



Learning Analytics: Importance of adopting a consultative approach to implementation

1. Introduction

Learning Analytics is a highly cross-functional process. A successful implementation that provides insights and actions that have a positive impact on the student experience is dependent upon each of a wide range of factors. An effective strategy is reliant upon multidisciplinary factors such as a comprehensive understanding of institutional data, a rigorous analytical approach, a sound pedagogical foundation, well-planned interventions and policy and practices that are ethical, effective and compliant with Data Protection legislation.

This document highlights some of the key cohorts with whom consultation is essential and the benefits of an implementation that is informed by their insight, experience and expertise.

2. Stakeholders (ordered alphabetically)

Academics & Researchers

- HE has a major advantage over other sectors in terms of exploring and developing analytics capabilities. Few non-HE organisations can boast the range of first-hand expertise that many HEIs have on campus.
- Academics from fields such as Computer Science, Mathematics, Statistics, Data Protection, Data Analytics, Informatics and Management Information Systems may have considerable experience and expertise in most, if not all, of the key considerations in developing an effective analytics strategy. These include data aggregation, data modelling, predictive modelling, user experience etc.

Data Protection & Legal

- LA's focus on student data brings it firmly into the realms of Data Protection. Institutions must ensure that their implementation and use of LA is compliant with both the Data Protection Acts of 1988 and 2003 and with the General Data Protection Regulation (GDPR) that will come into effect in all EU member states (including Ireland) from May 2018. HEIs that fail to do leave themselves vulnerable to legal action, reputational damage and, with the advent of the GDPR, the possibility of significant financial penalties.
- The implications of this legislation for LA are multiple and complex. Hence institutional Data Protection experts must be involved in the design of every aspect of the strategy from the outset.

Departmental/School staff

- In designing an institution-wide approach, local administrators will be able to provide insight into the exceptional courses and modules from their own schools that deviate from the 'normal' structure.
- In terms of pastoral support, they may also be able to offer a developed



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understanding of the needs of and challenges faced by their students.

Heads of Department/School

- Getting buy-in from Departmental managers will help with the roll out of new systems and operational practices
- LA can facilitate the development of evidence-informed curricula, courses and modules. Heads of Department can provide significant insight into how such an approach can be meaningfully designed and effectively implemented
- In designing an institution-wide approach, Heads of Department will be able to provide insight into the exceptional courses and modules from their own schools that deviate from the 'normal' structure.

Institutional Research

- Transforming abstract data into meaningful, actionable information is at the heart of LA. This is also a key function of Institutional Research. Your IR personnel will have considerable experience in the iterative process of developing an understanding of the informational needs of various cohorts within the institution and using your existing datasets to provide insights that can inform effective actions.

IT Services

- Another key challenge in developing an LA capability is that of merging data from a variety of platforms across the institutions. This cannot happen without the support and guidance of IT Services.
- IT Services are likely to have the greatest insight into what platforms are in use across the campus and what data exists within them. The greater an institution's understanding of these factors, the greater the insight they will be able to glean from their analytics.
- Partnership with IT Services is essential for ensuring that any analytics approach is designed in compliance with the institution's data security policies.

Lecturers

- One of the greatest challenges any institution will face is getting users to engage with LA. As a core user cohort, lecturers are far more likely to engage if they have helped to drive the process
- Consultation with lecturers gives invaluable insight into what they and their colleagues actually need and will benefit from. Again, users are far more likely to engage if they perceive a direct benefit for them.
- Lecturers have unique expertise in relation to how students engage with their modules. This knowledge will be of considerable benefit to an LA strategy that aims to enhance student learning and the student experience.



Library

- Many analytics systems incorporate library data to give a greater understanding of students' engagement with the learning resources available. Research has shown a significant correlation between library usage and student attainment (eg Stone and Ramsden, 2013).
- Library staff have the expertise in their systems, data and student behaviour patterns that is required to effectively make use of this key source of information.

Policy Unit

- Effective LA strategies must be informed by robust policy and procedures that enable the institution, staff and students to achieve the maximum benefits while also establishing the institutional norms and practices that ensure a consistent student experience.
- Good policy is the outcome of a well-planned approach and planning is essential for a cross-functional service like LA.

Registry

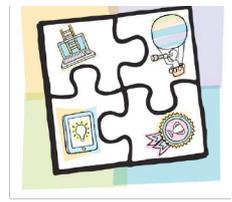
- In many cases, Registry staff will be the custodians of the data from the SIS and possibly other potential data sources such as the timetabling and attendance platforms. As such, their expertise in the structure of the data in these systems will be essential.
- Registry staff may have a bird's-eye understanding of structures, practices and business cycles across the institution. This knowledge can assist in the development of institution-wide approaches.
- LA-triggered interventions may unearth a plethora of student issues that are not academic in nature. These may include issues with fees, grants, timetables, registration etc. As the institutional experts in the resolution of such issues, Registry staff should be involved in the design of the institution's intervention policies and practices.

Senior Management

- An LA strategy driven by senior management offers the potential development of a single, coherent institutional strategy.
- Having management on board can ensure that aims of LA approach are effectively aligned with institutional strategy.
- It also gives considerable leverage when attempting to embed an LA approach in institutional practice

Student Advisors

- Any LA strategy will only be successful if it has a genuine, positive impact on students' experience. Extensive and insightful data analysis has only limited value unless it is acted upon.



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- Student Advisors, or whoever in the institution will be making analytics-informed interventions, are fundamental to this success.
- Student Advisors are the source of institutional wisdom and experience regarding reaching out to students. They know which approaches are likely to work and which are not. Moreover, they are uniquely qualified to address the many personal, social and medical issues that your analytics interventions are likely to uncover.

Students

- Involving students from the start is the best way to show the institution's emphasis on a transparent approach. This is essential to dispel potential suspicions about 'Big Brother'
- Transparency is a keystone of Data Protection. As the data subjects of LA, it is good practice to consult with and inform students throughout the exploration phase.
- Getting students to engage with a new system can be challenging. Having student representatives involved in its implementation is likely to increase their sense of co-ownership and, therefore, engagement.
- Students are the optimal source of information about the kinds of interfaces they will engage with, the kind of information they wish to know and the kinds of questions they will have. This information provides the foundation of a successful LA strategy.

Teaching & Learning Unit (Including Educational Developers and Learning Technologists)

- At its optimal level, LA seeks not only to improve student retention and performance, but to enhance student *learning*. Institutions are strongly advised to focus on learning as a primary goal, with the consequent aims of improving retention and performance. The expertise and experience that exists in the T&L community is pivotal to such an endeavour.
- The involvement of the T&L community is also essential for ensuring that the analytics implementation is consistent with the institution's T&L strategy.
- As members of the broader, national T&L community, your T&L unit will have links in other institutions that may be able to provide relevant insights from their own experience of implementing LA.
- Educational Developers not only have the knowledge required to ensure that a learning-focused analytics strategy is based on a strong evidential foundation and international good practice, but also have invaluable experience of the most (and, sometimes, least) effective means of incorporating a T&L focus into daily practice.
- Your institution's Learning Technologists will have a developed knowledge of the technologies in use in your institution that may feed into or benefit from your analytics approach. They will also know the existing features of these platforms



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that may be used to advance your strategy without the need to invest in new technologies. They will also have a first-hand understanding of the platform features and user experience that are a best fit with your academic staff.