

## **KEF DASHBOARDS DEMO**

### **Caption**

Knowledge Exchange Framework Dashboards Demo

### **Summary**

This is a short demo of the prototype Knowledge Exchange Framework dashboards produced by Jisc Analytics Labs between May and October 2018. This demonstration has been released as part of Research England's Knowledge Exchange Framework consultation and should be viewed in conjunction with the consultation documentation. These dashboards focus on making key KEF measures more accessible, so that institutions can understand, compare and improve their own performance.

### **Credit**

Jisc Analytics Labs & Research England

### **Transcript**

#### **INTRODUCTION**

This is a short demo of the prototype Knowledge Exchange Framework dashboards produced by Jisc Analytics Labs between May and October 2018. This demonstration has been released as part of Research England's Knowledge Exchange Framework consultation and should be viewed in conjunction with the consultation documentation.

These particular dashboards focus on making key KEF measures more accessible, so that institutions can understand, compare and improve their own performance. Research England will be further developing them for use by businesses and other users in the future.

#### **METHOD**

The dashboards use seven proposed perspectives, each of which represents an area of activity. The dashboards use clusters of similar research providers for benchmarking. Metrics are shown as decile performance within each perspective and cluster. Deciles have not been weighted.

The following dashboards are a proof of concept using anonymised data. The data sources used in the dashboards include the HESA Higher Education Business and Community Interaction Survey, HESA Finance Record, HESA Staff Record, and HESA Student Record.

It should be noted that Research England's proposed use of narrative statements in two of the perspectives have not been incorporated into these dashboards. This element will follow after the consultation and pilot exercise have concluded. This integration may include marking metric results in the two perspectives of Public and community engagement and local growth and regeneration as 'provisional'.

#### **LEVEL 1 – KEF Overview**

There are four dashboards in total. This dashboard is the high level Provider Overview.

This dashboard gives an overview of your Higher Education Provider against the seven proposed perspectives. We can select a provider using the filter in the top left of the screen. Below the filter is a description of the selected provider's cluster.

In the centre of the dashboard is a radar chart. There are seven points on the radar chart, one for each of the perspectives. Clicking on a perspective would take us through to the perspective level view, which I'll show you shortly.

In the legend in the top right of the screen, we can see that the filled shape on the chart represents the provider we have chosen, whereas the dark line on the chart represents the provider's cluster.

The radar chart allows us to see how the selected provider is performing against its cluster for each of the seven perspectives.

The radar chart is divided into ten equal shaded or unshaded segments. The segment nearest the middle of the chart represents the bottom 10%. Performance then increases through each segment to the outermost segment, which represents the top 10%.

Where the filled shape falls outside the dark line, the provider is performing above its cluster average for that perspective. Where the filled shape falls inside the dark line, the provider is performing below its cluster average for that perspective.

Changing the provider changes the data shown in the radar chart.

For University of STEM3, we can see they are below their cluster average on four perspectives. If we switch to University of E0, we can see that they are very high on local growth and regeneration, and above the average for their cluster of large universities for that perspective.

#### LEVEL 1 – Cluster Info

This second dashboard provides more information on the cluster for the selected provider.

On the left of the screen, there is a list of all the Higher Education Providers within the cluster.

In the centre of the dashboard, the radar chart from the previous dashboard is repeated. However, the filters below the radar chart allow us not only to change the selected provider, but to select a comparison provider.

In the legend in the top right of the screen, we can see that the bright green line on the chart represents the comparison provider.

If we select University of Arts4 as a comparison provider, we can see they are much higher than our provider on public and community engagement, but lower on local growth and regeneration. Although do note that these perspectives will contain further narrative information in the final version.

At the bottom of the dashboard, small radar charts are shown for every cluster, which can be used for comparison.

#### LEVEL 2 – Perspective Dashboard

This third dashboard shows a single perspective level view.

At the top of the screen are three filters. On the left we can select one of the seven perspectives; here we've selected the IP and commercialisation perspective. In the middle we can select our provider. And on the right we can select a breakdown, such as cluster, region, or mission group. Note that the filters of region and mission group are provided as examples only and are not an official feature of the KEF.

Below the filters, the radar chart is repeated on the left, for context. To the right of the radar chart, there's a narrative summary of the radar chart, including our provider's position within the perspective, and our cluster's position within the perspective.

In the bottom section of the dashboard we can see the metrics for our chosen perspective shown side-by-side for comparison.

Each metric is shown in a column. Below the metric title, the headlines for each column include our provider's data in bold green, and the percentile position of our provider in bold grey.

Below the headlines there's a bar chart showing the three-year average for every Higher Education Provider within the cluster. Our selected provider is highlighted in green, and a benchmark line shows the cluster average.

In the leftmost column, we can see that our provider is ranked in the middle of the cluster for research resource per spin-out, but still above the cluster average, with a three-year average over ten million.

On the right, the 'View metric detail' button takes us through to the metric dashboard.

### LEVEL 3 – Metric Dashboard

This fourth and final dashboard drills down to a single metric level view.

At the top of the screen we can see four filters. We can now select a metric in addition to the perspective, provider and breakdown. Here we've selected average external investment per spin-out.

The top row of charts includes a bar chart and a box-and-whisker plot for the selected metric. The charts show the three-year average for the selected provider, highlighted against members of the same cluster. The bar chart shows the total values for each provider, with highest performers towards the right. The box-and-whisker plot shows the spread of those same values.

We can see that our selected provider is near the bottom of the cluster for this metric, with an average external investment per spin-out of £16,563 over three years.

The bottom row of charts includes a line chart and a data table. The charts show a year-by-year breakdown of the selected provider, highlighted against members of the same cluster. The line chart shows the three-year trend for our provider, compared to the cluster average. The data table shows the value for each year, plus the three-year average, for every provider in the cluster.

We can see that our selected provider's average external investment per spin-out decreased from £50,000 in 2015/16 to zero in 2016/17. This variation was hidden when using the three-year average.