

OVERVIEW

There are a variety of ways in which learning analytics can be used for retention purposes and this variation means different paths and approaches can be adopted for decision making, implementation and evaluation. Developing a comprehensive understanding of potential learning analytics initiatives, their impacts and potential implementation requirements in a given institutional context requires a systematic approach. This structured series of questions assists with mapping current progress and related gaps across a range of factors identified in the literature and supported by empirical data gathered through the project.

INSTITUTIONAL CONTEXT AND ENVIRONMENT

Institutional context provides the parameters for what is feasible and appropriate in any given institution. Key questions include:

- What is implication of the jurisdictional location of your institution (e.g. privacy laws)?
- What is the size and structure of your institution?
- What is the strategic positioning of your institution (e.g. partnerships, international, and areas of focus)?
- What are the student demographics and characteristics?
- What are the staff demographics and characteristics?

TRANSITIONAL INSTITUTIONAL ELEMENTS

Transitional institutional elements provide the parameters for the implementation of learning analytics. The contextualisation of learning analytics to the institutional factors will affect the decisions and direction at later stages. Key questions to consider are:

- How does the culture at your institution both promote and challenge the advancement of learning analytics?
- What is the strategic positioning of learning analytics within your institution?
- To what degree is there executive sponsorship (academic and IT)?
- Do you have a specific learning analytics plan and if so, how is it aligned with your institutional budget and academic plan?
- To what extent is there congruence between the vision, strategy and values of the institution that relate to learning analytics?
- How clearly is the role of learning analytics in your institution identified and communicated?
- How sustainable is the approach to learning analytics at your institution?

LEARNING ANALYTICS INFRASTRUCTURE

Learning analytics infrastructure is concerned with three main questions:

- 1.) Are your systems reliable?
- 2.) Are they technically sophisticated enough?
- 3.) Is there enough expertise in the institution?

In unpacking this, there are seven focus areas: digital availability of data; data integrity; systems continuity, availability and reliability; integration of data systems, expertise; stewardship; and, policy and procedures.

Discussion questions relating to each of these areas are presented on the next page.

LEARNING ANALYTICS INFRASTRUCTURE CONT...

1. Digital availability of data (e.g. teaching and learning engagement, library, support systems etc.)

- What data systems exist in the institution?
- Which student interactions with your institution are you collecting data from including:
 - What data is collected by the LMS, SIS and other teaching interfaces like websites and social media?
 - What data is collected from student support and other areas (e.g. library, student services, academic support, and international office)?
- Is the data you are collecting in a usable format?

2. Data integrity

- How accurate is the data?
- How complete is the data?

3. Systems continuity, availability and reliability

- Which systems are available?
- How reliable are your systems?
- What are the potential threats to the continuity of your systems?

4. Integration of data systems

- Which data systems can be integrated (collection, storage, analysis & output)?
- To what extent are data systems integrated (system and variables level)?
- To what extent are data outputs integrated?

5. Staff/expertise in relation to infrastructure including technical, statistics and data analysis, pedagogy, and project management

- What technical expertise is available?
- What statistical and data analysis expertise is available?
- What pedagogical expertise is available?
- What project management expertise is available?

In relation of the main domains of expertise described above the following sub-questions might be posed:

1. How is the coordination of expertise facilitated?
2. What level of financial security is attached to the expertise (certainty, duration)?

6. Data stewardship

- What rights do different groups have in terms of data privacy and sharing?
- How are different levels of access managed?

LEARNING ANALYTICS INFRASTRUCTURE CONT...

7. Policies and procedures

- Do you have a high level governance group related to learning analytics, and if so, how does it function?
- What are the learning analytics policies and procedures?
- What is the fit between learning analytics policies and procedures and other relevant policies?
- How is currency of learning analytics policies and procedures maintained?
- How are learning analytics policies and procedures communicated to relevant people?
- To what extent are learning analytics policies and procedures followed in practice?

TRANSITIONAL RETENTION ELEMENTS

Transitional retention elements provide the parameters for the use of learning analytics for retention purposes. Having clear institutional and departmental retention plans and strategies can provide momentum and clarity for thinking about how learning analytics might be deployed purposefully to assist with retention.

- Do you have an institutional retention plan or strategy?
- What are the governance arrangements that support the retention plan or strategy?
- How are learning analytics positioned within the retention plans and associated governance arrangements?

LEARNING ANALYTICS FOR RETENTION

Learning analytics for retention factors are focused on enabling the use of learning analytics for retention, so all of the following questions should be read in that light.

- What business and educational questions do your stakeholders have, and how are they prioritised?
- To what extent can your system address those questions?
- Where gaps are identified, what resources are available for follow up?
- What ethical issues have been identified and what is the resolution?

INTERVENTION AND REFLECTION

Intervention and reflection are critical to improving retention. Key questions to consider in relation to these two areas are:

- How are potential interventions developed, managed and enabled?
- What training is provided, and what training is required for staff and students?
- What time and support is provided, and what time and support are required, for staff and students?
- How are the interventions evaluated and improved?
- How is the whole system evaluated and improved?

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FOR RETENTION

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