

How can analytics inform the way we learn?

Huw Davies

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Definition of learning analytics

- Analytics is the use of big data
- Learning analytics is done for the benefit of learners, or to advance pedagogy ☺
- Academic analytics is done for the (financial) benefit of institutions ☹
- Learning analytics is 'formative, rather than summative'

Case study: *Signals*

- Early warning traffic light system
 - An example of 'nudge analytics'
 - Live and instant formative assessment
 - Mapped exploits more accurately and meaningfully than demographics
 - Redefined needs analysis at Purdue U.
 - Found to lead to better grades
- ... but ...

Case study: *Signals*

- ...
- There was a (now discredited) suggestion the tool improved retention rates
- Tool now sold on the premise it improves retention by 21%
- Also, some measures 'trivial', like login count
- Does it push learners towards a certain identity?

Beyond *Signals*

- Yu & Jo (2014) adapted the tool in Korea, removing all non-behavioral measures
- They found
 - total time in the virtual learning environment (VLE)
 - regularity of VLE use
 - number of downloads
 - interaction with peersto be significant

Another use of analytics

- Goda *et al.* (2014) used learning analytics to look at learners' behavioral types
- They found seven different learning types on the course they analysed
- Differing levels of success within each behavioral type, which suggests self-regulating strategies are key

Thank you

Selected bibliography

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