

# **Overview of indicators and data-elements, by dimension**

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## Degree level focus

definition	The number of degrees awarded in the reference year, by level of degree	cut-off points	doctorate focus>= 5% of all qualiifications awarded are doctorate degreesmaster focus>= 25% master degreesbachelor focus>=40% bachelor degreessub-degree focus>= 5% sub-degree qualificationsMultiple focuses may be attributed
			doctorate degrees: >5; between 5 and 2; between 1 and 2; less than 1 master degrees: >25; between 25 and 15; between 15 and 5; less than 5 bachelor degrees: >40; between 40 and 10; between 10 and 5; less than 5 short first degrees:>40; between 40 and 10; between 10 and 5; less than 5
rationale	The relative size of the various degree levels give an indication of the focus of the profile of the HEI. Degrees are counted and not enrolment to avoid double counting and the biasing effect of 'eternal students'.	remarks	Qualifications comprise all levels including sub degree, bachelor, master, doctorate and other diplomas and certificates. The categories are chosen to avoid a hierarchical connotation to appeared to be attached to the 'old' indicator 'graduate intensity'.

#### data element

Degrees awarded in bachelor programs
Degrees awarded in undivided programs
Degrees awarded in master programs
1
Qualifications awarded in short first cycle programs
1
Doctorate degrees awarded
• • • • • • • • • • • • • • • • • • •

Qualifications awarded in other third cycle level progra



## Expenditure on teaching

definition	The percentage of the institution's total expenditure dedicated to the teaching activities in the reference year	cut-off points	more than 40%: major between 20 and 40: substantial between 5 and 20: some between 0 and 5: none
rationale	This indicator highlights the priority given to teaching activities, in relation to research and knowledge exchange	remarks	Including expenditure on instruction in teaching hospitals and expenditure on services indirectly related to instruction (e.g. educational services, curriculum development, administration, capital expenditure). The expenditure on management and organization of teaching is to be included.
			Excluding expenditure on CPD activities, the university hospitals' expenditure on patient care and other non-education related general expenditure.
			Some institutions are engaged in teaching as well as research. This makes it difficult to single out teaching-related expenditure. In this case we only request an estimate of the share of teaching in the total activity.

#### data element

Expenditure on teaching



## Orientation of degrees

definition	The proportion of graduates (all levels combined) in three types of programs: general formative programs, programs leading to licensed/regulated professions, and other career-oriented programs	cut-off points	more than one third of graduates in general formative programs: general formative focus more than one third of graduates in programs leading to licensed/regulated professions: licensed/regaulated professional orientation more than one third of graduates in other career-oriented programs: other career-oriented focus. More than one third of graduates in two categories: mixed orientation
rationale	Programs leading to certified/ regulated professions as assumed to have a clear professional orientation. Professional orientation thus can be described as having a direct link to the needs of the labourmarket.	remarks	General formative programs do not have a direct relation to a specific profession or specific (line of) jobs. These programs are in line with the Humboldtian tradition of Bildung and the American Liberal art programs. An example of this category would be a program leading to a Bachelor of Arts in Law (or: Bachelor of Laws, LLB) The EU has developed guidelines for the recognition of professional qualifications. A list of European regulation and national lists of regulated professions can be found on the website: http://ec.Europa.eu/internal_market/qualifications/index_en.htm In this second category are the health-related programs (to become a doctor, nurse, midwife, pharmacist, dentist, or veterinary surgeon), and also postsecondary programs to become an architect or barrister Other career oriented programs refer to programs that have a direct relation to a specific profession or specific (line of) jobs, others than the
			programs described in the previous item. Professional masters, research masters and professional doctorates should be counted here as well (if not counted under the previous item). An example of the third category would be a Bachelor in Business Administration in Tourism Management.



#### data element

Qualifications awarded in career oriented programmes

Qualifications awarded

Qualifications awarded in programmes leading to licens

Qualifications awarded in general formative programm

### Range of subjects

definition	The number of ISCED97 subject areas in which qualifications are awarded	cut-off points	areas covered <=3specialised3< areas covered <=6 broadareas covered >6comprehensive
rationale	The mix of subject offerings is an indicator of the width of the scope of activities of the HEI	remarks	The OECD ISCED97 classification distinguishes 8 broad subject areas or fields of education. These broad areas are likely to be used at the national level only, for reporting to Eurostat en OECD. The reporting agencies will have 'conversion tables' converting the national names into the broad international groups. For a more detailed description of the subject classification see http://browse.oecdbookshop.org/oecd/pdfs/browseit/9604031E.PDF A subject area is counted if at least five percent of the qualifications offered are in that subject area. The data provided should refer to all degree levels combined

Degrees awarded in humanities and arts
Degrees awarded in engineering
Degrees awarded in personal services



Degrees awarded in natural sciences and mathematics

Degrees awarded in social sciences, business and law

Degrees awarded in education

Degrees awarded in agriculture

Degrees awarded in health and social service



## Distance learning students

definition	Students enrolled in distance learning programs as a percentage of total number of students enrolled. Distant learning programs provide courses not requiring students physical on-site presence to receive their education.	cut-off points	more than 20%:predominantbetween 10 and 20 substantialbetween 5 and 10 someless than 5 none
rationale	Distance learning programs is a distinct characteristics of the way the programs are offered to students. An institution that has relatively many students enrolled in distance learning programs is likely to have an opener attitude to its environment/ stakeholders.	remarks	All levels combined.

Total enrolment	
Students in distance learning programs	



### Mature students

definition	The number of students aged 30 years or older (headcount, all levels combined) as a percentage of total number of students enrolled (headcount, all levels combined)	cut-off points	more than 20%:predominantbetween 10 and 20 substantialbetween 5 and 10 someless than 5 none
rationale	The proportion of adult learners is seen both as an indicator for the involvement in life long learning as for the age distribution of the student body.	remarks	
data elemen	t		

	Students aged 30+
ſ	Total enrolment



### Part-time students

definition	The number of students enroled in part-time programs (headcount) as a % of total enrolment (headcount)	cut-off points	more than 20%:predominantbetween 10 and 20 substantialbetween 5 and 10 someless than 5 none
rationale	Part time programs is a distinct characteristic of the way the programs are offered to students. An institution that has relatively many part time students enrolled is likely to have an opener attitude to its environment/ stakeholders.	remarks	The approach taken here differs slightly with the approach taken by OECD; At the tertiary level, an individual is considered part-time if he or she is taking a course load or educational programme that requires less than 75 per cent of a full-time commitment of time and resources.(OCDE http://www.oecd.org/dataoecd/45/17/33692376.pdf)
			Full time students who are de facto part time students (taking much more time to complete than the standard time) are not to be counted here.

Total enrolment	
Part time students	



## Size of student body

definition	The headcount number of students enrolled in all	cut-off points	very large: more than 30,000
	types of degrees and certificate programs.		large: between 15,000 and 30,000
			medium sized: between 5,000 and 15,000
			small: less than 5,000
rationale	A basic size indicator	remarks	We consider all students registered at the reporting institution who follow courses that lead to the award of a qualification(s) (degree seeking students), excluding those registered as studying completely abroad. Data should reflect the number of students enrolled at the beginning of the academic year. Preferably, the end (or near-end) of the first month of the school / academic year should be chosen. If the enrolment of students is not stable at the beginning of the academic year, a count at a later point may be preferable. Included are students studying for Associate degrees (short first cycle), Bachelor degrees (first cycle), Master degrees, as well as students in pre- Bologna degree programs (second cycle), as well as doctoral students and other third cycle students. The number of students enrolled only refers to students for which the institution is their principle institution of enrollment. Therefore, simultaneous enrollments should be excluded here (Each student enrolled
			is counted only once.)
data elemen	nt		

Total aprolm

Total enrolment



## Doctorate production

definition	The number of doctorate degrees awarded as a percentage of the number of academic staff (fte)	cut-off points	more than 0,15majorbetween 0,05 and 0,15substantialbetween 0 and 0,15some0none
rationale	In many higher education systems the 'production' of a doctorate degree is seen as a research intensive activity of a higher education institution. The doctorate thesis is in most cases a significant research publication.	remarks	Doctorate degrees comprise PhD degrees as well as professional doctorate degrees
data elemer	nt		

#### ita element

Doctorate degrees awarded	
Academic staff (fte)	



## Expenditure on research

definition	The amount of money (in euro's) spent on research activities in the reference year as a percentage of total expenditure	cut-off points	more than 40%: major between 20 and 40: substantial between 5 and 20: some between 0 and 5: none
rationale	Research expenditure is seen as a strong indicator for involvement in research	remarks	Including expenditure on R&D at academic hospitals and including expenditure on services indirectly related to research (e.g. management and organisation of research, administration, capital expenditure).
			Excluding the academic hospitals' expenditure on patient care and other non-research-related general expenditure.
			All expenditure on research is included, regardless of whether the research is funded from general institutional funds or through separate grants or contracts from public or private sponsors. This includes all research institutes and experimental stations operating under the direct control of, or administered by, or associated with, the higher education institution.
			Some institutions are engaged in teaching as well as research. This makes it difficult to single out research-related expenditure. In this case we only request an estimate of the share of research in the total activity. Please indicate the percentage of the institution's total expenditure dedicated to the research activity.

Total expenditure	
Expenditure on research	



## Peer reviewed academic publications

definition	Annual number of peer reviewed academic publications relative to the total number of academic staff (FTE)	cut-off points	more than 1.5 major between 0.75 and 1.5 substantial between 0,1 and 0.75 some less than 0,1 none
rationale	The number of publications is seen as an important indicator for the involvement in research	remarks	This includes PhD dissertations and books. Peer review (also known as refereeing) is a process of subjecting an author's scholarly work, research, or ideas to the scrutiny of others who are experts in the same field, before a paper describing this work is published in a journal, book or conference proceedings.
			You may use your database where national journals and other academic peer reviewed publications (that do not appear in the existing databases) are counted as well.





## Peer reviewed other research products

definition	The number of research outputs other than peer- reviewed publications and professional publications per fte academic staff	cut-off points	more than 1.5 major between 0.75 and 1.5 substantial between 0,1 and 0.75 some
			less than 0,1 none
rationale	This indicator points at the more professional oriented research activities of an institution	remarks	These outputs may be found through bibliographical searches and have been documented officially. This category includes exhibition catalogues, musical compositions, designs, and other artifacts that underwent a process of peer review.

data element

peer reviewed other research products		
Academic staff (fte)		

## Professional publications

definition	All publications published in journals/ books/ proceedings that are addressed to a professional audience and that can be traced bibliographically per fte academic staff	cut-off points	more than 7.5majorbetween 3.75 and 7,5substantialbetween 0,5 and 3.75 someless than 0,5nonenone
rationale	This indicator points at the more professional oriented research activities of an institution	remarks	These publications are not peer reviewed as in the category academic publications. A count of all publications published in journals/ books/ proceedings that are addressed to a professional audience and that can be traced

bibliographically.



Academic staff (fte)

Professional publication



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### regional engagement

## First year bachelor students from the region

definition	The number of first year bachelor students (headcount) from the region as a percentage of total number of first year bachelor students. The region is determined by the home address of the student.	cut-off points	more than 10%majorbetween 5 and 10% substantialbetween 1 and 5%0none
rationale	A HEI that draws many of its students from the region has a stronger relation with the region than a HEI with only few new entrants from the region.	remarks	We further note that new entrants are students who, during the course of the current reporting period, enter any program leading to a recognised qualification at this level of education for the first time, irrespective of whether the students enter the program at the beginning or at an advanced stage of the program (e.g. by virtue of credits gained for work experience or courses taken at another level). Operationally, new entrants into a level of education are enrolees who have never been included in the corresponding count of students for that level of education previously. Individuals who are returning to study at a level following a period of absence from studying at that same level are not considered to be new entrants. We are requesting data on the percentage of new entrants that prior to their registration in the institution had a place of residence located in the region where their institution is situated. If the institution has multiple campuses in different regions, students that were resident in any of the campus regions are regarded as coming from the institution's region. What is a region will be determined in two ways: the region the HEI uses in its data reporting (needs to be specified by the HEI) and the NUTS2 region

the HEI is located in.

data element

% of first year bachelor students from the region



### regional engagement

## Graduates working in the region

definition	The number of the graduates from two years ago (reference year – 2), who work in the region, as a percentage of the total number of graduates from two years ago	cut-off points	more than 10%majorbetween 5 and 10% substantialbetween 1 and 5%0none	
rationale	A high proportion of graduates working in the region indicates a close relation between the higher education institution and the region	remarks	To be asked either as exact numbers or as broad categories. What is a region will be determined in two ways: the region the HEI uses in its data reporting (needs to be specified by the HEI) and the NUTS2 region the HEI is located in.	

data element

Graduates working in the region

## Importance of local/regional income sources

definition	Total income from regional and local sources (both public and private), including all income from grants, subsidies and contracts for teaching and research, from both public and private regional sources public bodies, private contractors) in 1000 Euros as a percentage of total income	cut-off points	more than 10%majorbetween 5 and 10% substantialbetween 1 and 5%0none
rationale	A high proportion of income from regional/local sources indicates a intens relation between the higher education institution and the region	remarks	

data element

Income from regional and local sources



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## regional engagement

Total income



### **Cultural activities**

definition	The number of official exhibitions, official concerts and performances, (co)-organised by the institution or a department of it, that are registered as such and that are open to the general public, per 1000 fte academic staff	cut-off points	more than 100majorbetween 50 and 100substantialbetween 0 and 50some0none
rationale	The number of exhibitions, concerts and performancesis in arts and architecture a generally accepted indicator of the level of their activities	remarks	An exhibition is an event organised by the higher education institution where the academic staff or the students of the institution display their work (products, services, design, prototype, audiovisual/musical output) to the general public. There should be some evidence of the event in terms of a bibliographically traceable catalogue, or similar evidence that the event took place.

Exhibitions	
Concerts and performances	



## Income from knowledge exchange activities

definition	Sum of income from licensing agreements, income from 'private' research contracts with business and public sector organisations, income from copy righted products and income from CPD activities as a percentage of total income	cut-off points	more than 10%majorbetween 1 and 10% substantialbetween 0 and 1%0none
rationale	If a HEI gets relatively much of its income from 'knowledge exchange activities it is assumed to be more involved in those activities	remarks	

Total income
Licensing income
Income from CPD
Volume of privately funded research contracts
Income from copyright protected products



## Patent applications filed

definition	The number of patents filed related to the total fte of academic staff x 1000	cut-off points	more than 10majorbetween 5 and 10substantialbetween 1 and 5some>1none
rationale	The number of patents filed is a traditional indicator of innovativeness.	remarks	A patent is a set of exclusive rights for a fixed period of time in exchange for a disclosure of an invention. The exclusive right granted is the right to prevent of exclude others from making, using, selling or offering to sell or importing the invention. In order to be patented an invention must be novel, useful and not of an obvious nature. Applications for patents are filed to national states or application agencies. Most patents and applications for patents are listed in national and internaltional electronic databases (like the database of the European Patent Office)





## Start-up firms

over the last three years per 1000 fte academic staff		between 5 and 10 substantial
staff		
Stati		between 1 and 5 some
		>1 none
The number of start-up firms established in a period is considered to be an indication of the innovative character of an institution. The more start-up firms are established the better the institution has succeeded in turning its knowledge production into knowledge used	remarks	The number of firms set-up as an independent business to exploit intellectual property (IP) that has originated from within the higher education institution. The newly formed company usually obtains the assets, intellectual property, technology, and/or existing products from the parent organization as a result of a licensing/transferring of technology. To reduce erratic fluctuations in spin-off activity, a three year average is requested. If data is available for one year only, please mention this.
		In addition to this definition, the following specification applies where the start up firm is considered a spin-off of the higher education institution. Hereby a spin-ff is defined as a new firm where knowledge that was recently created in a HEI is used as a substantial contribution to the firm's foundation (Wintjes, et al., 2002).
		In U-Map the following three criteria for spin-offs are used: 1. New firms founded by employees of a university or another higher education institution (including staff, professors or post-docs) to transfer and commercialise inventions resulting from the R&D efforts of the HEI's departments.
		<ol> <li>New firms that have received a license to use technology (or broader: Intellectual Property) created in the university/HEI.</li> <li>Firms where the university/HEI participates in the equity (i.e. share)</li> </ol>
		capital or that have been started directly by the university/HEI.
		If one of these criteria is met, we speak of a spin-off.
	period is considered to be an indication of the innovative character of an institution. The more start-up firms are established the better the institution has succeeded in turning its	period is considered to be an indication of the innovative character of an institution. The more start-up firms are established the better the institution has succeeded in turning its



The definition is based on the idea that it is a new company and there is a direct transfer of knowledge from the institution ('host') to the company. It is not just a simple matter of including all firms started by students or alumni, or counting all firms located on/in an institution's incubator or science park. There has to be a direct link between the new firm and the HEI in the sense of the knowledge transferred to the firm or the HEI making capital or facilities available to the firm. If there is no such link or involvement of the HEI, the firm will not be counted as a spin-off of the HEI.

The location of the firm as such is not important. The firm can be located in the immediate region, but just as well somewhere else. Crucial is the knowledge (technology) at stake and the host institution where the knowledge originates from.

The definition is not restricted to a particular type of firm. The firm's products or services may be of a technological or non-technological (e.g. creative arts; media services) character.

Start-up firms	
Academic staff (fte)	



## Foreign degree seeking students

definition	The number of degree seeking sstudents with a foreign diploma on entrance as % of total enrolment in degree seeking programs.	cut-off points	more than 7,5% major between 2,5 and 7,5% substantial between 0,5 and 2,5% some >0,5% none.
rationale	A high percentage of foreign degree seeking students reflects a high attractiveness of the HEI to international students, which is assumed to be correlated with a high degree of international orientation.	remarks	Only full degree seeking. Exchange students are covered in one of the next questions. A degree seeking students is enrolled in a degree program with the intention to get the degree. Students enrolled for only one or two modules or on exchange basis are not considered to be degree seeking students. Students who are enrolled in programs that do not lead to degrees (but to certificates) are also not considered to be degree seeking. The fall back position is to use nationality as a foreign indication. This characteristic refers to the country of citizenship criterion. Students are non-citizens students if they do not have the citizenship of the country where the institution is located. Normally citizenship corresponds to the nationality of the passport which the student holds or would hold. The number of students enrolled only refers to students for which the institution is the institution of principal enrollment. Simultaneous enrollments at other institutions should be excluded here.

#### data element

Foreign degree seeking students with foreign qualifying

Total enrolment



### Importance of international sources of income

definition	Income from international sources, including subsidies and contracts for teaching and research, from both public and private international sources in 1000 Euros, as a percentage of total income	cut-off points	more than 10%majorbetween 5 and 10% substantialbetween 1 and 5%0none
rationale	If the relative size of international sources of income is large this indicates a strong international orientation.	remarks	This indicator is based on an assessment of the relative importance of the various sources/levels of income.

#### data element

Income from international sources	
	_
Total income	

### Incoming students in international exchange programs

definition	The number of incoming students in international exchange programmes, as a percentage of total	cut-off points	more than 2% major between 1 and 2% substantial
	enrolment		between 0,5 and 1% some
			>0,5% none
rationale	The indicator reflects the international	remarks	
	orientation of the institution. The assumption is		
	that a strong international orientation will lead to		
	a higher proportion of students coming in.		

#### data element

Incoming students in international exchange programs



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Total enrolment

## International academic staff

definition	Foreign academic staff members (headcount) as % of total number of academic staff members (headcount). Foreign academic staff is academic staff with a foreign nationality, employed by the institution or working on an exchange base	cut-off points	more than 10%majorbetween 5 and 10% substantialbetween 1 and 5%somebetween 0 and 1%none.
rationale	A high percentage of international staff flags a strong international orientation.	remarks	

International academic staff		
Academic staff (headcount)		
doctoral students in staff		
foreign PhD students		



## Students sent out in international exchange programs

definition	The number of students sent out in international exchange programs as a % of total enrolment	· · · · ·	more than 2% major between 1 and 2% substantial between 0,5 and 1% some >0,5% none
rationale	The indicator reflects the international orientation of the institution. The assumption is that a strong international orientation will lead to a higher proportion of students sent out.	remarks	
data element			

Total enrolment	
Students sent out in international exchange programs	

