

LEARNING ANALYTICS CHALLENGES

Here is what makes it difficult to get started with learning analytics according to participants of the LDECEL Innovation Room 15 on Learning Analytics.

EXTRACT MEANINGFUL INFORMATION FROM DATA

- choosing the most informative data to use
- effective use of easily attainable LA (e.g., statistics in Brightspace)
- answering the question "What would you like to know?", selecting and interpreting data
- deciding what is important to measure
- measuring higher level thinking skills or teamwork

PROVIDING ACTIONABLE INSIGHTS

- providing meaningful information to lecturers
- providing meaningful and useful feedback to learners



HAVING A CLEAR PURPOSE FOR LA

- using LA for curriculum improvement
- using LA for workplace-based training and professional development
- using LA to support learning of horizontal skills (critical thinking, creativity, reflection etc)
- using MMLA to understand learning behaviour and to promote SRL strategies in real-time
- cognitive LA

DESIGNING LA

- designing LA to target phases of self-regulated learning
- designing dashboards that will be used
- designing simple, effective, efficient, useful and understandable tools for teachers and learners
- designing for humans and sense-making

INSTITUTIONAL CAPACITY AND SUPPORT

- how to support teachers in translating analysis results to actionable information
- balancing faculty workload
- teacher professionalisation with regards to working with LA
- creating a data literate community (build basic and general LA competencies in educators and practitioners)
- getting teachers buy-in
- demonstrating usefulness, necessity and impact of LA

PRIVACY AND ETHICS

- how to address privacy and ethics
- implementing GDPR regulations without hindering the (speed of) development and implementation
- balancing students' privacy with the benefits of LA
- data ownership for students
- making LA transparent towards the stakeholders
- ethical considerations - does everyone benefit equally?

LIMITATIONS OF DATA AND ITS COLLECTION

- data wrangling (transforming data from one "raw" data form into another format to make it more valuable for analytics)
- combining data from different modules
- using existing data in combination with own data collection
- curating study program-wide datasets
- other limitations of data

PITFALLS AND MISCONCEPTIONS

- gathering data without having good research questions
- assuming data can paint the whole picture
- risk of bias, adverse effects
- providing users very limited information on the meaning of measures, easy to over-interpret
- lack of evaluation or measuring the wrong thing to evaluate success (Overall effects on graduation rates ('studiesucces') are very limited. Why is that?)

STUDENT BUY-IN

- overcoming resistance from students
- demonstrate the usefulness, necessity and impact of LA
- limited adoption of LA among students
- data ownership
- transparency
- balance LA benefits with the privacy rights



INSTITUTIONAL LEVEL ACTIONS

- defining who are the stakeholders
- defining who carries out analyses and who holds responsibility
- deciding between centralized LA for efficacy, or decentralized LA for tailored analysis per course/program/department
- transparency and communication
- evaluating the success of LA interventions



Source: 50 answers collected from participants of the Innovation Room #15: CLASH - Developing a Culture of Learning Analytics participants via the registration form under the question "What challenges (name 1 or 2) do you see in LA?".