This paper presents a ‘first glimpse’ of data from a major new study of digital technology use in Australian universities. The study addresses the long-standing gulf between the well-proven potential of technology-enabled learning (see Luckin et al., 2012; Goodfellow & Lea, 2013), and the more ‘messy’ realities of technology use throughout the university sector as a whole (see Selwyn 2014). In particular, the study responds to a growing call for more attention to be paid to the structural reasons why students engage (or not) with specific forms of learning technologies, as well as the individual meanings that are being attached to different digital practices, and the outcomes and consequences of any use.

The paper presents an analysis of data gathered in the spring/summer of 2014 from a large-scale survey (n>2000) of students on taught courses across three contrasting universities in Australia. In particular, the paper focuses on the following research questions:

- What technology-based learning opportunities are being made available to students within universities, and how are they being taken up?
- What are the key drivers for students within the institutional ‘ecology’ of the university to adopt different types of technology enabled learning?
- What forms of learning are these technologies enabling (e.g. active/passive, sole/collaborative), and with what outcomes (e.g. grades, motivation, retention, progression)?
- What other forms of educational engagement are these technologies enabling, and with what outcomes?
- What differences are apparent between different groups of students in terms of opportunities and outcomes (e.g. level of study, subject area, mature, cultural and linguistic diversity, first in family)?

These questions are examined through a series of multivariate analysis of the survey data. In particular the paper will present log linear and regression-type models relating supporting a detailed examination of the significance of organizational and socio-economic determinants in patterns of technology (non)use. The paper concludes by reflecting on how the field of educational technology might better balance enthusiasms for the ‘state of the art’ (i.e. what we know could be achieved through technology-enabled learning) with acknowledgement of the ‘state of the actual’ (i.e. the realities of technology use within contemporary university contexts).