Course Insights Workshop
Contents

Getting Started with Course Insights ................................................................. 4
Access Course Insights ....................................................................................... 4
Course Insights Menu ......................................................................................... 5
The Filter ............................................................................................................... 5
Create a filter(s) ................................................................................................. 5
Make a query time specific .............................................................................. 7
Apply the filter(s) ............................................................................................... 9
Remove a filter .................................................................................................. 9
Reset the date filter ......................................................................................... 10
Reset the entire filter ...................................................................................... 10
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 ....................................................................................... 16
Course Videos ................................................................................................... 16
Total Video Pauses ........................................................................................... 16
Advanced Video Summary .............................................................................. 16
edX Edge and Blackboard Engagement ........................................................... 17
Overall Engagement ......................................................................................... 17
Location Summary ............................................................................................ 18
Device Summary ............................................................................................... 18
Advanced Timeseries Analysis ....................................................................... 18
Changing from totals to averages .................................................................. 19
What would you do if ....................................................................................... 20

Assessment page ............................................................................................... 21
Insights to Investigate ....................................................................................... 21
Assessment Overview ....................................................................................... 21
Assessment Items ............................................................................................. 21
Unfiltered View ................................................................................................. 21
Filtered View .................................................................................................... 22
Change Score Intervals ................................................................................... 23
What would you do if ....................................................................................... 24

Correlations page .............................................................................................. 24
Correlations Heat map ..................................................................................... 25
What would you do if ....................................................................................... 26

Students page ................................................................................................... 26
Insights to Investigate ....................................................................................... 26
Student List .......................................................................................................... 26
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search for a student</td>
<td>26</td>
</tr>
<tr>
<td>View student details</td>
<td>27</td>
</tr>
<tr>
<td>Email students</td>
<td>28</td>
</tr>
<tr>
<td>Columns</td>
<td>29</td>
</tr>
<tr>
<td>Sort columns</td>
<td>29</td>
</tr>
<tr>
<td>Show or hide columns</td>
<td>29</td>
</tr>
<tr>
<td>Enrolment, Engagement, Demographic and Assessment toggles</td>
<td>30</td>
</tr>
<tr>
<td>Download or Print results</td>
<td>31</td>
</tr>
<tr>
<td>Example filter</td>
<td>31</td>
</tr>
<tr>
<td>What would you do if some students</td>
<td>32</td>
</tr>
<tr>
<td><strong>Student page</strong></td>
<td>32</td>
</tr>
<tr>
<td>Search for a student</td>
<td>32</td>
</tr>
<tr>
<td>Enrolment Information</td>
<td>33</td>
</tr>
<tr>
<td>Course Videos</td>
<td>33</td>
</tr>
<tr>
<td>edX (Edge) and Blackboard Engagement</td>
<td>34</td>
</tr>
<tr>
<td>Assessment</td>
<td>34</td>
</tr>
<tr>
<td>Assessment Overview</td>
<td>34</td>
</tr>
<tr>
<td>Individual Assessment Tasks</td>
<td>34</td>
</tr>
<tr>
<td><strong>Interventions Playbook</strong></td>
<td>35</td>
</tr>
<tr>
<td><strong>Curriculum Design</strong></td>
<td>37</td>
</tr>
<tr>
<td><strong>Further Resources</strong></td>
<td>37</td>
</tr>
<tr>
<td>Technical Support</td>
<td>37</td>
</tr>
<tr>
<td>eLearning Solutions Service</td>
<td>37</td>
</tr>
<tr>
<td>eLearning Resources</td>
<td>37</td>
</tr>
<tr>
<td>eLearning Newsletter</td>
<td>37</td>
</tr>
<tr>
<td>Pedagogical Resources</td>
<td>38</td>
</tr>
<tr>
<td>Student Resources</td>
<td>38</td>
</tr>
<tr>
<td>eLearning Workshops</td>
<td>38</td>
</tr>
<tr>
<td>iTaLi Workshops</td>
<td>38</td>
</tr>
<tr>
<td>Custom Workshops</td>
<td>38</td>
</tr>
</tbody>
</table>
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 Turn on Edit Mode 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 Enrolment, Engagement, Assessment, Students and Student 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.

![Image showing the date filter with options to reset](image)

Reset the entire filter

Click on the RESET FILTER button to reset the filter.

![Image showing the filter with the Reset Filter button](image)

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.
11. Check the select all checkbox in the table.
12. 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.
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 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 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.

![Video Plays (Top 10)](image)

**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.

![Video Pauses (Top 10)](image)

**Advanced Video Summary**

1. Click on the View Advanced Video Summary link.
2. 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.

![Location Summary Chart]

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.

![Device Summary 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.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>15.2474</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>3.0359</td>
</tr>
<tr>
<td>Range</td>
<td>20.0000</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.0000</td>
</tr>
<tr>
<td>Maximum</td>
<td>20.0000</td>
</tr>
<tr>
<td>Total Responses</td>
<td>729</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Values</th>
<th>Values (Filtered)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>16.2474</td>
<td>16.8389</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>3.0359</td>
<td>2.7578</td>
</tr>
<tr>
<td>Range</td>
<td>20.0000</td>
<td>12.0000</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.0000</td>
<td>8.0000</td>
</tr>
<tr>
<td>Maximum</td>
<td>20.0000</td>
<td>20.0000</td>
</tr>
<tr>
<td>Total Responses</td>
<td>729</td>
<td>48</td>
</tr>
</tbody>
</table>

**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 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 addition 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.

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.

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 Using the Demographic Filter 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

<table>
<thead>
<tr>
<th>Pre-Assessment Check-in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use the filter to identify students that have not completed blended content and formative activities a week before assessment.</td>
</tr>
<tr>
<td>Intervention Type: Email from instructor</td>
</tr>
<tr>
<td>Intervention Categories: Engagement, Assessment</td>
</tr>
<tr>
<td>Course Lifecycle: Before Quiz/Exam/Assessment</td>
</tr>
<tr>
<td>Data Source: Blackboard, edX Edge</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>End of Week 1 Check-in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use the filter to identify students that have not logged in to Blackboard or edX Edge.</td>
</tr>
<tr>
<td>Intervention Type: Email from instructor</td>
</tr>
<tr>
<td>Intervention Categories: Engagement</td>
</tr>
<tr>
<td>Course Lifecycle: End Week 1</td>
</tr>
<tr>
<td>Data Source: Blackboard, Echo 360</td>
</tr>
</tbody>
</table>

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 eLearning Solutions Service 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 eLearning website, 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 eLearning newsletter 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 Institute for Teaching and Learning Innovation (ITaLI) provides leadership, engagement and advocacy in educational innovation, teaching excellence and learning analytics.

Student Resources

Library Services provides AskUS a help and information service for students. They also offer face-to-face help, provide online Learn.UQ student guides and run workshops 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 Teaching and Learning Technologies series 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 Teaching, Learning and Assessment series on the Staff Development website.

Custom Workshops

Custom workshops 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