

# Step-by-step Script | U-Multirank's Benchmarking Tool

*\*based on the U-Multirank webinar from 20. January 2022*

The new benchmarking tool from U-Multirank is here and offers a variety of possibilities. With the U-Multirank benchmarking tool you can compare your institution with others based on different indicators, you can also find institutions to exchange with in order to improve your own and you can even check how your institution performs in one of its institutional networks.

In the following sections, we will provide you with a step-by-step guide to what you can do with the new benchmarking tool, with the help of examples. To follow along, you can view our webinar: [U-Multirank Benchmarking Tool Demonstration](#).

1. find your own institution
2. choose the indicators you want to compare yourself with
3. choose indicators that allow a comparison with slightly better performing universities
4. find institutions that allow a meaningful comparison
5. what you can through from the benchmarking tool
6. your position within a network

Basically, we would like to start at this point to explain what benchmarking is and how it works step by step. We will also show you exactly where the benchmarking tool from U-Multirank can support you:

What is benchmarking?

Benchmarking is a learning process. It serves to show organisations where they can improve and with whom they can exchange ideas to improve. The aim is to find institutions that perform better than one's own institution in certain indicator areas - one wants to find out why these institutions perform better and what adjustments one can make in order to perform better.

Step by Step benchmarking as a whole process:

- institutional commitment to improvement using benchmarking
  - Practical steps!
- choosing partners/benchmark institutions
  - You have to identify what are the institutions you want to benchmark with
- defining priorities (indicators)
  - What are your primary and secondary processes
- data gathering and reporting
- draft and implement action plan
- monitoring the progress

U-Multirank's benchmarking tool does not support you in the complete process, but helps you primarily in steps 2, 3 & 4 (partner search, definition of priorities & data). So the aim is to support you in the process. The search for data is very time-consuming and since U-Multirank has a lot of data, you can access it for free. We have improved our web tool, the studying part and some indicators for this, so that you can use the benchmark tool better. Basically, the tool is not password protected, this is not the final version and you are welcome to [contact us](#) if you find bugs or something is missing. We will use your feedback to further improve the tool.

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## First Use Case

### Example 1: Find your own institution

Click on 'Find your benchmarks'

The screenshot shows a web interface for finding benchmarks. On the left is a dark sidebar with navigation options: Introduction, Find benchmarks (1), Find your benchmarks, See your companions, Who are your companions?, General info, Benchmark info, Start learning from them (3), Performance, In time: HEI, In time: indicators, and Tables. A blue box in the sidebar shows '305 HEIs selected' with a yellow arrow pointing up. The main content area has three dropdown menus at the top: 'Select my institution' (University of Luxembourg, with a red arrow pointing to it), 'Select preferred institutions (max 3)' (none), and 'Select a network' (none). Below these are two sections: 'Institutions that are similar on:' (with a blue arrow pointing to it) and 'Institutions that perform slightly better on:' (with a green arrow pointing to it). The 'similar on' section contains a list of checkboxes for various indicators, with 'Age of institution' checked. The 'perform slightly better on' section contains four colored boxes: Teaching & learning (green), Knowledge transfer (blue), International orientation (orange), and Regional engagement (purple). A large red box on the right contains a list of checkboxes for various research-related indicators.

**Red arrow:** Here you can enter the name of your institution or select it from the list.

### Example 2: Identifying other institutions similar to your own:

**Red arrow:** your own institution - in the example "University of Luxembourg".

**Blue arrow:** Selection of institutions similar to your own. Here you can use the various indicators to select institutions that are similar to your own institution in the following indicators (Expenditure on teaching, Level of study, Graduate students, Scope, Expenditure on research, Income from private sources mapping, Foreign degree seeking students, New entrants from the region, Age of institution, Legal status & size of institution) - In the example "Age of Institution" is selected.

**Yellow arrow:** Number of institutions selected. The more indicators you select, the smaller the number of HEIs you can compare yourself to. It makes sense to select indicators that leave about 10 comparison institutions - clarity is the keyword here. In the example, 305 institutions are selected.

### Example 3: Identify other institutions that perform slightly better:

Click on "Find your Benchmarks"

The screenshot shows a benchmarking tool interface. At the top, there are three dropdown menus: "Select my institution" (set to "University of Luxembourg"), "Select preferred institutions (max 3)" (set to "none"), and "Select a network" (set to "none"). Below these are two main sections: "Institutions that are similar on:" and "Institutions that perform slightly better on:". The "similar" section has a list of indicators with checkboxes, including "Expenditure on teaching", "Level of study", "Graduate students", "Scope" (checked), "Expenditure on research", "Income from private sources mapping", "Foreign degree seeking students", "New entrants from the region", "Age of institution", "Legal status", and "Size of institution". The "slightly better" section has five colored boxes: "Teaching & learning" (green), "International orientation" (orange), "Knowledge transfer" (blue), "Regional engagement" (purple), and "Research" (red). Each box contains a list of indicators with checkboxes. A red arrow points to the "University of Luxembourg" dropdown. A green arrow points to the "Teaching & learning" box. A blue arrow points to the "Bachelor graduation rate" checkbox in the "Teaching & learning" box. A black arrow points to the "Scope" checkbox in the "similar" section. A yellow arrow points to the "16 HEIs selected" box in the left sidebar.

**Red arrow:** At this point you select your own institution again - in the example University of Luxembourg.

**Green arrow:** Here you can select institutions that perform slightly better than yours based on the following indicators (Teaching & Learning, International Orientation, Knowledge Transfer, Regional Engagement and Research).

**Turquoise arrow:** Here you can select an indicator for the institutions that perform slightly better than yours.

**Blue arrow:** Here you can fine-tune the indicators and select what you are particularly interested in - for example: Bachelor graduation rate.

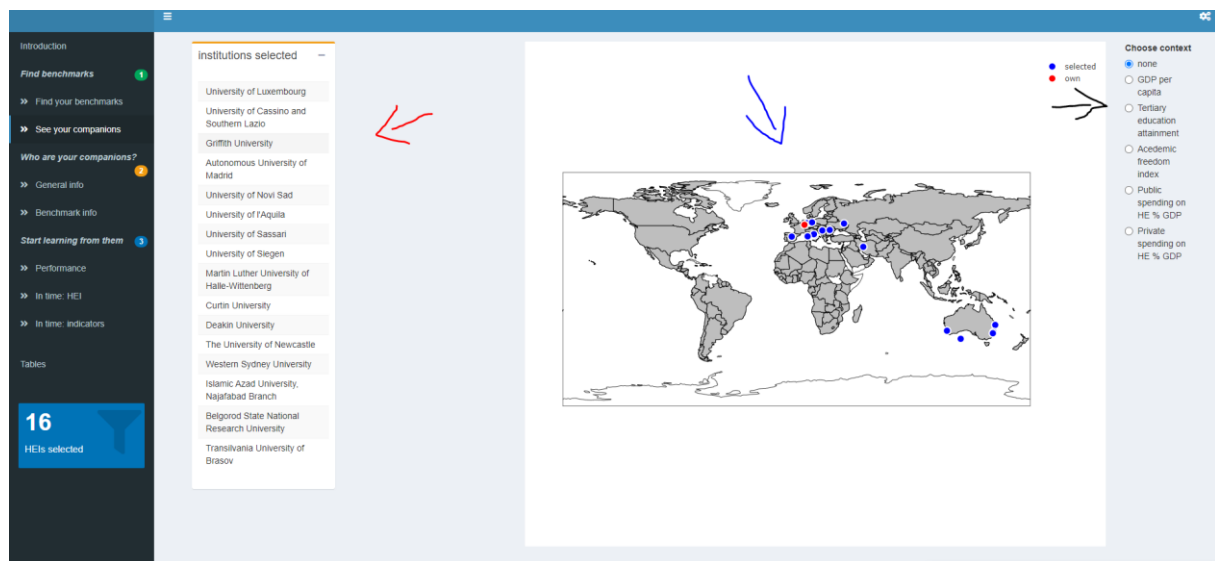
**Black arrow:** Here you select, as in example 2, institutions that are similar to your own - In the example: Scope. In the example, universities are selected that offer similar programmes or work in a similar field.

**Yellow arrow:** Here you see the number of universities you are comparing yourself with.

As a general rule, universities that perform slightly better in a range of 0 - 10 % perform better than theirs. We recommend that for the final selection of compared universities you use a maximum of 10.

## Example 4: A look at the institutions:

Click on 'See your Companions'

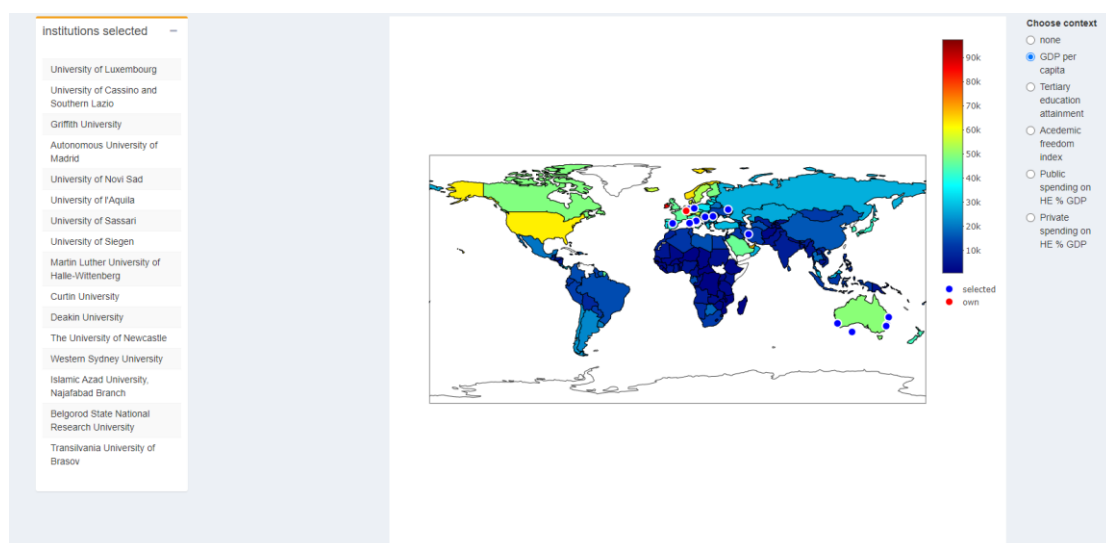


**Red arrow:** All the institutions you are now comparing yourself with.

**Blue arrow:** A map with the institutions. The red dot is your institution and the blue dots are comparison institutions. In the example, University of Luxembourg is selected. You often see universities from Europe here, because they have a higher coverage of indicators than most of the other institutions.

**Black arrow:** Here you can select a context, as this can help to find universities that work in the same context. As context variables we have the following (GDP per capita, Tertiary education attainment, Academic freedom index (do we have an issue with academic freedom? Do I want to compare myself to those who have a very different level?), Public spending on HE % GDP, Private spending on HEIs % of GDP). You don't have to select anything here; it can only be used as an aid.

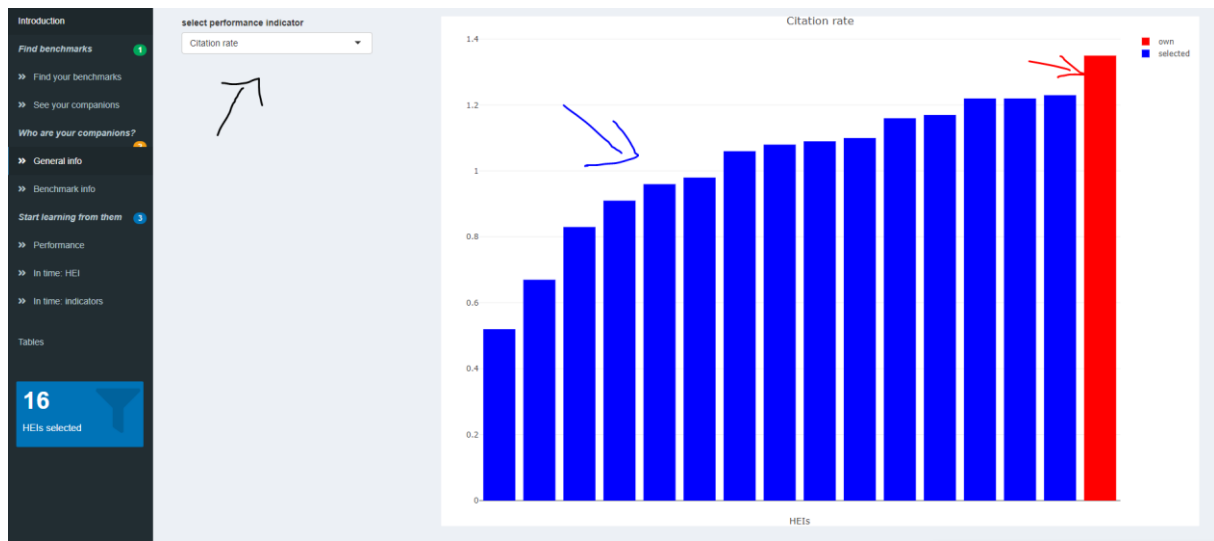
➔ You can also save this graph. Click on the cogwheel and then on the save icon and the graph will be downloaded as a PNG. file.



As a small example - the colouring in the map shows the GDP per capita - it makes sense to look for institutions for comparison that work in a similar environment as your own institution.

## Example 5.1: What can you learn from the other institutions?

General Information: Here you can see your institution compared to other universities using indicators



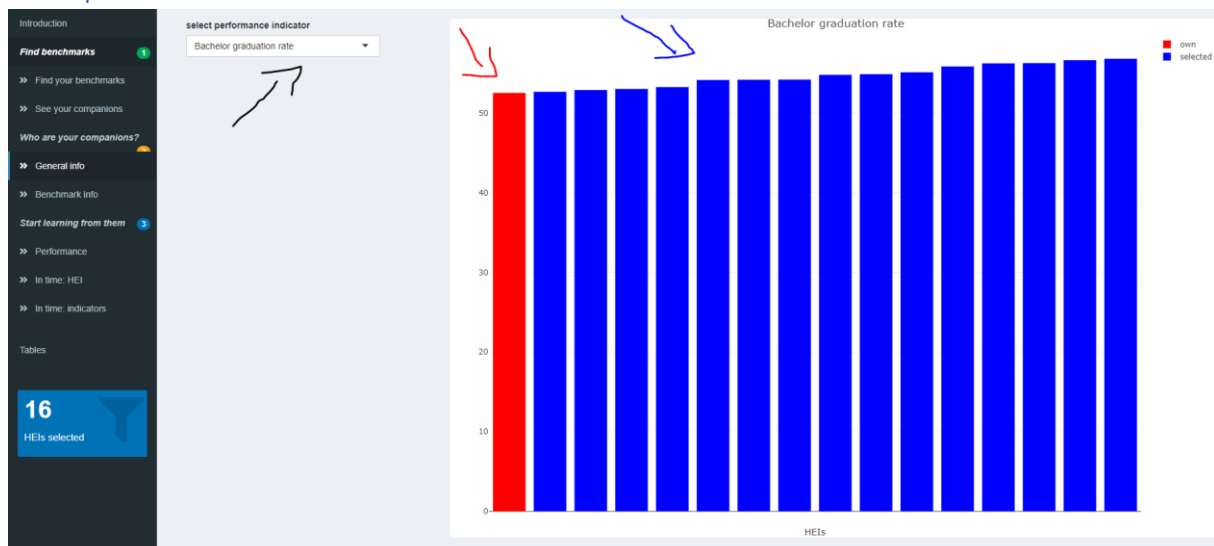
**Black arrow:** Here you can select the indicators. Click in the field and you can take a closer look at one of the many indicators - in the example the citation rate is selected.

**Blue arrow:** The blue bars show the result of the comparison institutions.

**Red arrow:** The red bar shows your own institution.

➔ You can see in this example that the University of Luxembourg performs better in the indicator area 'citation rate' than its peer universities.

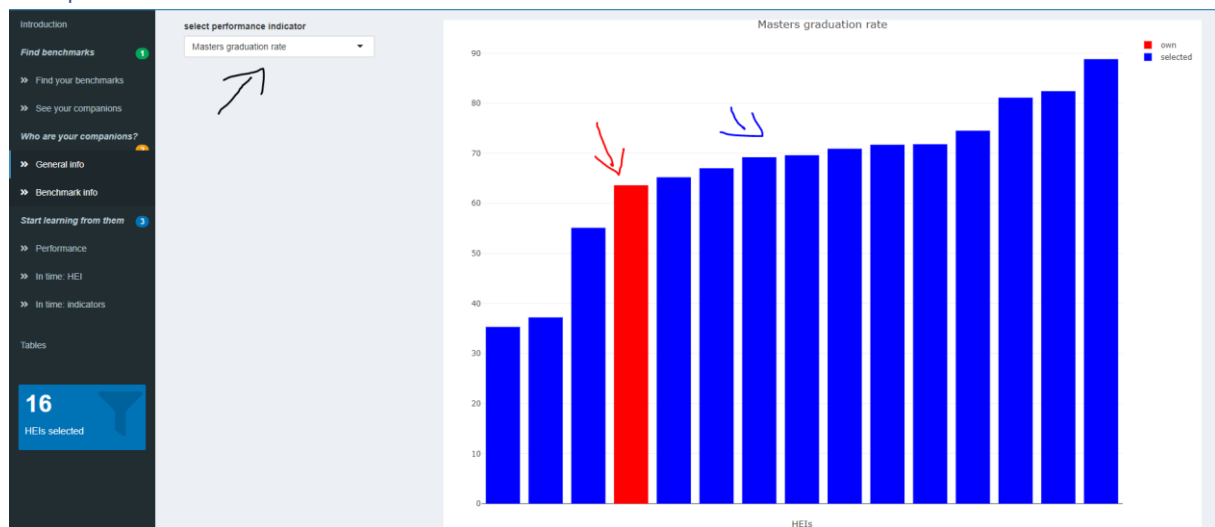
## Example 5.1a: Selection of other indicators:



The arrows in this example have the same meaning as in example 5, but you can see that the graph has changed. In this example, we see the universities that are performing slightly better in terms of bachelor graduation rates, so institutions that you can learn something from if you want to improve in this indicator. If you remember back to example 3, you know that the indicator Bachelor graduation rate was selected for the slightly better performing universities, so the other universities in this

example perform better on this indicator – it is nothing to worry about, it is something we can learn from.

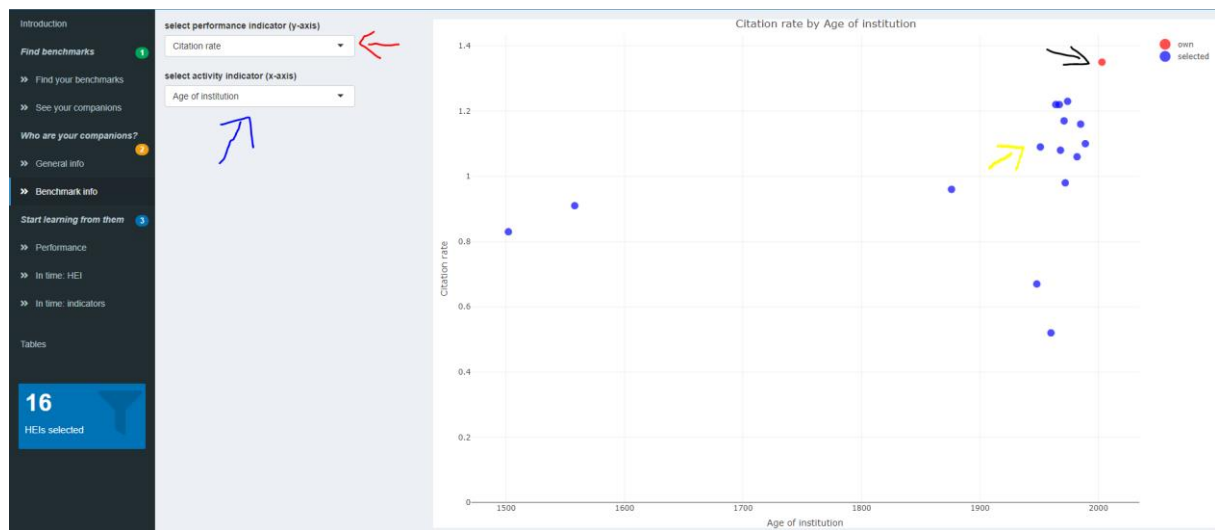
### Beispiel 5.1b: Selection of other indicators:



The arrows again have the same meaning as in the previous examples (5 & 5a). This time you can see that the example university (University of Luxembourg) is in the lower middle range for the indicator Master graduation rate. So there are some universities that perform better and a few that perform worse in our selection. This is due to the fact that you have not selected the Master graduation rate as an indicator under "Find your Benchmarks". Nevertheless, you can aim for comparisons through these different indicator choices.

### Example 5.2: Benchmark Info

**Benchmark Info:** Here you can have the results of the benchmark displayed graphically.



**Red arrow:** Here you can select the indicator for the Y-axis. In the example, the citation rate has been selected.

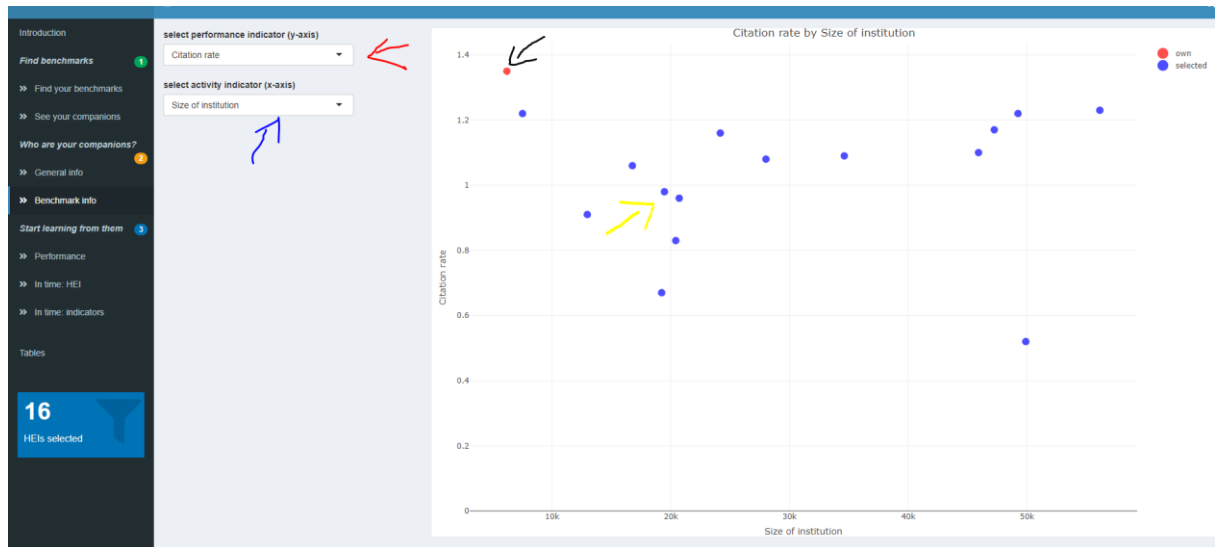
**Blue arrow:** Here you can select the indicator for the X-axis. In the example, Age of Institution is selected.

**Black arrow:** The red dot indicates your university.

**Yellow arrow:** The blue dots indicate the comparative universities.

➔ In the example, the University of Luxembourg is selected. You can see that this is a fairly young university, but it does very well in terms of citation rate compared to the other universities.

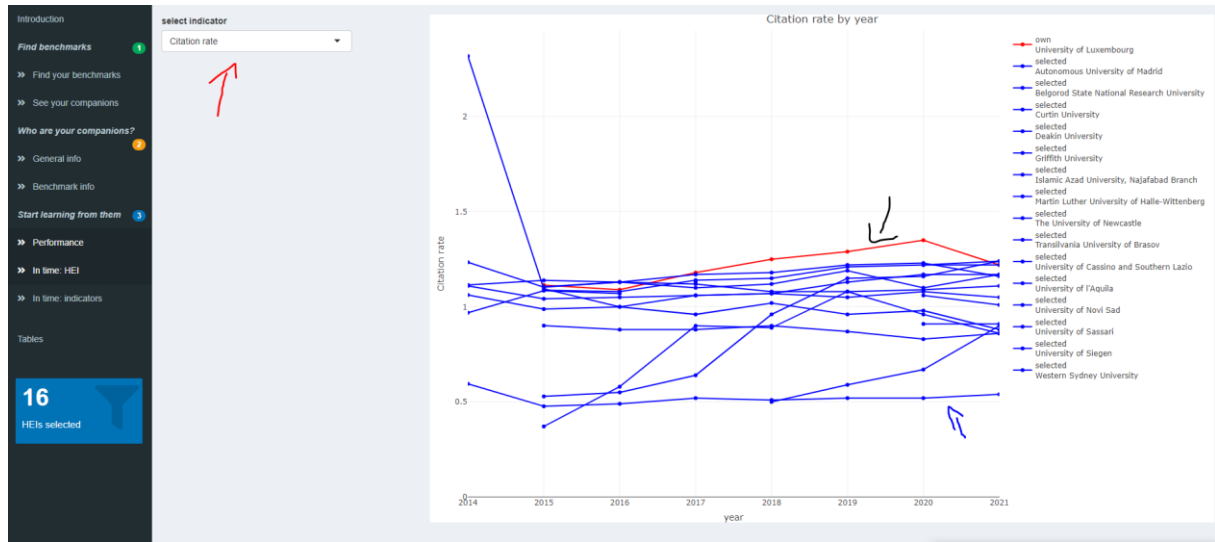
### Example 5.2a – Benchmark with other indicators:



The arrows in this example have the same meaning as in the previous one (example 5.2). Here you can see that the University of Luxembourg is a rather small university compared to the other institutions, but still performs very well in the citation rate.

➔ Overall, it is important to think about which indicators you want to improve. This tool can help you to try out the different indicators and to make different comparisons. The goal can be to find indicators in which one would like to improve.

### Example 5.3: Comparing through time



**Red arrow:** Here you can select the indicator - in the example Citation rate.

**Black arrow:** The red line indicates your university - in the example is the University of Luxembourg.

**Blue arrow:** The blue lines indicate the comparing universities.

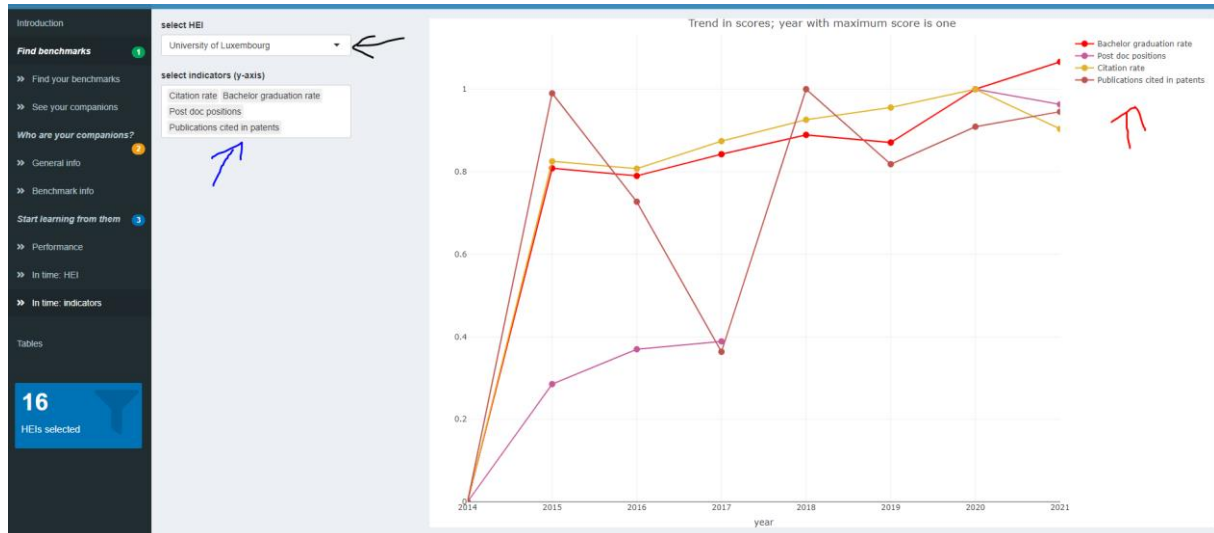
➔ You can look at the progression of the indicators over time in this area in comparison to other institutions. So you can see whether there have been increases or decreases. In the example,



we see that the University of Luxembourg had a slight increase in the citation rate until 2020 and then dropped slightly the following year.

- ➔ A tip here is not to have too many universities, otherwise the graph becomes very confusing.
- ➔ We do not have annual data for every indicator.

### Example 5.4: Indicators through time



**Black arrow:** Here you can select your university.

**Blue arrow:** Here you can select the indicators you want to analyse over time.

**Red arrow:** Here you can see the indicators you have selected and what colour they are in the chart.

- ➔ You can see how the indicators have performed in recent years, i.e. whether there have been positive or negative changes.
- ➔ You can compare different indicators with each other. In the example, you can see that the post doc positions have a steady slight increase, while the publications cited in patents have a higher volatility.
- ➔ You can save each image.

### Conclusion:

- We learned how to improve our teaching and learning performance.
- We learned how to find institutions we can learn from.
- We also learned that we can't learn the same from the same HEIs in different indicators.

## Second use case is to position your Institution in a network

### Step 1 – Find your institution and your network

The screenshot shows a web interface for benchmarking institutions. At the top, there are three dropdown menus for selecting an institution, preferred institutions, and a network. A red arrow points to the 'Select my institution' dropdown, which is currently set to 'University of Luxembourg'. A blue arrow points to the 'Select a network' dropdown, which is set to 'CESAER'. Below these are two main sections: 'Institutions that are similar on:' and 'Institutions that perform slightly better on:'. The 'similar on' section contains a list of checkboxes for various metrics. The 'perform slightly better on' section contains four colored boxes, each with a list of checkboxes for specific metrics. To the right of these is a large red box labeled 'Research' with a list of checkboxes for research-related metrics. On the left side, there is a dark blue sidebar with navigation options and a '352 HEIs selected' indicator.

**Red arrow:** Your own institution.

**Blue arrow:** The network in which your institution is represented or a network with which you would like to compare yourself.

→ We have implemented a few networks that are also in the european university initiative. We will continue to expand the number of networks as more networks become relevant. If you are part of a network that is not listed here, you are welcome to contact us and we will implement it.

→ Basically, the network gives you the opportunity to compare yourself with other institutions.

→ In addition, you can add up to three further institutions in the middle box with which you would like to compare yourself in addition to the network.

## Step 2 – See your companions

**Black arrow:** The list of institutions selected in the network or manually.

**Blue arrow:** The blue dots on the world map show the institutions you have selected.

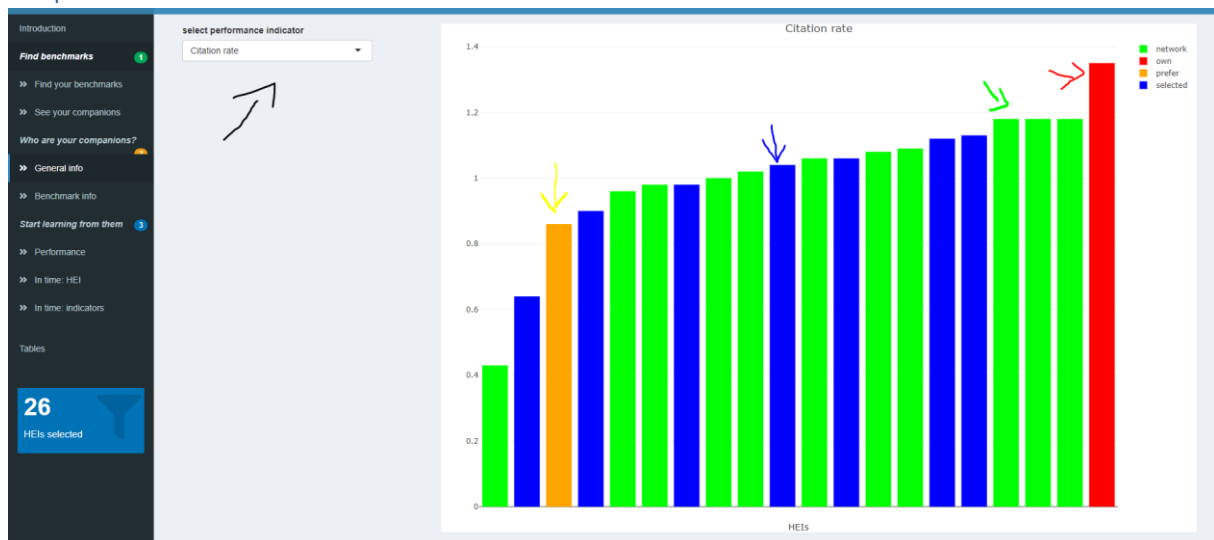
**Red arrow:** The red dot on the world map shows your own institution.

**Green arrow:** The green dots on the world map show the institutions from the selected network.

**Yellow arrow:** Here you can again include contexts (GDP per Capita or Private Spending).

➔ This function allows you to locate the geographical position of your benchmark.

## Step 3: General info



**Black arrow:** Here you can select the different indicators you want to compare with.

**Red arrow:** The red bar represents your own institution in the indicator.

**Green arrow:** The green bars represent your network in the specific indicator.

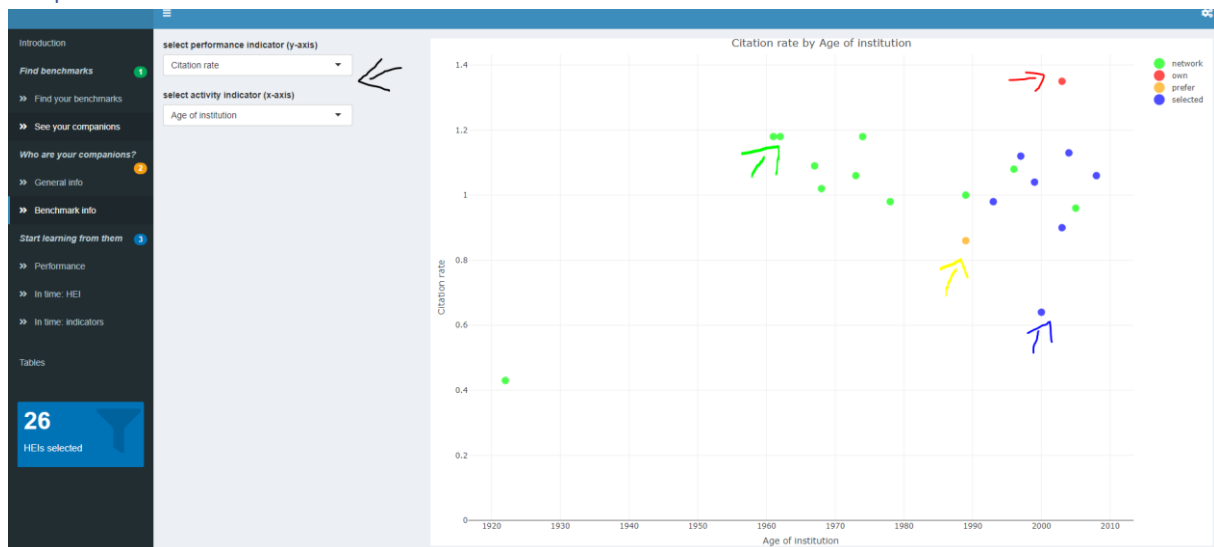
**Blue arrow:** The blue bars represent the institutions that have been included in the benchmark by your previous selection.

**Yellow arrow:** The yellow bar represents the institution you have selected manually.

→ At this point, you can compare individual indicators at the institutions with each other.

→ You also have the possibility to change the indicators. You can use this function to identify institutions that perform slightly better than your own institution and get in touch with them.

#### Step 4: Benchmark info:



**Black arrow:** Here you can set the indicators for the X and Y axis.

**Red arrow:** The red dot maps your own institution.

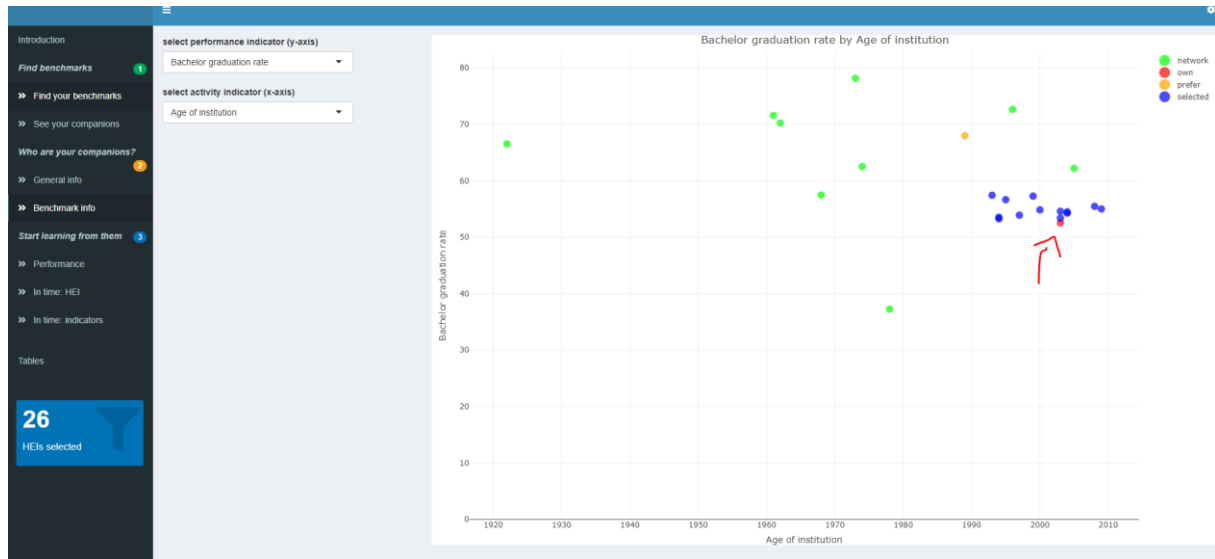
**Green arrow:** The green dots represent the network.

**Yellow arrow:** The yellow dot represents the institution you have selected manually.

**Blue arrow:** The blue dots represent the institutions that have been included in the benchmark by your previous selection

- With the colors you can identify where you are in the groups of institutions
- Example: Luxembourg is doing very well in citation rate

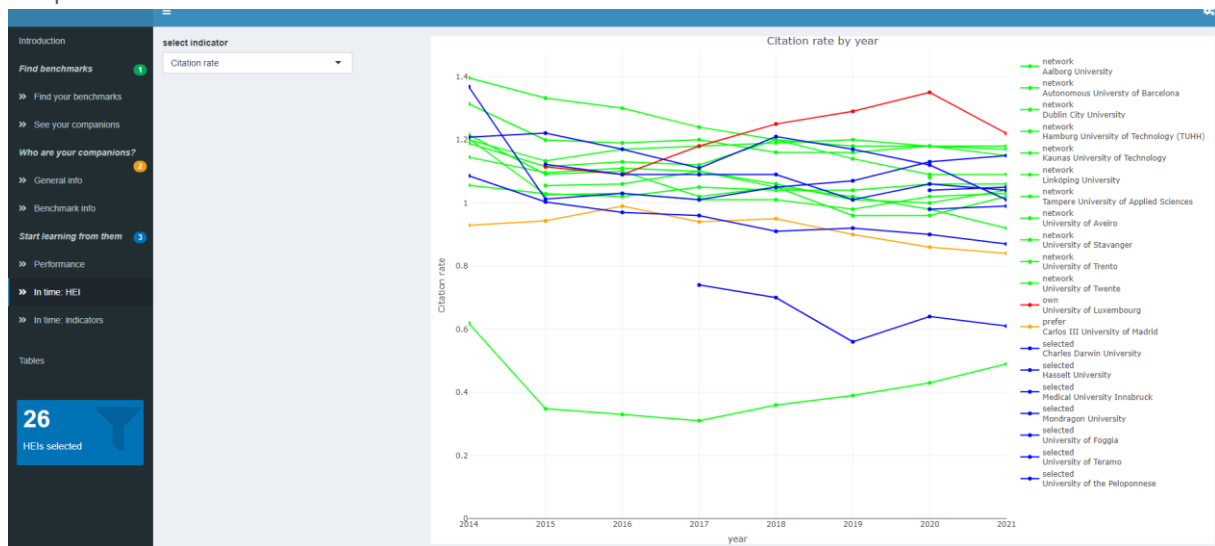
## Example 2: Bachelor graduation performance



→ Luxembourg is not doing well in Bachelor Graduation im Vergleich zur Citation rate

➔ It gives you information where your institution is compared to others of the network

## Step 5: In time HEI:



Here again, the same colours apply as in the pictures before. You can see here how the indicators have developed over the years. If you have selected too many institutions, it will become confusing, so caution is advisable here. You can save the graph as usual via the cogwheels.

## Step 6 – Tables

Find your benchmarks

See your companions

Who are your companions? 2

General info

Benchmark info

Start learning from them 3

Performance

In time: HEI

In time: indicators

Tables

**26**

HEIs selected

Institution_engi	Age of institution	Expenditure on research	Expenditure on teaching	Foreign degree seeking students	Graduate students	Income from private sources mapping	Legal status	Level of study	Online provision of degree programmes	Percentage of online programmes	Scope	Size of institution	Specialised in	Universities of Science and Technology	Female academic staff	Female professors	Femal student bachel
1 University of Luxembourg	2003	68.38	22.4	54.41	49.44	4.05	1	6	1		9	6194		1	28.12		51
2 Carlos III University of Madrid	1989	43.33	56.67	3.37	50.47	24.58	1	6	2		8	19103		1	32.54		44
3 Autonomous University of Barcelona	1968	35.33	57.49	3.2	42.24	31.07	1	6	2		10	34213		1	42.18		58
4 Aalborg University	1974	49.01	45.59	6.28	55.65	0	1	6	2		5	20517		1			47
5 Dublin City University	1989	40.66	51.65	14.56	31.64	25.99	1	6	2		8	15504		1	52.73		52
6 University of Aveiro	1973	22.96	72.9	10.83	47.62	15.34	1	6	1		8	10449		1	1.85		50
7 Linköping University	1967			13.27	49.62	8.56	1	3			6	22822		1	39.91		58
8 Tampere University of Applied Sciences	1996			4.09	11.49		3	3			8	10283		2	56.83		56
9 University of Stavanger	2005	47.37	43.86	10.66	38.28	0.99	1	6	1		9	9722		1	49.31		55
10 University of Twente	1961	54.55	41.02	28.11	56.77	14.93	1	6	1		8	10103		1	31.46		38

Showing 1 to 10 of 26 entries Previous 1 2 3 Next

Performance Indicators, Teaching and Learning

Show 10 entries CSV Excel

Institution_engi	Bachelor graduation rate	Masters graduation rate	Graduation rate long first degree	Graduating on time bachelors	Graduating on time masters	Graduating on time long first degree	Relative graduate unemployment bachelors	Relative graduate unemployment masters
1 University of Luxembourg	63.6	63.6	64.75	66.7				

Here you can see all the data used from your benchmark. You can download the data in .ssw format and use it for further analysis. The data sets can help identify certain outliers and also apply fine tuning to the benchmark analysis. The data is available completely free of charge.