



# Using Insights Report Builder to support Student Engagement and Success at University College Dublin (UCD)



UCD IT Services  
Seirbhísí TF UCD

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# Our Agenda



# About Us

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- University College Dublin (UCD) is the largest university in Ireland with a student population of 33,000 and 3,500 staff, of which approx 2,000 are academic staff
- UCD is Ireland's Global University with 5,200 International Students
- UCD has a number of campuses with the two main campuses in Ireland being our Belfield Campus and Smurfit School of Business for Graduate Business Programmes.
- UCD offer programmes Globally within
  - China
  - Hong Kong
  - Singapore
  - Sri Lanka
- UCD introduced Brightspace in the 2018/19 academic Year



# About Us

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- University College Dublin (UCD) has Six Colleges and their constituent 37 schools make up the academic structure of UCD.
- Each college has a Programme or School Office and Student Adviser who oversee the academic and pastoral care for students within their own designated college or school.
- UCD offers a diverse range of programmes and our Undergraduate programmes allow students to select elective modules from across the University and external to their course of study.



# Project Background

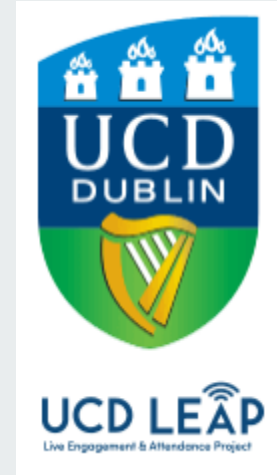
- The UCD Live Engagement & Attendance Project (LEAP) Project
- A collaborative project with Dublin City University (DCU) as part of the HEA I&T Fund
- The project looked to Support Student Success - Using Data Analytics to Understand Retention and Progression
- With the joint aims to
  - I. Create A Student Engagement Model Which Enables Personalised And Effective Interventions By Staff
  - II. Evaluate The Effectiveness Of Our Real-Time Data-Driven Interventions
- The project reported to the University Management Team Education Group (EG) and Student Experience Group (SEG) under the theme of student mental well being



# Project Background

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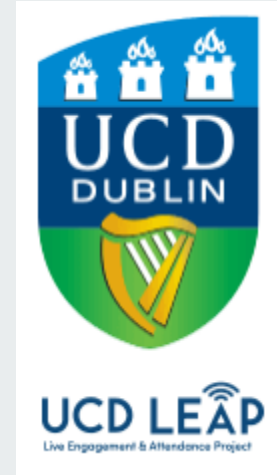
- The Project originally had no IT Services input.
- Within the first phase they monitored students physical attendance within the UCD Veterinary School using a mobile application.
- As a result of Covid 19 and the move to at distance learning, this could no longer be used.
- The project looked to use Brightspace data to measure engagement
- Originally the project set up a number of Intelligent Agents (IAs) and the outputs manually analysed by the project team weekly.



# Project Background

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- The project Supports the University's Educational Strategy
- Data looked at two elements
  - Did the student login to Brightspace Module within the last week (number of logins)
  - How much did students engage with the lecture material in comparison to their peers.
- Data was then shared with the Student Adviser where a student had a number flags
- Student Advisers would then reach out to students to offer support , guidance and advice



# Project Background

## Problem Statement

It was not possible for UCD to support the use of Brightspace Data on scale using the current approach to successfully support Student Engagement and Success across the University.

1

**IA's**  
Required Intelligent Agents to be in place to run. Naming would need to be consistent across all modules

2

### Manual

Required individuals to download and evaluate reporting weekly

3

### Prone to Error

Analytics was reviewed within Excel using "IF" queries

4

### Not Scalable

While it could work well in one school, it was not scalable, due to dependencies and resource restraints.



# How we helped



- In Jan 2022, the LEAP project reached out to IT Services to see if we could assist in automating or supporting the roll out of this data across the University.
- A number of discussions around the current process and mechanisms were had and discussed at length.
- We wanted to move from the IF statements to something more automatic. An example of this is seen at on the side.

So for example, Student number 38 was flagged in week 9. The formulas used were `=AVERAGE(EI3:EI46)` for cell EI47 and `=IF(EI3<((EI$47)/100*30),("Yes"),("No"))` for EJ3, and dragged and dropped all the way down to cell EJ46 `=IF(EI46<((EI$47)/100*30),("Yes"),("No"))`

# How we helped



- We identified a number of items that we felt we needed to address in order to successfully support this project:
  - Curriculum Based information is not currently held within Brightspace and the reporting is currently organised by Programme and Stage (Year of Programme)
  - Students are not attributed to specific programmes/majors or stage within Brightspace, this information is held on UCDs SIS system (Banner)
  - Information needs to be made available to specific users and automatically updated on a weekly basis based on defined metrics associated with module interactions.
    - Some modules may not have material to interact with weekly, how would these be managed
    - Some modules may span across numerous trimesters and need to consider these in the overall scope and credit weightings.
  - Information needs to be provided in easy to read (and exportable) formats
  - Ability for UCD to amend reporting easily based on changes to other University Systems eg Curriculum changes
  - UCD has a complex curriculum structure - e.g. electives can be taken from across the university.
  - Inability to group by user attribute hindering the development of programme-level reporting
  - GDPR concerns in relation to the monitoring of student engagement and actively reporting on this.

# How we helped



## Other considerations

- Grade information is not currently used within the reporting due to inconsistency in how this is used across modules eg not all mid term/final results will be inputted to Brightspace, assessment external to Brightspace etc
- Reports are currently produced manually and built on a weekly basis over the twelve weeks of the trimester - to build a week on week picture. In order to amalgamate the information and monitor where engagement levels may have dropped. Information should continuously append to any automated reporting so a complete picture and monitoring can take place.
- UCD offers students three programme start dates
  - September – the main student intake which includes all UG students (some exceptions for our overseas programmes)
  - January
  - May
- To accommodate this, a module may have a number of Course Reference Numbers or CRNs attached to it and this information would need to be included where applicable.

# How we helped



- UCD has Insights report builder and felt we could utilise this to develop reporting that would support the overall objectives of the UCD LEAP project.
- An initial discussion with D2L took place, and we decided to use D2L Data Consultancy service to assist in developing the reporting dashboard.
- We undertook a one month consultancy bundle, focused purely on the UCD LEAP Project.
- It should be noted that we have had some internal challenges in relation to Insights Report Builder and utilising this tool
- We had put resourcing towards the LEAP Project, a Senior Project Manager to oversee the development, financials and engagement with the LEAP Project and D2L. We also had a Project Manager who is our system admin and one Senior IT Specialist.
- Everyone involved in our Analytics project, would attend the consultancy sessions for overall learning and development purposes.

# How we helped



## D2L Consultancy

We were allocated a D2L consultant - Ana Kuronen-Shoemaker

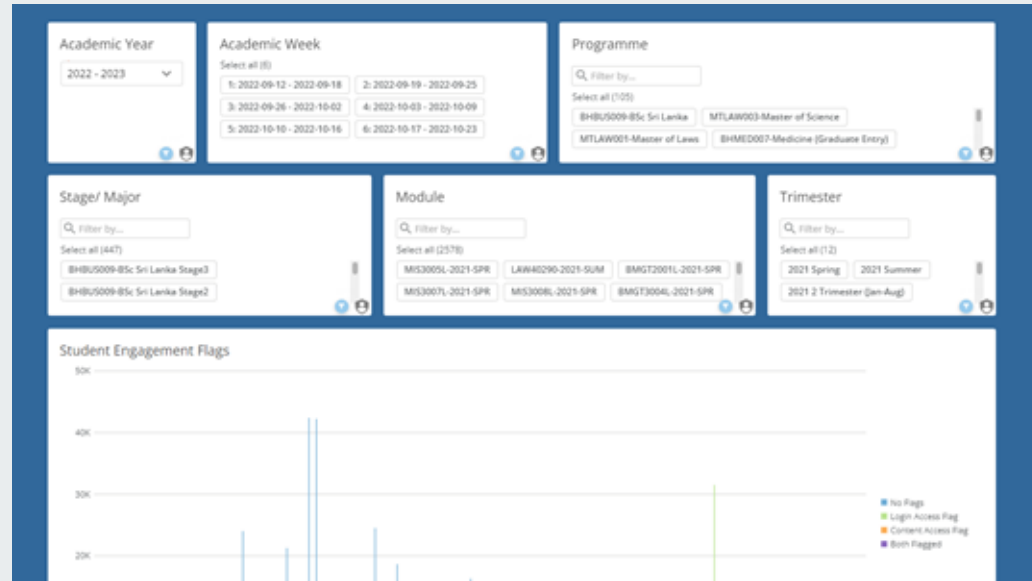
Together we developed and agreed the goal of the consultancy piece

### **PROJECT GOAL**

*The main goal of this engagement is to create a report that achieves the main goals of an internal report – UCD LEAP Student Report. It is being compiled in a more manual way for a pilot phase and would like for it to be less manual and something that can be scalable in the future. The main goal of the report is to bring attention to students who are either behind in course content compared to peers or who have not accessed the course in the week – that way Student Advisors and Program Directors can support the student appropriately. The goal of the report is to have flagged metrics captured on a per week, per modules (course), per student, per program basis*

# How we helped

- The consultancy with D2L assisted in developing a dashboard that highlighted three different areas.
- Within our Brightspace instance, we have “Programme Spaces” which are used by our Programme offices to communicate key messages or information to students. These captured information such as Programme and Year of Study. These were utilised to support the reporting outcome.



# How we helped

- The consultancy was really beneficial for the following reasons
  - Provided key insights into different functionality within Insight report builder such as
    - Drill downs and how to format these in a meaningful way
    - PDP and best practice in sharing Insight Reporting
    - Beast Mode reporting and how integral this is, within your reporting.
- We also received a copy of each Zoom session recording and have stored these and returned to them when undertaking order reporting.
- Because we included the full Analytics project team, we got a lot of return from Ana and key insights in the report builder.



Column name

All Flags

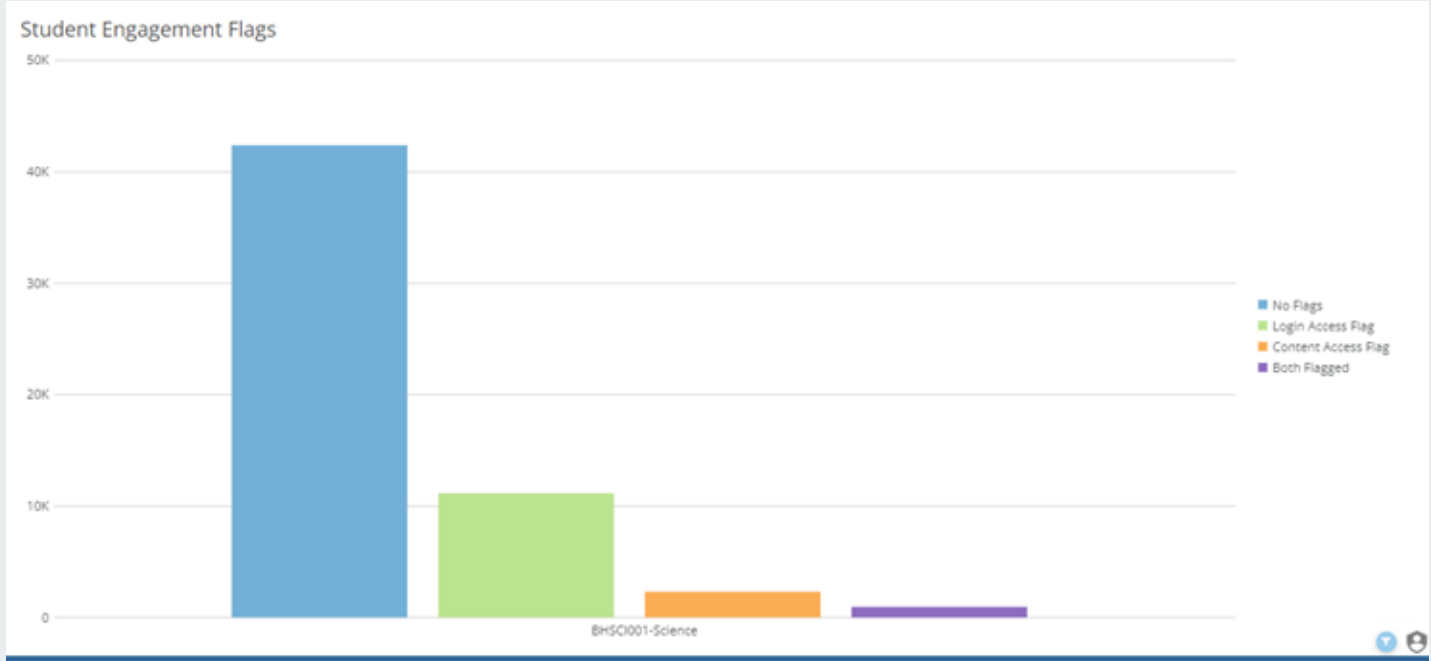
Calculation ?

```
1 ((CASE when ('Run.UserId' is not null) AND ('Average' is not null) then 'Both Flagged'  
2     when ('Run.UserId' is not null) then 'Login Access Flag'  
3     when ('Average' is not null) then 'Content Access Flag'  
4     else 'No Flags'  
5 end)
```

# How we helped

In September, we rolled out the reporting within 3 colleges

- School of Veterinary Medicine
- College of Arts and Humanities
- College of Science





# How we helped

- From within our Student Engagement Card, you can drill down by the different flags. This will provide you with an individual student break down.

This screen allows the adviser to click on the student number, and it will bring them to the University CRM by hyperlink and they can contact the students from here, get an overview of the students SIS record and Log any interaction with the student on the CRM for future reporting purposes.

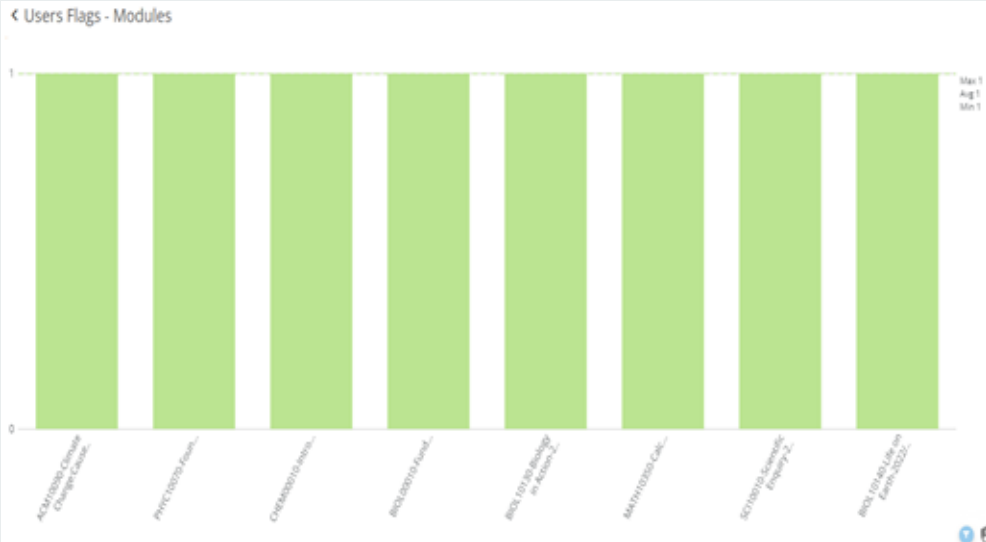
This report gives key information for the student adviser in relation to the flags and the class average.

## < Student Flag Data: Individual Breakdown

Student Number	Name	Module Code	Login Access Flag	Content Access Flag	Content Visited	Content Visited: Class Average
[REDACTED]	[REDACTED]	DSCY10050-2022-AUT	Flagged	Flagged	1	3.34

# How we helped

The next card, provides a breakdown by student, and will provide a listing of all students with flags attached to the programme. It will break them down under the different flags as before and allows the adviser to drill down to see more information relating the number of modules and individual module information for each student also.



# Conclusion



How we overcame the issues:

- GDPR concerns - This was address with our DPO. Previously the University had inputted information into our Terms and Conditions and Privacy Statement that data could be used in this manner. So this was covered and revisited with the DPO at the time.
- Curriculum Information - we were able to utilise the Programme Space information to overcome this. We did not have to link externally to any other database.
- Intelligent Agents - We removed the requirements for Intelligent Agents completely and use baseline Brightspace Information to report on this within our Data Flows.
- Students taking electives outside of their Programme of study, will only appear on their “home” College report.
- Access Rights - Access is only provided to the Student Advisors and we have used PDP to do this. More of this to come....

# Conclusion



- Next Steps
  - We are scheduled to do a review with the three colleges on how they have found the next approach and areas of improvement.
  - We will be looking to roll it out more broadly across all colleges and programmes within the University in Jan 2023 (Undergraduate and Graduate programmes)
  - Learning from this project will go to support the Universities use of Brightspace Data more broadly and this project has allowed us as a team to gain insights into what can be done.

# Conclusion



*"The UCD IT Services team were a huge help to us on the UCD LEAP project. They helped arrange D2L consultancy to better understand our needs and fully operationalised everything on our project wish list.*

*Specifically, they helped model and develop automated student engagement reporting via the Insight Report Builder which was more scalable and accurate than our existing LEAP reporting system.*

*They also helped embed project learning on an institutional scale by facilitating regular meetings with our project team to collate and implement user feedback to ensure it fit our bespoke requirements as much as possible, and also created user guides to ensure continued usability. This has already helped staff provide targeted support for students and consequently enhanced the student experience in UCD."*

John Wyatt, Project Manager, UCD LEAP Project

# Conclusion

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# Acknowledgements

## UCD LEAP Project Team

John Wyatt

Maurice Kinsella

## D2L Consultant

Ana Kuronen-Shoemaker

## IT Services Project Support Team

David Kane

Caio Samelo

