

# Higher Education Attributes

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To clarify the meaning of attributes, general terms and categories used to characterize higher education statistics are described first. In this task, we follow definitions and classifications from the following sources: ISCED 97 (UNESCO, 2006) and UNESCO Institute for Statistics Online Education Glossary (<http://www.uis.unesco.org/glossary>). The description of the terms and categories is followed by a description of the attributes.

## 1. International Standard Classification of Education – ISCED

ISCED represents a classification scheme used to classify educational programs into internationally comparable levels.

ISCED levels corresponding to higher education are ISCED 5 and ISCED 6. The ISCED 5 denotes the first stage of higher education, while the ISCED 6 represents those programs that lead to the award of an advanced research qualification. The ISCED 5 programs are further divided into 5A and 5B categories. The 5A includes theoretically-based programs preparing students for the ISCED 6 level programs or for high-skills professions.

## 2. Expenditure on education

Current expenditure – Expenditure for goods and services consumed within the current year including expenditure on: staff salaries, pensions and benefits, contracted or purchased services, books and teaching materials, welfare services, subsidies to students and households, furniture and minor equipment, minor repairs, fuel, telecommunications, travel, insurance and rents.

Capital expenditure – Expenditure for assets that last longer than one year, including expenditure for construction, renovation and major repairs of buildings and the purchase of heavy equipment or vehicles.

## 3. Attributes

| ATTRIBUTE   | DESCRIPTION   |
|---|---|
| Gross enrolment ratio. ISCED 5 and 6. Total             | Gross enrolment ratio represents the number of students enrolled in higher education, regardless of their age, expressed as a percentage of the population in the five-year age group following on from leaving secondary school, showing a general level of participation in higher education. |
| Gross enrolment ratio. ISCED 5 and 6. Male              |   |
| Gross enrolment ratio. ISCED 5 and 6. Female            |   |
| Gender parity index for gross enrolment ratio. Tertiary | Indicates the opportunity for females to enroll into higher education programs. Represents a ratio of female to male values of “Gross enrolment ratio”, computed by dividing female value of the attribute by that of a male.   |
| Distribution of students (%). ISCED 5A                  | Indicates a level of higher education sector development in terms of the range of fields offered and the capacity of each field.  |
| Distribution of students (%). ISCED 5B                  |   |
| Distribution of students (%). ISCED 6                   |   |
| Percentage of female students. ISCED 5A                 | Represents the number of female students enrolled in the specific ISCED level, expressed as a percentage of the total   |
| Percentage of female students. ISCED 5B                 |   |

| ATTRIBUTE   | DESCRIPTION   |  |
|---|---|--|
| Percentage of female students. ISCED 6  | enrolment in the same level. Used to assess a gender disparity.   |  |
| Percentage of female students. Total  | Represents the number of female students enrolled in higher education, expressed as a percentage of the total higher education level enrolment.   |  |
| Gross completion rate. ISCED 5A. Total  | Represents the number of graduates in ISCED 5A programs, expressed as a percentage of the population of the age at which students theoretically finish the most common ISCED 5A program in a country.   |  |
| Gross completion rate. ISCED 5A. Male   |   |  |
| Gross completion rate. ISCED 5A. Female   |   |  |
| Gender parity index for gross completion rate. ISCED 5A   | Indicates the opportunity for females to complete the ISCED 5A programs.  |  |
| Percentage of female graduates in tertiary education  | The number of female graduates, expressed as a percentage of all graduates in higher education.   |  |
| Inbound mobility rate   | The number of students from abroad studying in a given country, expressed as a percentage of the total enrolment in higher education in that country.   |  |
| Outbound mobility ratio (%)   | The number of students from a given country that study abroad as a percentage of the total enrolment in higher education in that country.   |  |
| Gross outbound enrolment ratio  | The number of students from a given country that study abroad, expressed as a percentage of the higher education student age population in that country. Indicates a general level of participation in programs at foreign higher education institutions. |  |
| Percentage of tertiary graduates in education   | Distribution of graduates over different ISCED fields reflects the development of higher education system in terms of the range of fields offered.  |  |
| Percentage of tertiary graduates in humanities and arts   |   |  |
| Percentage of tertiary graduates in social sciences, business and law                                   |   |  |
| Percentage of tertiary graduates in science   |   |  |
| Percentage of tertiary graduates in engineering, manufacturing and construction                         |   |  |
| Percentage of tertiary graduates in agriculture   |   |  |
| Percentage of tertiary graduates in health and welfare  |   |  |
| Percentage of tertiary graduates in services  |   |  |
| Percentage of tertiary graduates in unspecified programs  |   |  |
| Female tertiary graduates as percentage of all graduates in education                                   |   | Female graduates in each ISCED field as a percentage of all graduates in the same field. |
| Female tertiary graduates as percentage of all graduates in humanities and arts                         |   |  |
| Female tertiary graduates as percentage of all graduates social sciences, business and law              |   |  |
| Female tertiary graduates as percentage of all graduates in science                                     |   |  |
| Female tertiary graduates as percentage of all graduates in engineering, manufacturing and construction |   |  |
| Female tertiary graduates as percentage of all graduates in agriculture                                 |   |  |
| Female tertiary graduates as percentage of all graduates in health and welfare                          |   |  |
| Female tertiary graduates as percentage of all graduates in services                                    |   |  |

| ATTRIBUTE   | DESCRIPTION  |
|---|--|
| Female tertiary graduates as percentage of all graduates in unspecified programs  |  |
| Pupil-teacher ratio   | Denotes an average number of students per professor, indicating the level of human resources dedicated to higher education.  |
| Tertiary students per 100 000 inhabitants   | The number of students enrolled in higher education in a given academic-year per 100 000 inhabitants, indicating the density of students within country's population.  |
| <b>EXPENDITURES – HIGHER EDUCATION</b>  |  |
| Public expenditure per pupil as a % of GDP per capita. Tertiary   | Public expenditure per student enrolled in higher education, expressed as a percentage of GDP per capita.  |
| Educational expenditure by nature of spending as a % of total educational expenditure on public institutions. Tertiary. Salaries                  | The spending by nature (salaries, other current, total current and capital), expressed as a percentage of total expenditure on higher education. Salaries and other current add up to the total current expenditure.                               |
| Educational expenditure by nature of spending as a % of total educational expenditure on public institutions. Tertiary. Other current expenditure |  |
| Educational expenditure by nature of spending as a % of total educational expenditure on public institutions. Tertiary. Total current expenditure |  |
| Educational expenditure by nature of spending as a % of total educational expenditure on public institutions. Tertiary. Capital                   |  |
| Total expenditure on educational institutions and administration as a % of GDP. All sources. Tertiary   | Total expenditure on higher education, expressed as a percentage of GDP.   |
| Total expenditure on educational institutions and administration as a % of GDP. Public sources. Tertiary  | The spending on higher education, distributed by source (public and private), expressed as a percentage of GDP.  |
| Total expenditure on educational institutions and administration as a % of GDP. Private sources. Tertiary   |  |
| Percentage distribution of public current expenditure on education by level. Tertiary   | Public current expenditure on higher education, expressed as a percentage of total public current expenditure on education. Indicates the relative emphasis of government spending on higher education within the overall educational expenditure. |
| Educational expenditure in tertiary as % of total educational expenditure   | Expenditure for higher education, expressed as a percentage of total expenditure on education.   |
| <b>EXPENDITURES – ALL LEVELS (INCLUDING HIGHER EDUCATION)</b>   |  |
| Public expenditure on education as % of GNI   | Proportion of country's wealth that has been spent on education during a given year.   |
| Public expenditure on education as % of GDP   |  |
| Public expenditure per pupil as a % of GDP per capita   | Public expenditure per pupil/student, expressed as a percentage of GDP per capita.   |
| Public expenditure on education as % of total government expenditure  | Indicates government's policy emphasis on education relative to other public investments, showing how committed the government is to investing in the development of human capital.  |
| Public current expenditure on education as % of total current government expenditure  | The share of total current government expenditure intended for current expenditure on education.   |
| Current expenditure on education as % of GNI  | Proportion of country's wealth that has been allocated for public current expenditures on education.   |
| Public current expenditure on education as % of total public expenditure on education   | Indicates the pattern of government spending on education in terms of the relative weight between the current and capital expenditure.   |

| ATTRIBUTE   | DESCRIPTION   |
|---|---|
| Total expenditure on educational institutions and administration as a % of GDP. All sources           | Total expenditure on education, expressed as a percentage of GDP.   |
| Total expenditure on educational institutions and administration as a % of GDP. Public sources        | The spending on education, distributed by source (public, private and international), expressed as a percentage of GDP. |
| Total expenditure on educational institutions and administration as a % of GDP. Private sources       |   |
| Total expenditure on educational institutions and administration as a % of GDP. International sources |   |

## References

UNESCO (2006) ISCED 1997. Source: [http://www.uis.unesco.org/TEMPLATE/pdf/isced/ISCED\\_A.pdf](http://www.uis.unesco.org/TEMPLATE/pdf/isced/ISCED_A.pdf).