

Progression Analysis at Waterford Institute of Technology

This institutional approach...

...is based in Waterford Institute of Technology.

...was undertaken in-house.

...involved analysing the profile of non-progressing first-year students.

...will support informed institutional approaches to enhancing student success.

Identified Need

This study was conceived as part of a broader effort on the part of the Institute to understand with greater clarity the profile of the student body and specifically to identify factors that may negatively impact on student retention and progression. The institution also sought to build a more robust evidence base on which to plan proactive initiatives designed to address retention and progression issues at institutional, department, course and module level. In particular, they recognised the need for a more evidence-based understanding of the retention and progression challenges at module and programme level in order to inform more effective and targeted deployment of resources by faculty and by central services at the earliest possible stage in the programme lifecycle.

Solution

A comprehensive analysis of the profile of non-progressing first year students was undertaken with a view to identifying patterns that could direct preventative action in future years. The analysis considered the profile of the non-progressing students across a broad range of academic and demographic factors. The study also considered the post-primary school of the student, an element of the investigation supplemented by an additional and separate study which considered the neighbourhood of non-progressing student for underlying patterns. The descriptive analysis determined that there were several interesting patterns across the profile of non-progressing students and that, with further statistical analysis, this information could be useful in informing future interventions. Findings will assist in determining the optimum deployment of resources at faculty level in particular, and will inform ongoing curriculum revision and development.



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Enablers and Challenges

Framing this work within the larger institutional priorities of data-enabled decision-making and student success was a significant enabler. Support from senior management and funding from the Open Data Engagement Fund for some elements of the project (specifically the “neighbourhood” study) were also crucial to its realisation. It was also extremely helpful to be able to draw on existing resources of the Institute in data gathering and analysis (Strategy Office) and statistics (School of Science). The team has found data quality to be a challenge, requiring a significant data cleaning and reconciliation exercise to bring the data into a useable format. GDPR compliance has been an ongoing essential component, and has presented an additional set-up requirement.

Advice

The team emphasises the importance of securing broad support for an evidence-based approach to decision-making at Executive level. It is critical to gain and maintain a strategic momentum within the institution, meaning that there is an evident route from the data and the analysis to operations. ‘Democratising’ the data by allowing colleagues access to evidence to inform approaches in their own units and classrooms has been instrumental in bringing about change, understanding that individual departmental managers are best-placed to make the necessary decisions in their area. Finally, making the time to ensure that only high-quality data is used is critical. The combination of expertise in strategy, statistics and data gathering ensures robust methodological approaches and high-quality data, further ensuring confidence in the outcomes.

Further Information

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