



Letterkenny IT Digital Attendance Monitoring System

This institutional approach...

...is based in Letterkenny Institute of Technology.

...was developed in-house.

...involved the creation of a Digital Student Attendance Monitoring System.

...helps to inform institutional decision-making success strategy

Identified Need

LYIT continuously strives to enhance the experience of its students. A key goal in this process is to improve student retention, in which in-class attendance has been found to play a significant role. Attendance was traditionally recorded on a paper-based system, with data being manually compiled and digitised. This proved to be both cumbersome and time consuming. Recognising that retention reporting would be best served by a user-friendly approach that would eliminate the need for paper-based documents, allow the creation of records for lecturers and the transfer of data to administration staff for timely reporting, senior managers within LYIT sought the development of a bespoke digital attendance monitoring system.

Solution

Following consultation at school and department level, a pilot custom web application system was built. Integrating data from Banner and LYIT's timetabling system, the Digital Attendance Monitoring System was first introduced in the 2017/2018 academic year. Following an initial pilot, it was introduced across all programmes in the School of Tourism in January 2018. The system enables lecturers to digitally record attendance, supported by a dashboard that includes students' photographs. For large classes and some practical teaching areas (e.g. training kitchens), the system provides a 'self-service' option for students who can record their attendance by scanning their student ID card with a barcode scanner.

This solution provides a much more comprehensive data picture than has previously been available in LYIT, enabling real-time and bespoke reporting (such as practical classes, tutorials and off-site classes as well as management of absences). It also facilitates the production of tailored timetables for students with module exemptions, undertaking additional modules or attending on a part-time basis.



Enablers and Challenges

The fact that the pilot initiative was supported by senior members of academic and computer services staff with significant IT experience was a key enabler for obtaining senior support, expertise and resources from within LYIT. Having access to onsite developers with the requisite expertise in drawing data from multiple sources was critical, as were good relations between academic and IT staff, which ensured that the development was always informed by operational needs. Challenges included getting staff on board and data quality issues. Finding reasonably priced hardware especially suitable barcode scanners took longer than expected. Finally, consultation and training with academic and administration staff was critical for ensuring that the system was fit-for-purpose.

Advice

The project team advise beginning with a pilot phase to iron out any issues before the platform is rolled out further across the whole institute. It is important not to underestimate the complexity of a system/project such as this one. Engaging lecturers, administration staff and students from the beginning of the process is very important. This needs to be balanced against the need to have a prototype to show the end users before effective engagement can occur. The policy of limiting the initial rollout to a single department/school proved to be worthwhile. Furthermore, follow up analysis and research are needed to investigate the benefits of the system to the students in terms of retention.

Further Information

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