

Course Insights Workshop





Contents

Getting Started with Course Insights	
Access Course Insights	
Course Insights Menu	5
The Filter	5
Create a filter(s)	
Make a query time specific	
Apply the filter(s)	
Remove a filter	
Reset the date filter	
Reset the entire filter	
Example queries using the filter	10
Enrolment page	13
Insights to Investigate	13
Course Overview	13
Distribution of Students	14
What would you do if	15
Engagement page	15
Insights to Investigate	
Course Videos	
Total Video Pauses	16
Advanced Video Summary	16
edX Edge and Blackboard Engagement	17
Overall Engagement	
Location Summary	
Device Summary	
Advanced Timeseries Analysis	
What would you do if	
•	
Assessment page	
Insights to Investigate	
Assessment Overview	
Assessment Items	
Unfiltered View	
Filtered View	
Change Score Intervals	
What would you do if	
Correlations page	
Correlations Heat map	
What would you do if	
Students page	
Insights to Investigate	
Student List	26

Search for a student	26
View student details	
Email students	28
Columns	29
Sort columns	
Show or hide columns	
Enrolment, Engagement, Demographic and Assessment toggles	
Download or Print results	
Example filter	31
What would you do if some students	32
Student page	32
Search for a student	32
Enrolment Information	33
Course Videos	33
edX (Edge) and Blackboard Engagement	34
Assessment	34
Assessment Overview	34
Individual Assessment Tasks	34
Interventions Playbook	35
Curriculum Design	37
Further Resources	37
Technical Support	37
eLearning Solutions Service	37
eLearning Resources	37
eLearning Newsletter	37
Pedagogical Resources	38
Student Resources	
eLearning Workshops	
ITaLI Workshops	
Custom Workshops	38



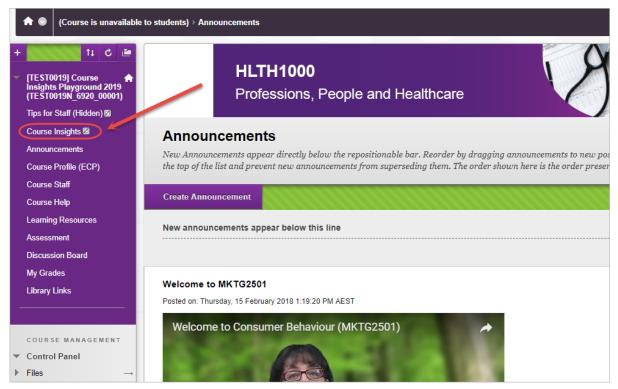
Getting Started with Course Insights

Course Insights is a learning analytics tool that tracks student data across your course.

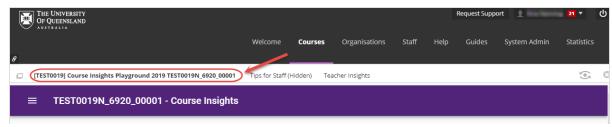
Access Course Insights

- 1. Access your Learn.UQ course.
- 2. Select Course Insights from the Course Menu.

Note: If the link does not appear in the Course Menu, ensure Edit Mode is turned on. Refer to the <u>Turn on Edit Mode</u> guide.

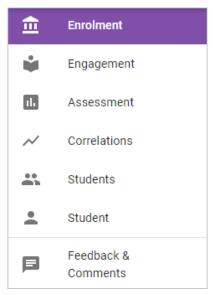


- 3. Course Insights will launch within your Learn.UQ course.
- 4. Once you have finished accessing Course Insights, click on the course title to return to your course.





Course Insights Menu



Enrolment: This page provides an overview of the overall course and filtered cohort's demographics.

Engagement: This page primarily uses data from the edX edge and Blackboard Learn platforms to provide an overview of the engagement level for students and cohorts.

Assessment: This page primarily uses data from the Blackboard Grade Centre items to provide an overview of how students are performing or engaging with the course.

Correlations: This page provides a visualisation of correlations between performance and behavioural data.

Students: This page displays student level overview information that can be filtered to display the desired cohort.

Student: This page displays specific enrolment, engagement and assessment information for each student in relation to the cohort.

Feedback & Comments: Throughout the Pilot, feedback will be collected from users based on their experience. This page is where staff can provide feedback and comments on suggested improvements to the interface, report any confusing wording or analytics they don't understand. Staff are also encouraged to provide specific examples of use cases, such as a particular filter they have chosen and how they will use those filtered results.

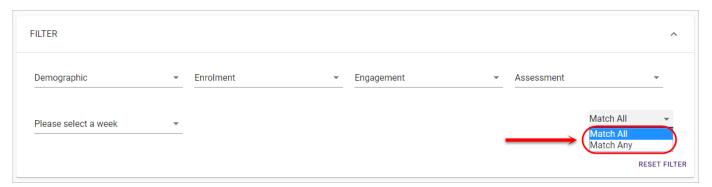
The Filter

You are able to filter data based on one or more independent queries across Course Insights. The filter is available on the <u>Enrolment</u>, <u>Engagment</u>, <u>Assessment</u>, <u>Students</u> and <u>Student</u> pages.

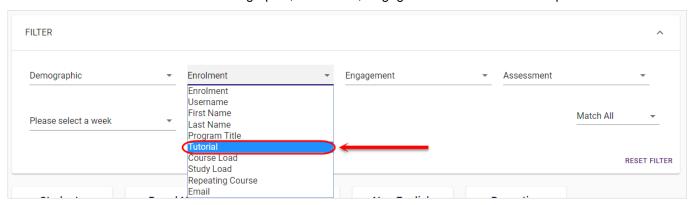
Create a filter(s)

1. Select either Match All (which inserts an "and" in between queries) or Match Any (which inserts an "or" in between queries) from the dropdown list.



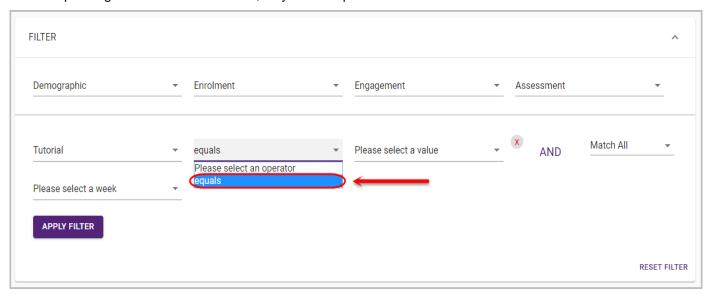


2. Select a variable from the Demographic, Enrolment, Engagement or Assessment dropdown list.



3. Select an operator from the Operator dropdown list.

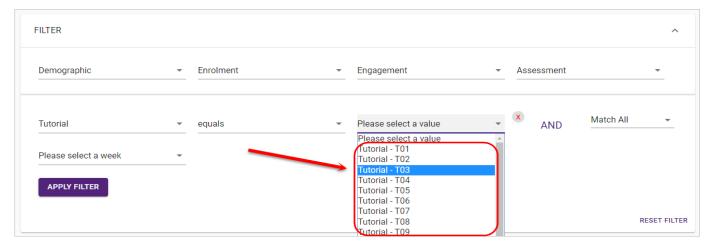
Note: Depending on the variable selected, only certain operators will be available for selection.



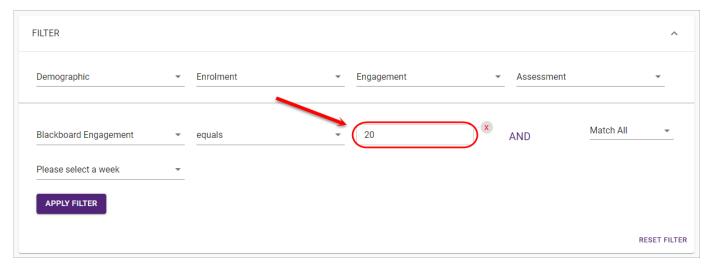
4. Select a value from the value dropdown list

Note: Depending on the variable selected, you will have the option to either enter a value (i.e. Blackboard Engagement = "20") in the textbox or select a value (i.e. Tutorial = "Tutorial - T03") from the dropdown list.





OR enter a number in the value textbox.

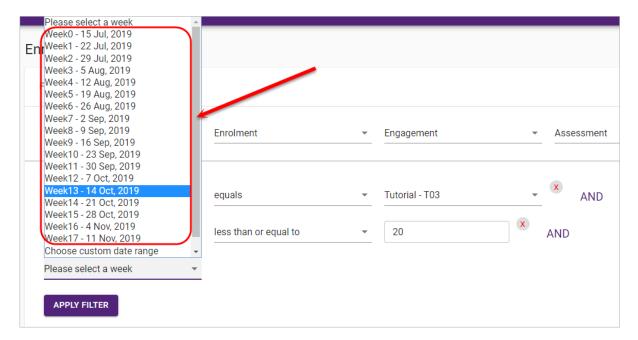


5. Repeat Steps 2 to 5 to create more complex queries.

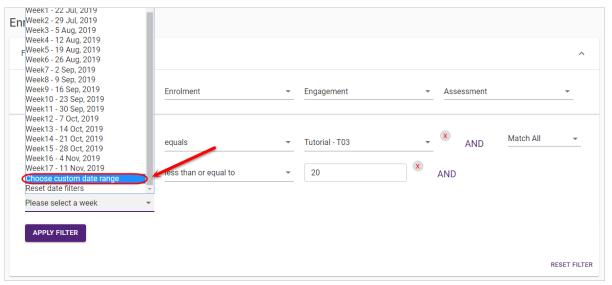
Make a query time specific

1. To make your query time specific, select a week from the Please select a week dropdown list.



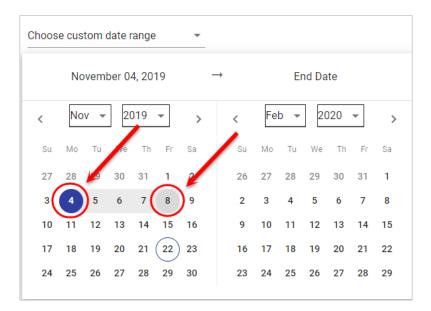


2. Alternatively, select Choose custom date range from the Please select a week dropdown list.



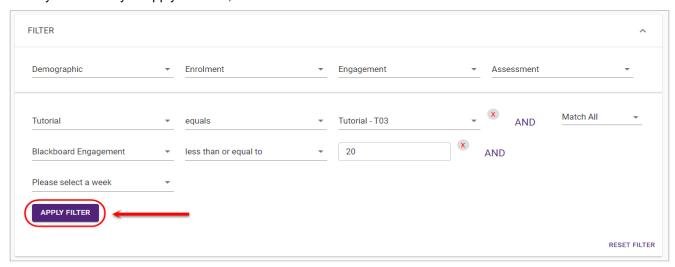
3. Select the first date in the date range followed by the last date to apply a custom date range.





Apply the filter(s)

Once you are ready to apply the filter, click on the APPLY FILTER button.



Remove a filter

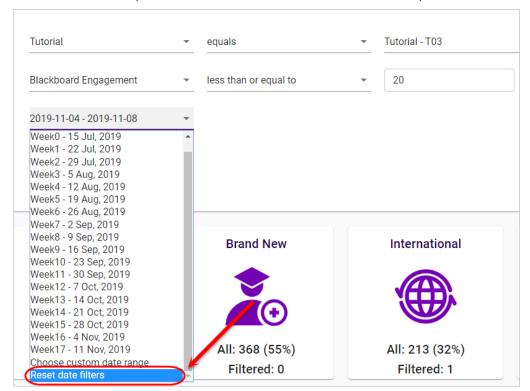
Click on the X button to remove a particular filter.





Reset the date filter

Click on the date dropdown and select Reset date filters from the dropdown list.



Reset the entire filter

Click on the RESET FILTER button to reset the filter.



Example queries using the filter

Example 1: Email students who have not accessed either Blackboard or edX (Edge) by the end of Week 1

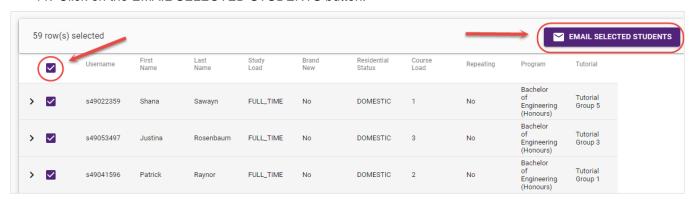
- 1. Access the Students page.
- 2. Select Match Any from the Filter Builder dropdown list.
- 3. Select Blackboard Engagement from the Engagement dropdown list.
- 4. Select equals from the Operator dropdown list.
- 5. Enter 0 in the Value textbox.
- 6. Select Edge Engagement from the Engagement dropdown list.



- 7. Select equals from the Operator dropdown list.
- 8. Enter 0 in the Value textbox.
- 9. Select Week 1 from the Please select a week dropdown.
- 10. Click on the APPLY FILTER button.



- 10. Check the select all checkbox in the table.
- 11. Click on the EMAIL SELECTED STUDENTS button.



Example 2: Email students who have failed an assessment task and have low engagement with online content prior to census date

- 1. Access the Students page.
- 2. Select Match All from the Filter Builder dropdown list.
- 3. Select Blackboard Engagement from the Engagement dropdown list.
- 4. Select less than or equal to from the Operator dropdown list.
- 5. Enter the threshold value (e.g. 50) in the Value textbox.
- 6. Select Edge Engagement from the Engagement dropdown list.
- Select less than or equal to from the Operator dropdown list.
- 8. Enter the threshold value (e.g. 50) in the Value textbox.
- 9. Select the first assessment task from the Assessment dropdown list.
- 10. Select equals from the Operator dropdown list.
- 11. Enter 0 in the Value textbox.
- 12. Select Week 1 from the Please select a week dropdown.



13. Click on the APPLY FILTER button.



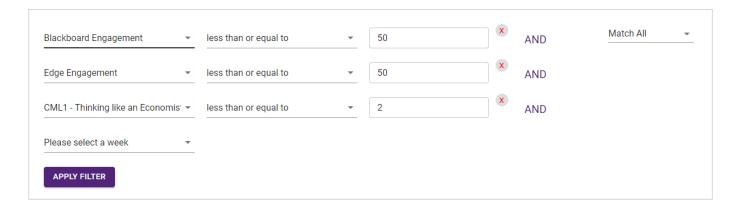
- 13. Check the select all checkbox in the table.
- 14. Click on the EMAIL SELECTED STUDENTS button.



Example 3: Email students who did poorly on an assessment item and have low engagement with online materials

- 1. Access the Students page.
- 2. Select Match All from the Filter Builder dropdown list.
- 3. Select Blackboard Engagement from the Engagement dropdown list.
- 4. Select less than or equal to from the Operator dropdown list.
- 5. Enter the threshold value (e.g. 50) in the Value textbox.
- 6. Select Edge Engagement from the Engagement dropdown list.
- 7. Select less than or equal to from the Operator dropdown list.
- 8. Enter the threshold value (e.g. 50) in the Value textbox.
- 9. Select assessment task from the Assessment dropdown list.
- 10. Select less than or equal to from the Operator dropdown list.
- 11. Enter the threshold value (e.g. 2) in the Value textbox.
- 12. Click on the APPLY FILTER button.





- 13. Check the select all checkbox in the table.
- 14. Click on the EMAIL SELECTED STUDENTS button.



Enrolment page

The Enrolment page has been designed to provide course coordinators and teaching staff with a current overview of the students in their course. Data is taken from SI-net and is updated daily.

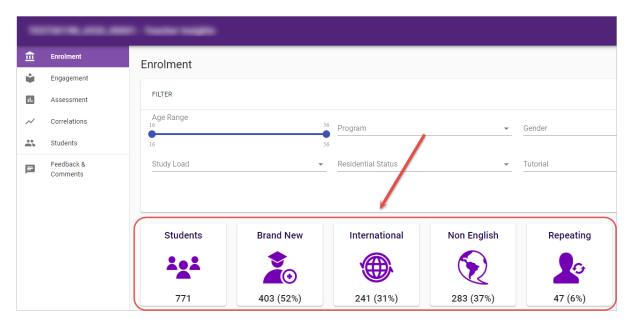
Insights to Investigate

- Do you have a high percentage of international students?
- Do you have a high percentage of students from a non-English speaking background?
- Do you have a high percentage of students who are new to UQ?

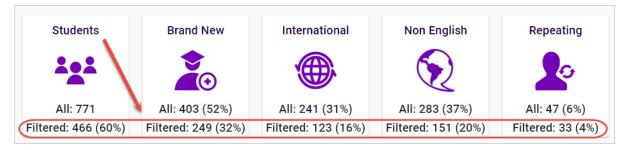
Course Overview

This section reveals the following demographic information (filtered and unfiltered) about the student group:

- **Students:** Number of students enrolled in the course.
- Brand New: Number and percentage of students that are in their first Semester at UQ.
- International: Number and percentage of international students.
- **Non English:** Number and percentage of students who come from a non-English speaking background.
- Repeating: Number and percentage of students repeating the course.



If a filter has been applied, information about that filtered group will appear below the information about all students in the course.



Distribution of Students

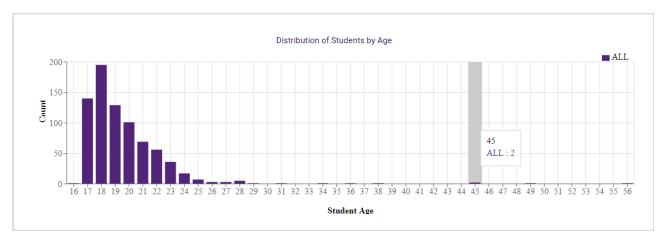
Below the course overview, there are four graphs which display the distribution of students by:

- Age Group
- Program
- Language Spoken at Home

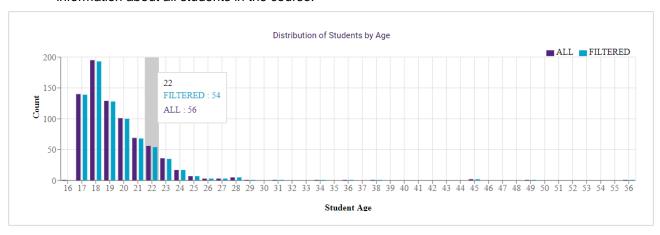
Note: NEC refers to a language that is not elsewhere classified.

1. To view a more detailed breakdown, hover your mouse over the value you wish to view more closely.





2. If a filter has been applied, information about that filtered group will appear in addition to the information about all students in the course.



What would you do if...

- you had a particularly small / large cohort?
- the numbers had **increased** since last run?
- you had a large of number of students who are new to UQ?
- you had a large number of students repeating the course?
- you had a younger / older / bi-modal cohort?
- you had a large number of students from a non-English speaking background?

How would this impact your teaching strategies?

Engagement page

The Engagement page aims to provide you with information extracted from the teaching and learning system with whom the student engages with in the course of learning. It is critical to note, that the information provided should only be used as a guide and not as a measure of academic success. Although student



engagement with teaching and learning systems has been proven to correlate to better academic performance, a student may still perform well without active use of these systems.

Insights to Investigate

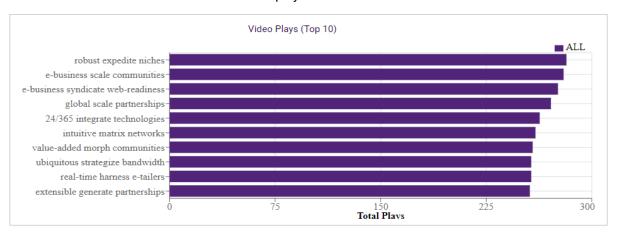
- Do you have a large number of students who have not engaged with content?
- Do you have students who have not completed formative assessment tasks?
- Which videos (based on video pauses) were the most challenging/confusing for the students?

Course Videos

This section focuses on providing a comparison between filtered and unfiltered data related to video views and pauses on the edX and Blackboard learning platforms.

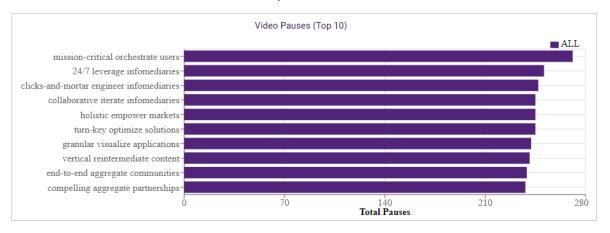
Total Video Plays

The total video plays graph will display the Top 10 course videos on the edX and Blackboard platforms, based on the total number of times students play the videos.



Total Video Pauses

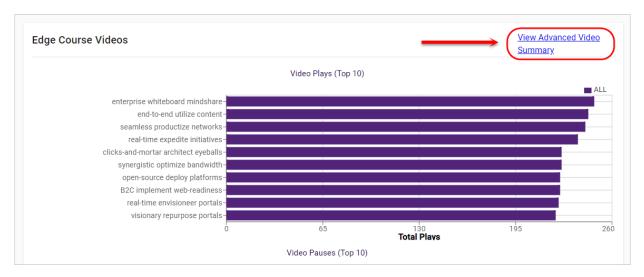
The total video pauses graph will display the Top 10 course videos on the edX and Blackboard platforms, based on the total number of times students pause the videos.



Advanced Video Summary

1. Click on the View Advanced Video Summary link.





You will then be presented with a full list of videos (i.e. not just the Top 10) and can sort by Total Plays and Total Pauses.

edX Edge and Blackboard Engagement

How is engagement calculated?

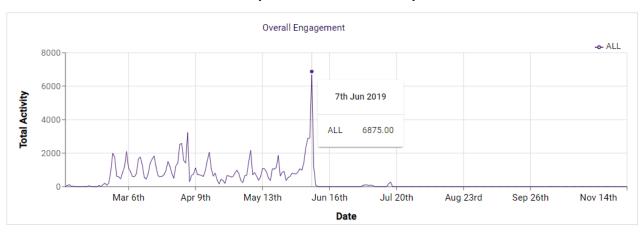
Student engagement is measured by the average activity pattern per student, which is based on the student being active in Blackboard or edX Edge (i.e. clicking or watching a video). The activity pattern is calculated per minute (i.e. if a student views 10 different folders in a minute, the activity pattern is recorded as +10). Activity is the aggregate of all the recorded students' activity patterns per day with respect to the criteria (i.e. overall, mobile/tablet/desktop, on-/off-campus).

- The average activity of all students, is calculated by dividing the total activity of all students by total number of all students.
- The average activity of filtered students, is calculated by dividing the total activity of filtered students, by the total number of filtered students.

Overall Engagement

The Overall Engagement graph displays the average activity pattern per student calculated across all criteria (i.e. overall, mobile/tablet/desktop, on-/off-campus) over time.

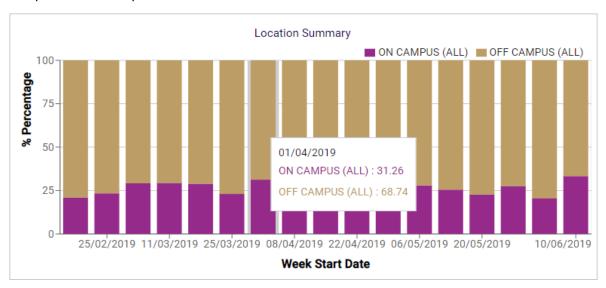
To view a more detailed breakdown, hover your mouse over the date you wish to view more detail for.





Location Summary

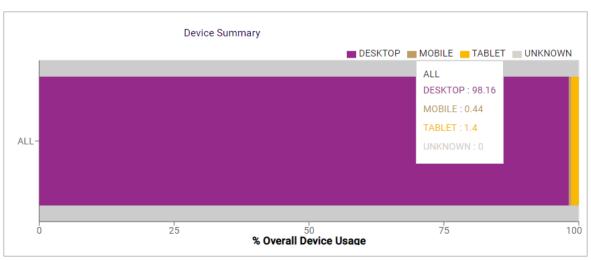
The Device Summary chart displays the percentage of students who have accessed the learning platform on campus and off campus over time.



Device Summary

The Device Summary chart displays the percentage of students who have accessed the learning platform on a mobile device, tablet and desktop computer.

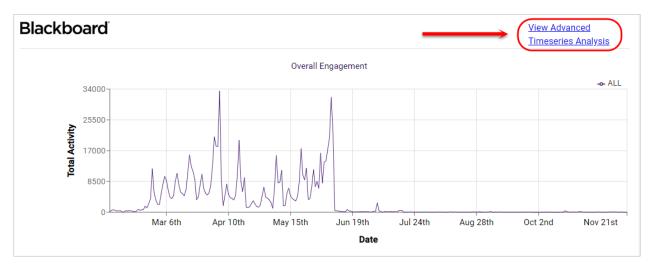
To view a more detailed breakdown, hover your mouse over the chart.



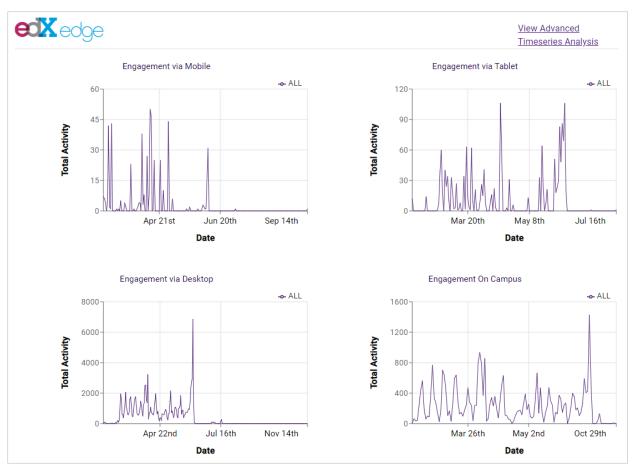
Advanced Timeseries Analysis

1. Click on the View Advanced Timeseries Analysis link.



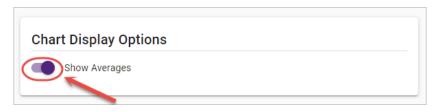


2. You will then be presented with individual graphs which displayed engagement via mobile, tablet and desktop over time, as well as engagement both on and off campus.

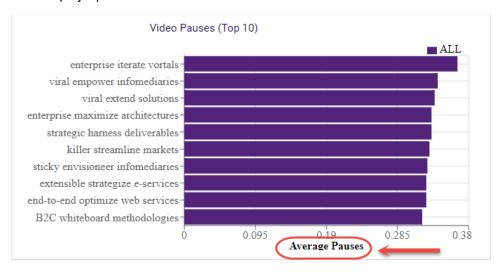


Changing from totals to averages

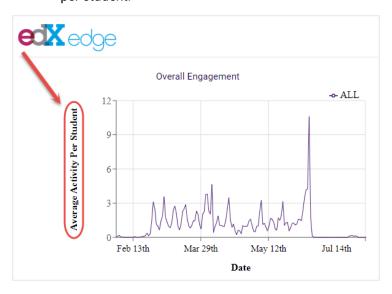
1. Turn the Show Averages toggle ON to display averages instead of totals.



2. The x-axis on the course video graphs will change from total video plays/pauses to average video plays/pauses.



3. The y-axis on the engagement graphs will change from total activity per student to average activity per student.



What would you do if...

- one video had significantly more plays than the others?
- one video had significantly more pauses than the others?
- · the activity patterns showed engagement dropping off?

How would this impact your teaching strategies?



Assessment page

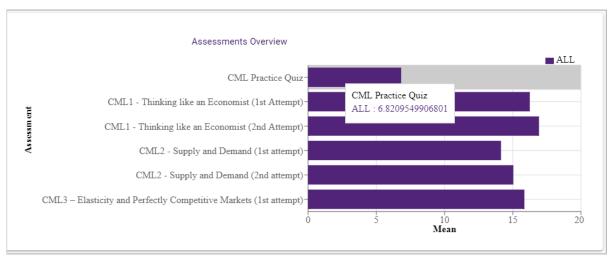
The Assessment page has been designed to provide course coordinators and teaching staff with an overview of the course assessment, as well as a detailed breakdown of all assessment tasks.

Insights to Investigate

- Which assessment tasks did students achieve poor results?
- Which assessment tasks did students struggle with?

Assessment Overview

The assessment overview graph provides a filtered or unfiltered view of all assessment items based on the mean student result.

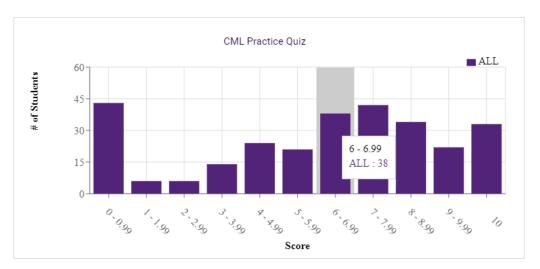


Assessment Items

Filtered or unfiltered views of assessment items (mapped from the Blackboard Grade Centre) provide an overview of student performance and may be used to identify student groups that are finding difficulties with content or learning.

Unfiltered View

1. Hover your mouse over a particular Score group to view a more detailed breakdown.



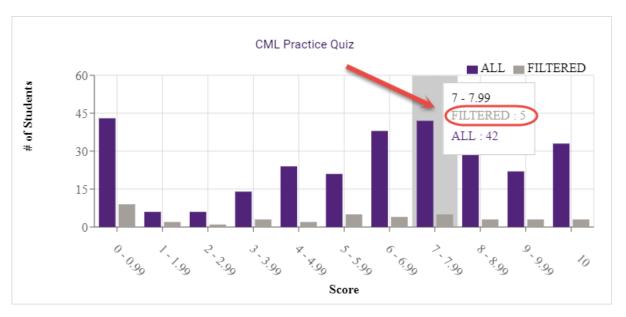
- 2. To the right of the graph, a table will display a range of parameters including:
- Mean: The average student result.
- Standard Deviation: The measure of how spread out student results are.
- Range: The difference between the lowest and highest student result.
- Minimum: The lowest student result.
- Maximum: The highest student result.
- Total Responses: The total number of student submissions.

	\$
Values	
16.2474	
3.0359	
20.0000	
0.0000	
20.0000	
729	
	16.2474 3.0359 20.0000 0.0000 20.0000

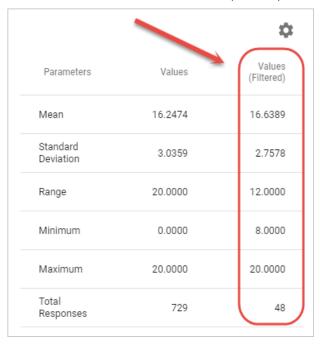
Filtered View

- 1. Hover your mouse over a particular Score group to view a more detailed breakdown.
- 2. If a filter has been applied, information about that filtered group will appear in addition to the information about all students.



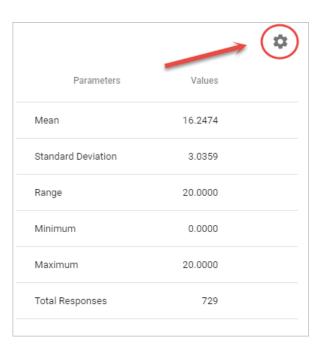


3. Another column titled Values (Filtered) will also be added to the table based on the current filter.

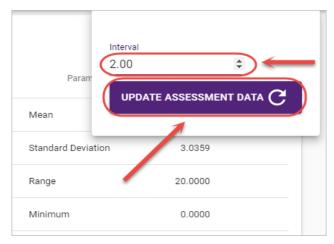


Change Score Intervals

1. Click on the Settings cog, to change the score intervals for that particular assessment item on the graph.



- 2. Enter a new parameter in the Interval textbox.
- 3. Click on the UPDATE ASSESSMENT DATA button to view the changes.



What would you do if...

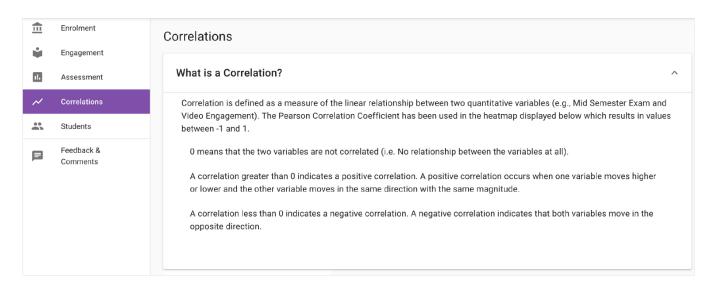
- there was a clumping of results at the top?
- there was a high failure rate?
- there were bi-modal results (2 distinct groups) with a particular demographic group?

How would this impact your teaching strategies?

Correlations page

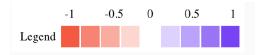
The Correlations page measures the linear relationship between two quantitative variables (e.g. Mid-Semester Exam and Video Engagement).





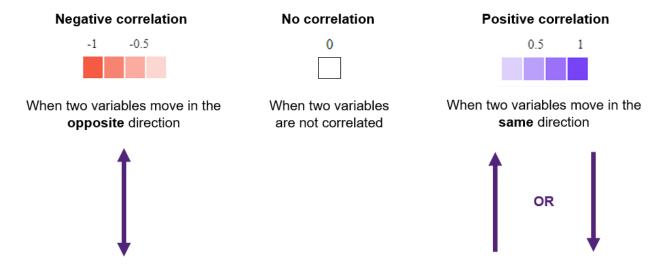
Correlations Heat map

Correlations are visualised using a heat map, which appears as values between -1 and 1.

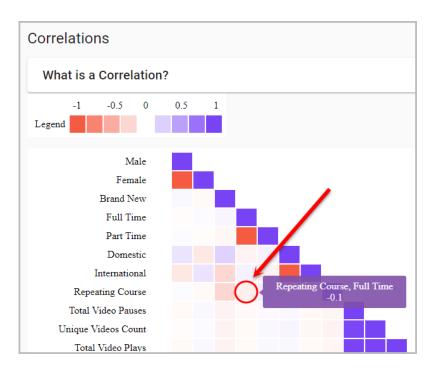


The following guidelines will assist in interpreting the heat-map:

- A correlation of 0 indicates no relationship between two variables.
- A correlation greater than 0 indicates a positive correlation between two variables.
- A correlation less than 0 indicates a negative correlation between two variables.



Hover your mouse over a particular square to view more information about the correlation.



What would you do if...

there was a negative correlation between students completing weekly quizzes and the final exam results?

Students page

The Students page provides a tabular view of all relevant student data and enables filtering so that educators can determine groups/cohorts based on their selected criteria.

Insights to Investigate

- Which students have not accessed either Blackboard or edX (Edge) by the end of Week 1?
- Which students have failed an assessment task and have low engagement with online materials prior to census date?
- Which students did poorly on one or more assessment tasks and have low engagement with online materials after census date?

Student List

Search for a student

You can search for a particular student by first name, last name or student number.

- 1. Click on the Search button to launch the search bar.
- 2. Enter a student name or number in the search bar to filter the search results below in the table.

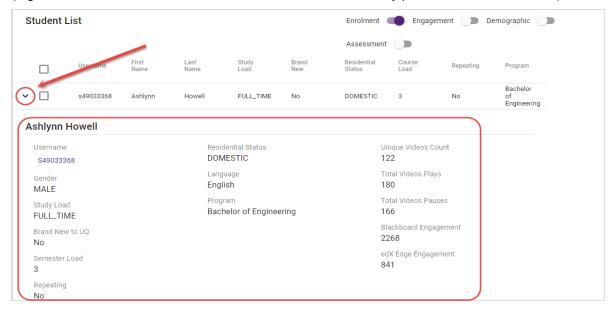




View student details

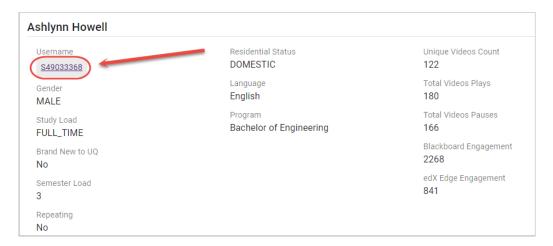
- 1. Click on the down arrow next to any student's name to view the following information, in additional to enrolment information:
- Unique Videos Count: The total number of times that student has played different videos in edX
 Edge.
- Total Video Plays: The total number of times that student has played videos in edX Edge.
- Total Video Pauses: The total number of times that student has paused videos in edX Edge.
- **Blackboard Engagement:** The daily activity count calculated for that student in the Blackboard learning platform.
- edX Edge Engagement: The daily activity count calculated for that student in the edX Edge learning platform.

Note: Student engagement is measured as a daily activity count which is based on the student being active in Blackboard or edX Edge (i.e. clicking or watching a video) and activity pattern is calculated per minute (e.g. If a student views 10 different folders in a minute, the activity pattern is recorded as +10).



2. Click on the student number to view the student's full profile on the Student page.

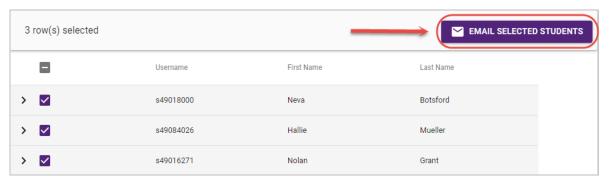




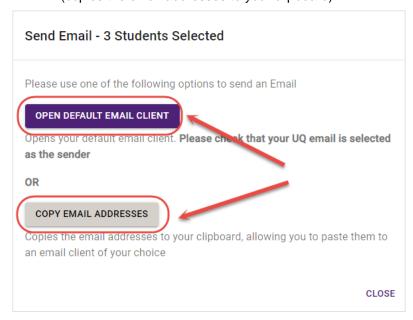
Email students

You can use this feature to email one or more selected students.

- 1. Check the checkbox next to the student or students that you would like to email.
- 2. Click on the EMAIL SELECTED STUDENTS button.

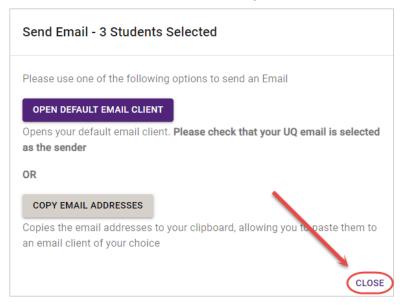


3. Either click on the OPEN DEFAULT EMAIL CLIENT button (drafts a blank email to selected students as BCC using your default email client) OR click on the COPY EMAIL ADDRESSES button (copies the email addresses to your clipboard).





4. Click on the CLOSE button once you have finished.



Columns

Sort columns

You can sort the information in any column as either ascending or descending.

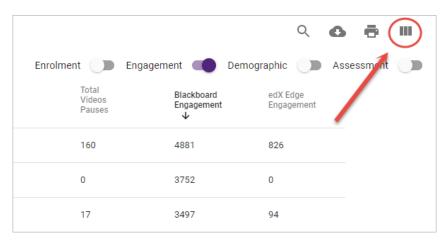
- 1. Click on the column title to sort the column information as ascending.
- 2. Click on the column title again to sort the column information as descending.

Unique Videos Count	Total Videos Plays	Total Videos Pauses	Blackboard Engagement •	edX Edge Engagement
123	174	160	4881 Sort	826
0	0	0	3752	0
17	20	17	3497	94
133	207	169	3460	899
38	42	42	3321	220

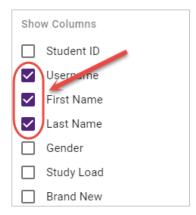
Show or hide columns

1. Click on the columns button to view all column options.





- 2. Check the checkbox for columns you wish to appear in the table.
- 3. Uncheck the checkbox for columns you wish to disappear from the table.

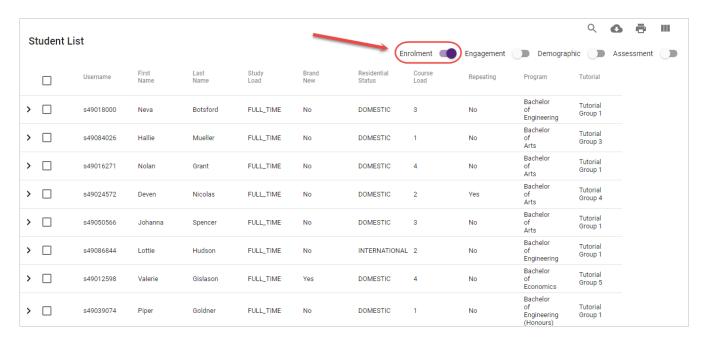


Enrolment, Engagement, Demographic and Assessment toggles

Enrolment, engagement, demographic and assessment information can be toggled to either show or hide relevant columns in the table.

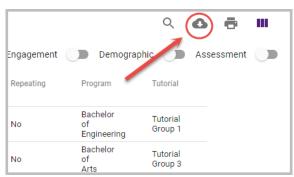
- 1. Click on the toggle to view relevant columns (e.g. all columns related to enrolment information) in the table.
- 2. Click on the toggle again to hide the columns.



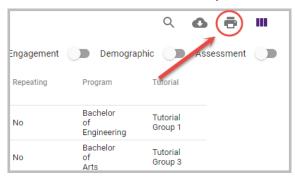


Download or Print results

1. Click on the Download button to save the current information shown in the table as a .CSV file.



2. Click on the Print button to print the current information shown in the table.



Example filter

Students who failed first assessment task AND have low Edge Engagement AND have low Blackboard Engagement





What would you do if some students...

- · had minimal edX Edge and Blackboard engagement before census date?
- failed the first assessment task before census date?
- · had high engagement but low assessment results after census date?

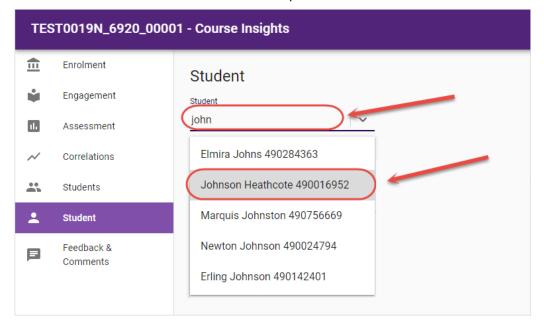
How would this impact your teaching strategies?

Student page

The Student page provides course coordinators and teaching staff with the ability to search for and view an overview of enrolment, assessment and engagement information for individual students, in relation to the entire cohort or a filtered group. Refer to the <u>Using the Demographic Filter</u> guide for more information.

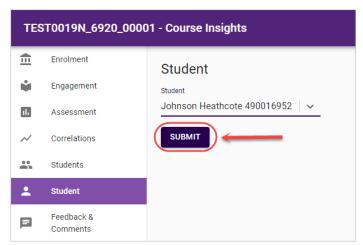
Search for a student

- 1. Enter the first or last name of the student you want to search for.
- 2. Select the correct student from the drop-down list.



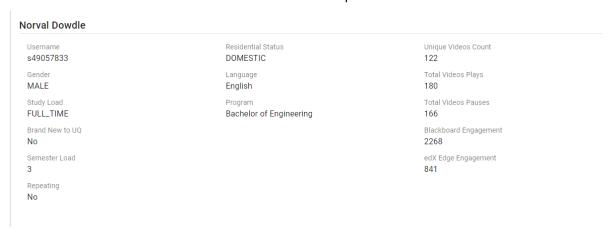


3. Click on the SUBMIT button to view their data.



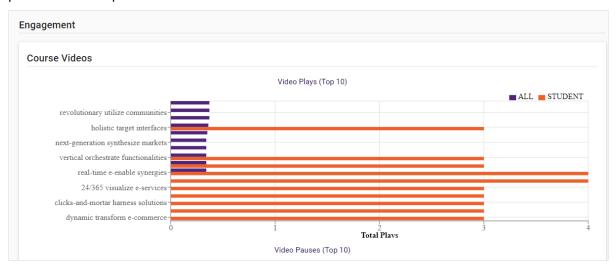
Enrolment Information

You can view an overview of enrolment information for a particular student.



Course Videos

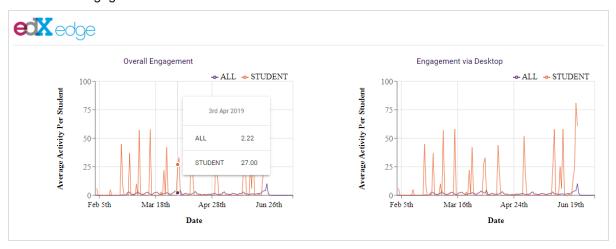
You can view where a particular student sits in relation to the rest of the cohort in terms of video plays and pauses for the Top 10 course videos.





edX (Edge) and Blackboard Engagement

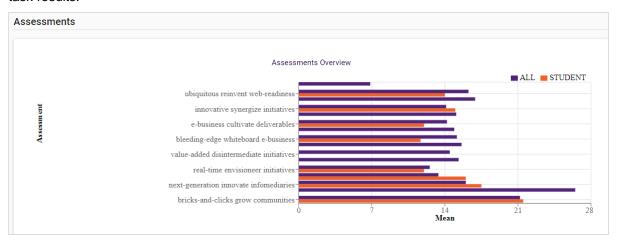
You can view where a particular student sits in relation to the rest of the cohort in terms of edX (Edge) and Blackboard engagement over the semester.



Assessment

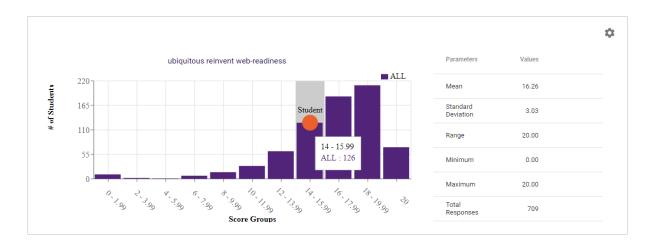
Assessment Overview

You can view where a particular student sits in relation to the rest of the cohort in terms of all assessment task results.



Individual Assessment Tasks

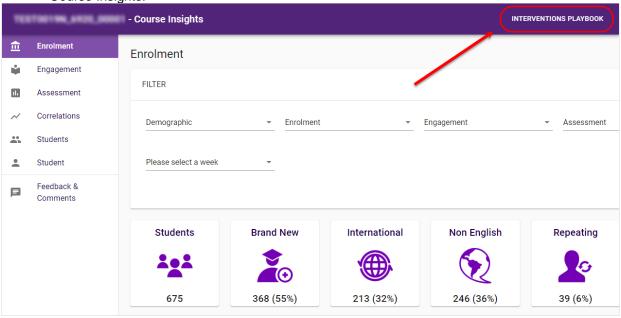
You can view where a particular student sits in relation to the rest of the cohort in terms of each individual assessment task.



Interventions Playbook

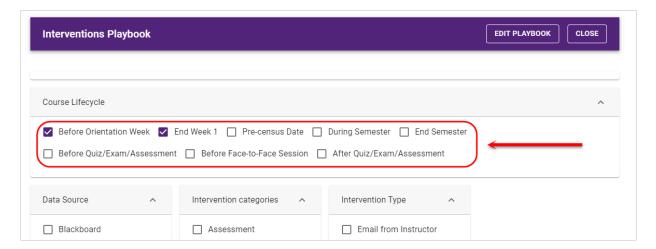
The Interventions Playbook provides suggested interventions based on the options selected within Course Insights.

1. Click on the INTERVENTIONS PLAYBOOK button in the top right-hand corner of any screen in Course Insights.

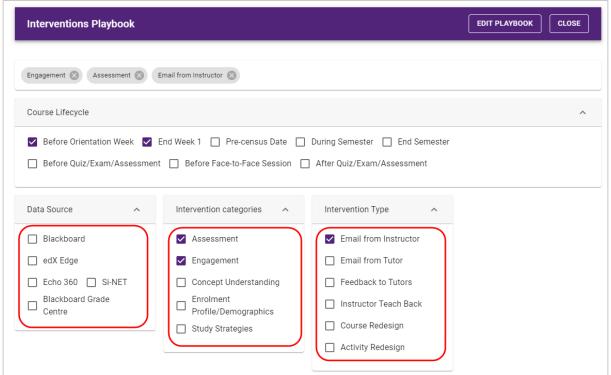


2. Check the required checkboxes from the Course Lifecycle options.





3. Optionally, check the required checkboxes from the Data Source, Intervention categories and Intervention Type options.



4. Scroll down the page to view the Matching Interventions.



Matching Interventions

Pre-Asssement Check-in

Use the filter to identify students that have not completed blended content and formative activities a week before assessment.

Intervention Type: Email from Instructor

Intervention Categories: Engagement, Assessment

Course Lifecycle: Before Quiz/Exam/Assessment

Data Source: Blackboard,edX Edge

End of Week 1 Check-in

Use the filter to identify students that have not logged in to Blackboard or edX Edge.

Intervention Type: Email from Instructor
Intervention Categories: Engagement

Course Lifecycle: End Week 1

Data Source: Blackboard, Echo 360

Curriculum Design

Consider how you would use your findings from Course Insights to inform your current course design.

Further Resources

Technical Support

- help@learn.uq.edu.au
- Phone 336 56000

eLearning Solutions Service

The eLearning Systems and Support team provide an <u>eLearning Solutions Service</u> to help staff implement eLearning solutions for the most common teaching and learning problems, using centrally supported eLearning tools.

eLearning Resources

A range of instructional resources are available on our <u>eLearning website</u>, including self-help text based guides, self-help videos, teaching and learning quick-guides and information on known technical issues. Additionally, updates are also available on the progress of eLearning projects such as the implementation of new tools and upgrades to current systems.

eLearning Newsletter

The <u>eLearning newsletter</u> is published fortnightly and includes articles on eLearning tips for the start and end of semester, promotion of new tools, tool functionality and how tools could be used to improve teaching and learning. Other relevant communications on policy updates, tool upgrades and outages are also included in the newsletter.



Pedagogical Resources

The <u>Institute for Teaching and Learning Innovation (ITaLI)</u> provides leadership, engagement and advocacy in educational innovation, teaching excellence and learning analytics.

Student Resources

Library Services provides <u>AskUS</u> a help and information service for students. They also offer face-to-face help, provide online <u>Learn.UQ student guides</u> and run <u>workshops</u> for students.

eLearning Workshops

A range of technical eLearning workshops are offered throughout the year. For descriptions of the workshops, dates and to enrol, visit the <u>Teaching and Learning Technologies series</u> on the Staff Development website.

ITaLI Workshops

A range of pedagogical eLearning workshops are offered throughout the year. For descriptions of the workshops, dates and to enrol, visit the <u>Teaching, Learning and Assessment series</u> on the Staff Development website.

Custom Workshops

<u>Custom workshops</u> on implementing Technology Enhanced Learning using centrally supported eLearning tools are available on request for faculties / schools / courses. Workshops can be organised for teaching staff, tutors and professional staff. The eLearning team can provide laptops, iPads and a data projector.



Contact details eLearning Systems and Support E elearningadvisors@uq.edu.au W elearning.uq.edu.au CRICOS Provider Number 00025B