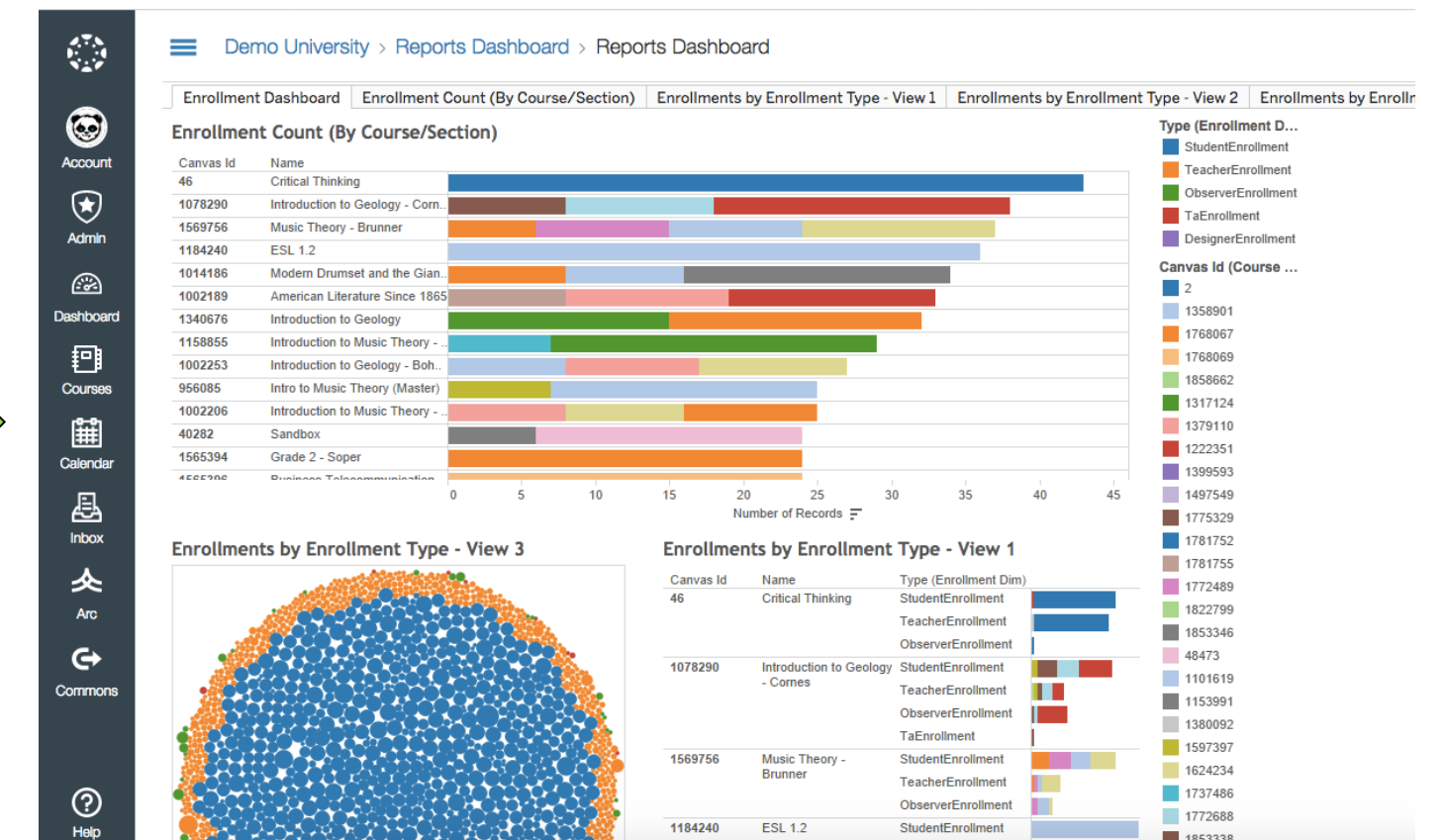
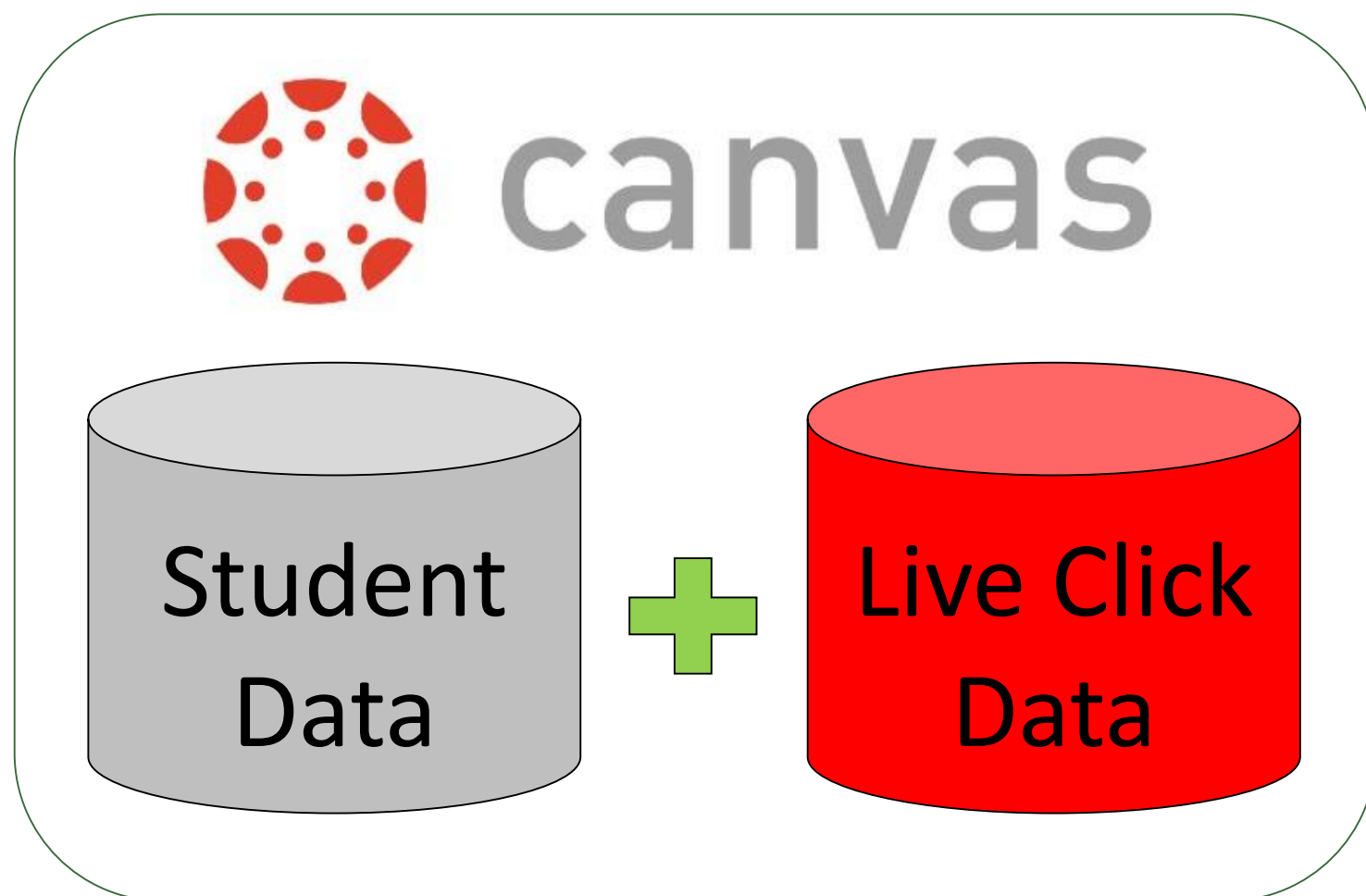


# Visualising Learning Analytics Data

Victoria Szymanska

MSc in Information Technology



## The Data

Canvas is the University of Stirling's Virtual Learning Environment (VLE). From there we are able to extract two sets of data, namely:

- **Student data** – information about each student's account such as their ID, module enrolments, assignment submissions, grades, group memberships and more.
- **Live Events or 'click' data** – details every click made within the VLE by listing the event time, the object that was clicked on, user ID, etc.

## Visualising the Data

Tableau software enables processing and visualisation of large datasets.

The two data sets from Canvas must first be extracted, changed into a compatible format and uploaded into a MySQL database.

Tableau can then be connected to the database so that queries can be formulated and visualisations made.

## Embedding a dashboard

Once the desired graphs, charts and reports have been created using Tableau, different dashboards can be created showing different views of the data.

The aim is to create two views, namely: student and staff. Students will be shown their own data and anonymised data about their cohort, whereas teaching staff will see data about their students.

The dashboard then needs to be embedded in a webpage or within Canvas for users to access it.