

# Kingston University Institutional Performance Example Dashboard

## TEF/B3-style Student Outcomes: Continuation (Benchmark vs Provider)

### Executive Summary

This project was created as an example dashboard to demonstrate how I would approach the core requirements of Kingston's Institutional Performance Data Insight Lead role: turning complex sector datasets into clear, reliable and decision-ready insight, and delivering outputs that support planning, course monitoring and enhancement.

To keep the work realistic for a short portfolio piece, I deliberately selected two example cuts from the wider OfS student outcomes indicator dataset:

1. Continuation for First Degree, Taught provision, split by subject
2. Continuation for All Undergraduates, filtered to MODE = Apprenticeship

### Introduction

The Planning / Institutional Performance function is responsible for translating multiple internal and external data sources into insight that supports course planning, annual monitoring, enhancement and student success. This example dashboard demonstrates a practical approach to that work using publicly available outcomes indicators:

- selecting a metric that supports institutional review,
- creating clean, consistent analysis outputs,
- producing Tableau-ready extracts, and
- presenting results in a way that can be used confidently by non-technical stakeholders.

### Methods

#### Data sources

This work uses published outcomes indicator data and associated definitions and codelists to interpret coded fields (for example, subject coding, split categories and population definitions) consistently.

Rather than attempting a broad dashboard covering many KPIs at once, I used two selected examples to demonstrate a pattern Kingston could scale across additional outcomes measures and monitoring requirements.

#### Data preparation and quality checks (example workflow)

For each cut, I applied a consistent preparation approach:

- Filter to the target indicator: **Continuation**
- Filter to the relevant population definition (**level, mode, taught and split type**)
- Remove duplicated and suppressed or unpublished rows, and check missingness

- Standardise data types (**numeric measures and denominators**)
- Create dashboard fields to support interpretation:
  - a **gap-to-benchmark flag** (for example, Focus / Watch / OK)
  - a **small cohort flag** (to avoid over-interpreting unstable results)
- Produce clean, Tableau-ready extracts so the dashboard can be built without complex transformations inside Tableau

## Results

### Output 1: First Degree (Taught) continuation by subject

This view supports course portfolio discussions by showing:

- where continuation is below benchmark,
- how large the gap is, and
- whether the cohort is large enough for the result to be meaningful.

It is designed to support questions such as:

- Which subject areas are furthest below benchmark?
- Where should we focus first if resources are limited?
- Which areas warrant deeper follow-up with faculty and services?

### How to interpret the “impact estimate” in the subject dashboard

The subject view includes an **impact estimate** to support prioritisation. It is a directional translation of the percentage-point gap into an approximate “student-equivalent” number.

#### What it means

- It converts the **gap to benchmark** into an approximate count using the cohort denominator.
- In simple terms:

$$\text{Impact estimate} \approx (\text{Gap to benchmark in percentage points} \div 100) \times \text{Cohort size}$$

#### How to read it (example)

- If a subject is **-5pp** below benchmark and the cohort size is **200**, then:  

$$-5/100 \times 200 \approx -10$$

This suggests that, if performance matched benchmark, the difference is roughly equivalent to **around 10 additional students continuing** (as an approximate scale of impact).

#### What it is for

- It helps prioritise attention: a moderate gap in a large cohort can represent a larger institutional impact than a large gap in a very small cohort.

### Output 2: All Undergraduates continuation monitoring (Apprenticeship-only)

This view supports **annual monitoring**. It is useful for monitoring continuation across common split dimensions used in institutional reporting and supporting targeted enhancement planning, particularly where apprenticeship provision is a strategic area.

# Conclusions

This example dashboard demonstrates how published outcomes indicators can be shaped into clear monitoring outputs and Tableau-ready extracts using a transparent workflow that supports data confidence and consistent interpretation.

It is intentionally a starting point. The greatest value comes from scaling the approach across additional KPIs, adding trend context, and linking outcomes to internal lead indicators that enable earlier intervention rather than post-hoc reporting.

## Recommended next steps

In a live institutional setting, the next logical extensions would be:

1. **Add additional outcomes measures**

Extend beyond **Continuation** to include **Completion** and **Progression** (and, where appropriate, **Graduate Outcomes**), so decision-makers see a rounded outcomes picture.

2. **Add time trends**

Include multiple reporting windows and direction of travel (not only the latest snapshot), so users can see whether gaps are improving or worsening.

3. **Strengthen the EDI / APP lens**

Build consistent gap reporting across key groups (for example, IMD/POLAR, disability, ethnicity, sex and age) with cohort-size flags and a clear prioritisation view.

4. **Add statistical context where available**

Where the source supports it, use significance flags or confidence intervals so small cohort noise is not over-interpreted.

5. **Link outcomes to internal drivers (course and student experience)**

Join outcomes monitoring to internal operational data (engagement, assessment, attendance, interruption reasons) to move from “what is happening” to “why it might be happening”.

6. **Create lead indicators and early-warning views**

Develop in-year indicators that correlate with continuation risk, so interventions can happen earlier, not after the end-of-year outcome.

7. **Develop a student-level predictive model**

Alongside the dashboard, develop a **student-level model** that predicts the probability that a student is at risk of withdrawing or not continuing. This moves from descriptive monitoring to proactive support.