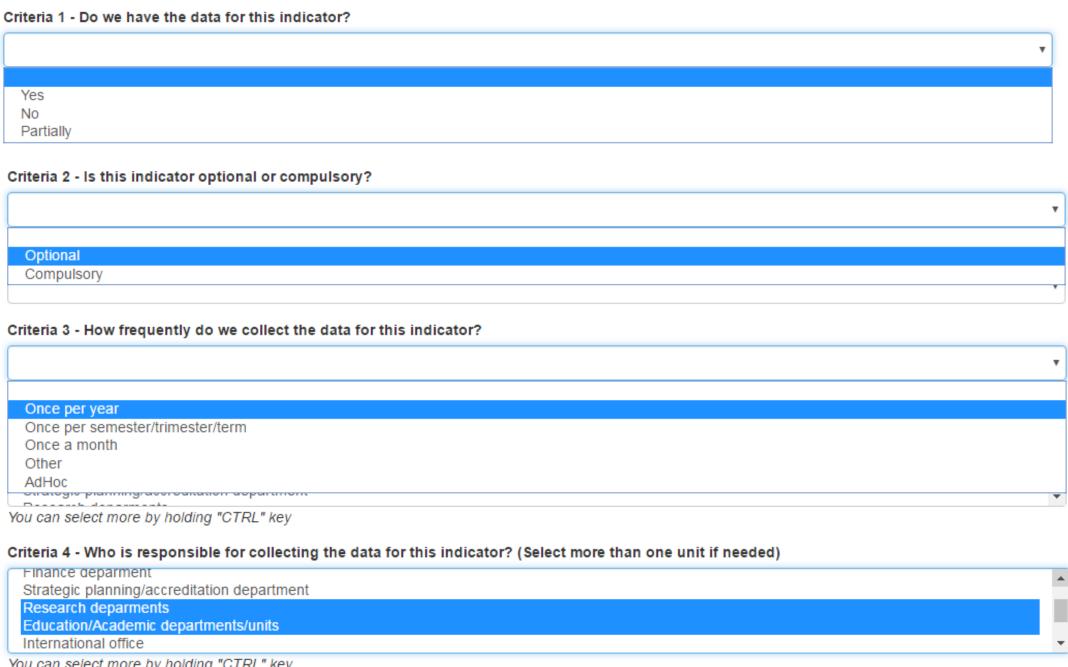
DEPARTMENT PUBLIC YEAR:VALUE

No data available



In a given year, what proportion of researchers in the unit is involved in at least one research project with an international partner?

No data available								
Type of Unit		Type of Sub Unit		Please write the na	me of your unit			
Academic Unit	•	College	•	College of Science	s			
Time Period			Year					
Calendar Year		•	2007 2008 2009 2010 2011					
			You can select more by	y holding "CTRL" key				
Value of 2006	Value of 2007	Value of 2008	Value of 2009	Value of 2010	Value of 2011			
12	22	25	21	18	22			



You can select more by holding "CTRL" key

#### Criteria 5 - What is this indicator used for? - Please choose all that apply National statistics Educational/Academic planning Funding and budgeting Media and marketing Other You can select more by holding "CTRL" key Criteria 6 -Do we have procedures for ensuring the data for this indicator is accurate? Yes No Criteria 7- In what format do we collect the data for this indicator? Please tick all that apply Paper records Open source/free data management/sharing software (eg. Google docs, other) Excel database/worksheet Commercial data management software Other You can select more by holding "CTRL" key Criteria 8 -In what format is the data for this indicator available? - Please tick all that apply Annual reports Open source/free data management/sharing software (eg. Google docs, other) Institution's website Commercial data management software You can select more by holding "CTRL" key

Cancel



Reports

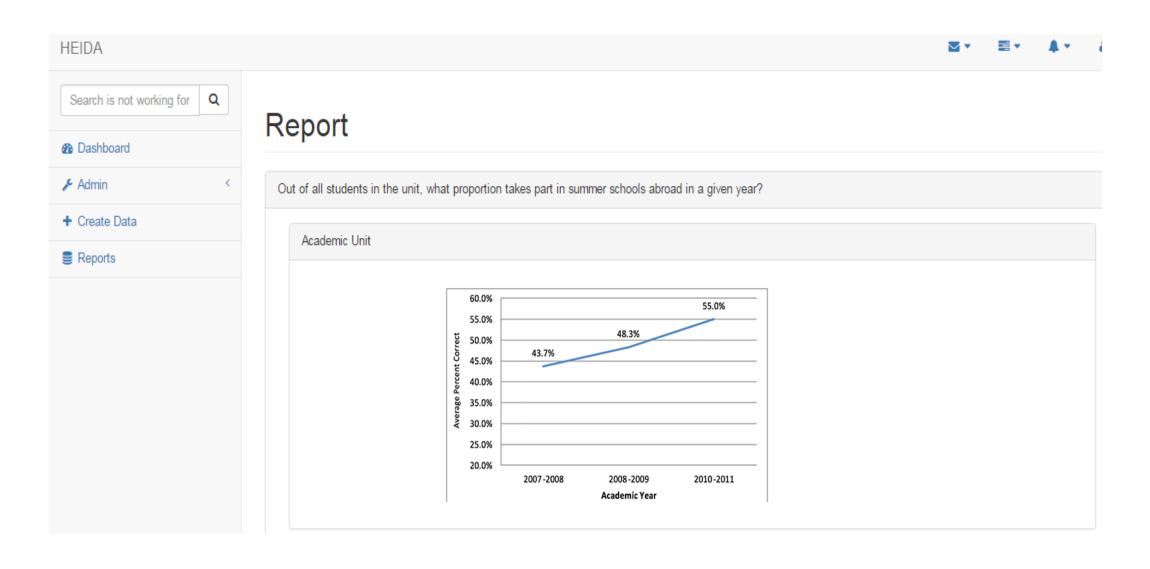


Search Indicator	Q

### Reports

INDICATOR	DEPARTMENT		
•	•	Clear	Filter

INDICATOR CODE	INDICATOR NAME	GROUP	SUB- GROUP	DATA TYPE	STATUS	ACTIONS			
IC	Question to student: How satisfied are you with the number of exchange places available in your unit?				status	Edit	Visualize (Graph/Table)	Print	Delete
IC	Out of all international students in the unit in a given year, what proportion are exchange or mobility programme students?				status	Edit	Visualize (Graph/Table)	Print	Delete
IC	Out of all students in the unit, what proportion takes part in summer schools abroad in a given year?				status	Edit	Visualize (Graph/Table)	Print	Delete
IC	Out of all students in the unit, what proportion studies abroad in a given year?			numeric	status	Edit	Visualize (Graph/Table)	Print	Delete
IC	What proportion of students in the unit is involved in service learning				status	Edit	Visualize	Print	Delete





## HEIDA TOOL FUNCTIONS

SELECTION OF INDICATORS

 ADDING DATA FOR INDICATORS FOR VARIOUS YEARS IN CALENDAR OR ACADEMIC YEAR FORMAT

VISUALIZING PERFORMANCE IN TIME AS A GRAPH OR TABLE

• EXPORT AS PDF/PRINT INDICATOR AND DATA QUESTIONS

SEARCH BY INDICATOR KEYWORDS



### HEIDA ONLINE TRAINING MODULE

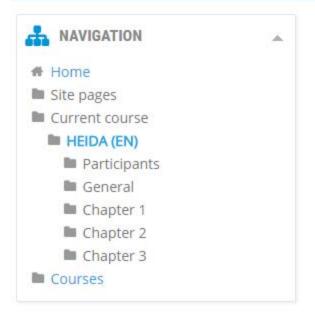
Available from Moodle classroom <u>here</u>

Open access

• Languages: **ENGLISH**, SPANISH, SLOVENIAN, TURKISH



Celje · Slovenia · Europe



#### HEIDA (EN) - Data Management and Decision-making: Applications for Internationalization in Universities





Co-funded by the Erasmus+ Programme of the European Union











### HEIDA ONLINE TRAINING MODULE

#### **CHAPTER 1 ORGANIZATIONAL DEVELOPMENT**

• Chapter opens a discussion on data use in a data rich world. As new technologies make it possible to collect, manage and maintain massive numbers of "big" data, questions about their limitations and the need of "small" data might be raised on the other hand. The module opens dilemmas on how and why data are used for in higher education institutions.

#### **CHAPTER 2 DECISION MAKING & USING DATA**

The chapter focuses on the importance of the evidence-based decision-making in university
management mostly related to teaching activities. Also, in the chapter, the debate on the
importance of collecting data on internationalization of teaching and the advantages that could be
brought are being promoted.

#### CHAPTER 3 HEIDA TOOL AND OTHER FREE DATA MANAGEMENT RESOURCES

 Measurement indicators are a structured mechanism for gathering different kinds of data which, particularly when compared over time, may point to trends or allow for a comparison of performance within or across institutions/units. HEIDA tool makes it possible to measure the performance of higher education institutions in the field of internationalization.

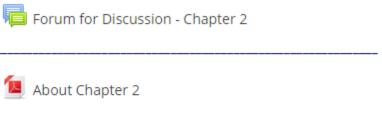


#### CHAPTER 2

#### **DECISION MAKING & USING DATA**



The chapter focuses on the importance of the evidence-based decision-making in university management mostly related to teaching activities. Also, in the chapter, the debate on the importance of collecting data on internationalization of teaching and the advantages that could be brought are being promoted.



#### Study materials

- Data management and decision making: applications for internationalization in universities
- Findings from the HEIDA survey (2015)
- Steps for decision making process based on internationalisation data
- Mini case studies for reflexion in pears or small groups

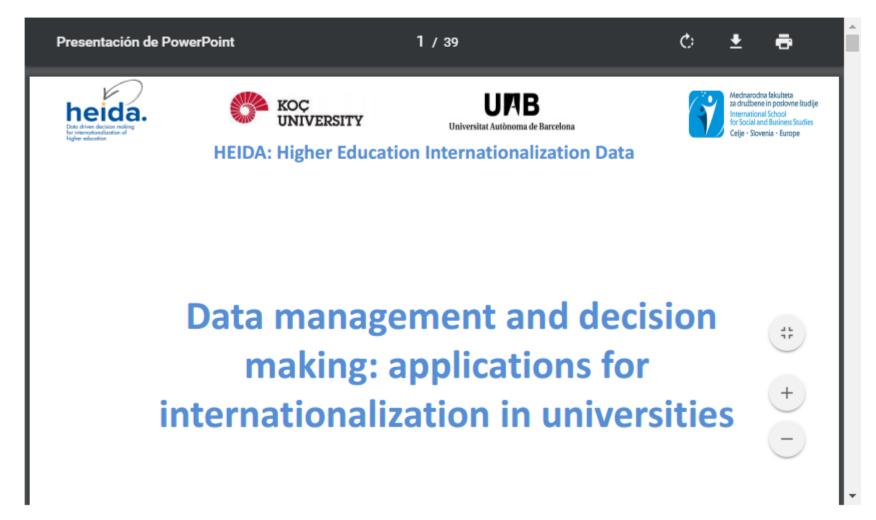


- # Home
- Site pages
- Current course
  - HEIDA (EN)
    - Participants
    - General
    - Chapter 1
    - Chapter 2
      - Forum for Discussion Chapter 2
      - About Chapter 2
      - Data management and decision making: applications

...

- Findings from the HEIDA survey (2015)
- Steps for decision making process based on interna...
- Mini case studies for reflexion in pears or small ...
- Complementary Study Materials
- Chapter 3
- Courses

Data management and decision making: applications for internationalization in universities



Data management and decision making: applications for internationalization in universities



## Join the HEIDA online community!

• Follow us on Twitter: @HEIDAProject

• Join the **LinkedIn** group: HEIDA

• Email the team to install the tool at your HEIs heida@ku.edu.tr

Check the project website: <a href="heida.ku.edu.tr/">heida.ku.edu.tr/</a>



Comments

Suggestions

Questions