

## Context

- Increasing number of data sources about learning experiences.
- Learning Analytics may help transform data into actionable knowledge targeting the improvement of the student experience.
- Student support is challenging and resource intensive for highly diverse or large student cohorts.
- Personalisation is key to effectively reach students with meaningful and effective support actions.
- Feedback is one of the most powerful mechanisms to increase attainment.

## Problem description

There is a gap between the rich data sets that are collected while students interact with resources, peers or instructors in a learning environment and the need for personalised student support. Although instructors

have access to detailed accounts of what students did (assessment summaries, dashboards showing student participation, etc.) they still need to transform all that detailed information into something that has a positive effect on how students learn.

Ideally, instructors should provide students with guidance and suggestions not only about the domain of knowledge, but about how to increase their learning skills and become sophisticated



learners. But, how can data from a learning experience be used to support instructors to provide personalised support actions to students?

## The Solution

Over the last years, a team of researchers from various universities have detected that instructors are capable of providing highly valuable suggestions in the presence of data indicators that are directly related to the learning experience. In other words, instructors can combine the right data sources with their own expertise to provide different suggestions to students depending on their level of engagement.



The OnTask platform offers an intuitive interface to upload data about student engagement into *matrix* and the definition of a set of simple *when/do* rules to customize email messages for the students.

Instructors use the indicators about student engagement to select/ignore text portions that are then collated and sent to the students as regular email messages.

These messages provide students with

personalized support and a concise set of suggestions to improve their engagement. In our preliminary experiments, these messages produced a significant increase in student satisfaction with feedback and a moderate increase in academic performance.

