

Learning dashboard for instructors

Guidelines

Dear instructor,

The European VITAL project coordinated by Hasselt University in which UCLan participates has led to the implementation of Learning Analytics in the courses “EB3006”/“EB4710”. **Learning Analytics** is a new research domain that consists in collecting, measuring, analysing and reporting data about online learning in order to better understand and optimise learning and the environment in which it occurs. Your students’ learning activities in the online learning environment for the courses of “EB3006”/“EB4710” have been analysed using statistical and process mining techniques and learning dashboards have been developed.

Log in and use your instructor username and personal password to get an overview of your students’ learning progress and behaviour. Only you the student him/herself can see their own learning data. Students can also see the group averages, but not anyone other’s individual results. To view the student dashboard, click on Student at the right at the top of the screen.

- **Select the course** in the scroll menu at the top of the screen and select **"All students"** to see the averages of all students in the course or of their group.
- In the **“All programmes”** menu you can chose to view the results of a specific group. De data in the graphs will adapt automatically.
- Select a specific student to view her/his profile based on the online learning data

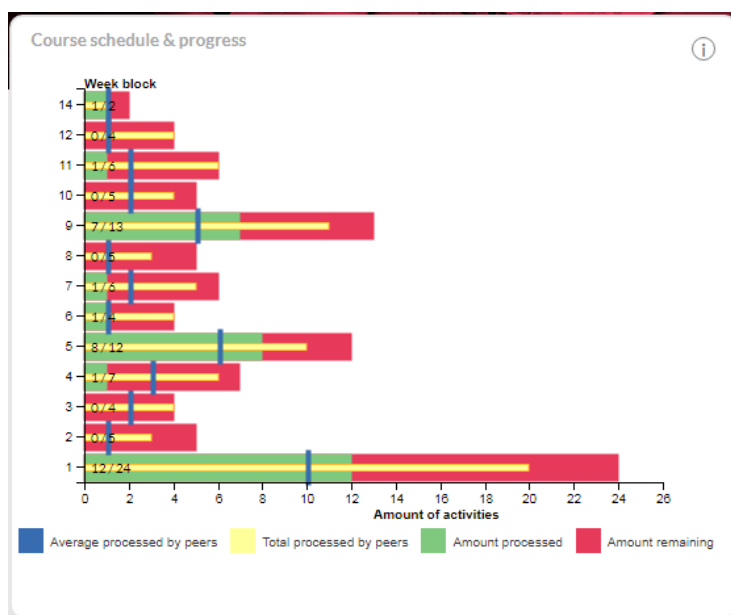
The graphs you see display information about students’ engagement in the online learning environment and their progress relative to the course schedule. Click on the i-buttons next to each graph for IMPORTANT information. You can find this information also in the rest of this document.

In the course information in Blackboard, it is clearly stated that the students’ data are used only for the purposes of supporting students in their online learning and optimising course design. They will NOT play a role in the final grading. These learning data only reflect students’ online learning behaviour and do not provide a complete visualisation of their learning process. The data are always interpreted in the context of the entire course. More information about the confidential and ethical treatment of personal data can be found in this document (cf. Action plan legal & ethical aspects of LA).

Important information for interpreting the graphs

In the first 3 graphs, you can monitor the progress of your students during the time period of the course.

How much of the planned contents have students used per week?

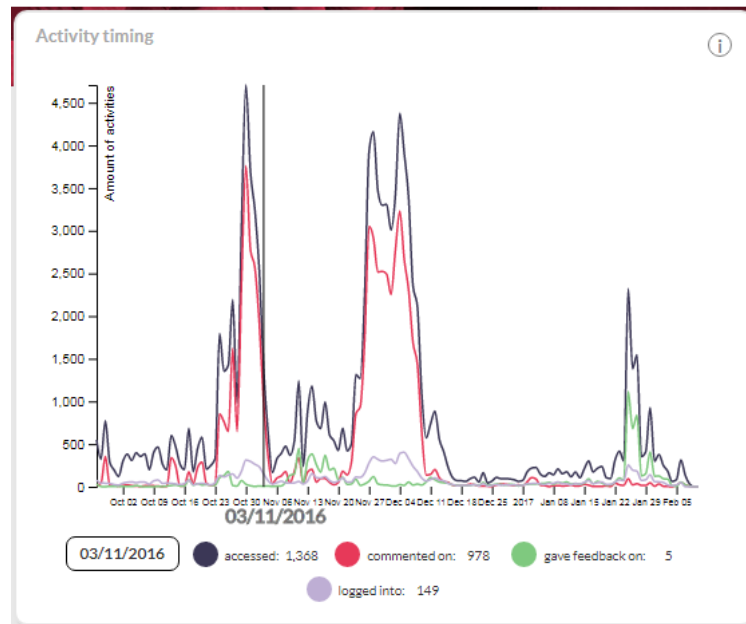


This graph shows the number of contents to be processed per week according to the course schedule. Green refers to the number of contents already processed by the group or by an individual student. Choose the course and a group or an individual student in the menus on top of the screen.

Red shows the amount of contents that have not been used yet. In case of an individual student view, yellow refers to the total amount processed by the student's peers, blue refers to the group average and indicates whether the students has done more or less than the group average.

Of course the number of viewed contents alone does not tell you anything about the quality of learning. It is important that students engage as much as necessary and have an active learning attitude to succeed on the course. Compare these data with the following graphs.

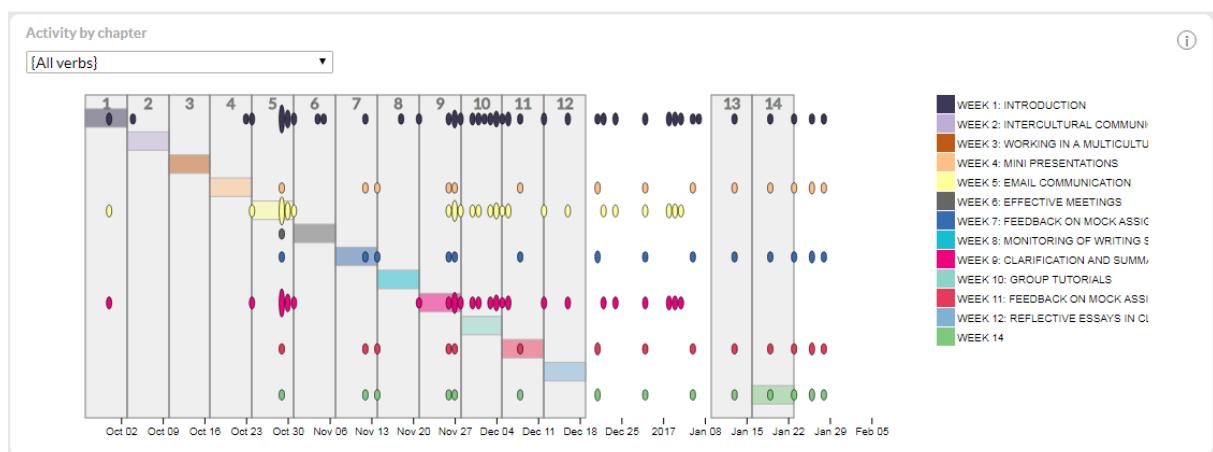
When do students work online & on which type of activities?



Activity timing: The 2nd graph shows the peaks in online activity on a timeline. If you have selected a specific group or student, this group's class hours are displayed as vertical dotted lines. This allows you to validate whether the students have prepared for your class in advance (go over the lines with the mouse to see the name of the instructor and the class date).

The colours of the lines indicate the type of activity they have done: 'accessed' means they have accessed online resources/pages; 'commented on' means they posted comments on the discussion forum. 'Gave feedback on' means students have accessed your instructor feedback. For further details on e.g. how much time they spent on the resources, see the rankings of theory pages further on in the dashboard.

Which contents are used most compared to the course schedule?

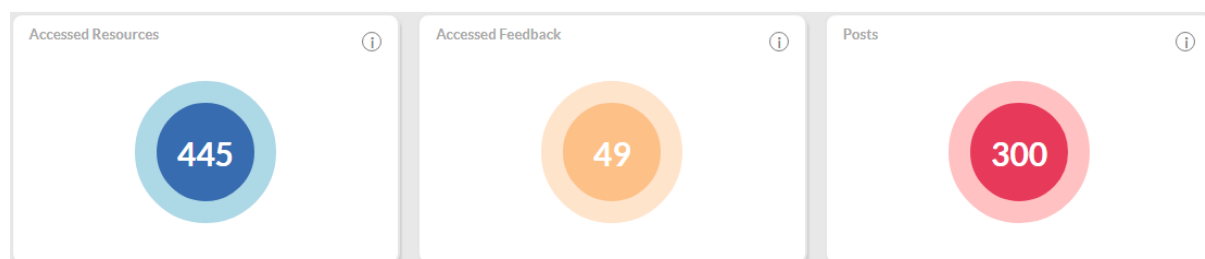


Activity by chapter: The 3rd graph shows coloured dots for the students' actual activities on specific chapters on the course timeline. The larger the bubbles, the more activity was registered. The coloured backgrounds indicate which contents needed to be processed during which week according to the course schedule. Grey areas are lesson-free or exam preparation weeks.

This graph allows you to verify whether students focus their online attention on the advised contents in accordance with the course schedule and in preparation for your classes. In the 'All verbs' menu, you can select the type of activity, e.g. did students access the resources or the feedback, did they comment on discussion fora.

What is the current performance on important activities?

The counters show a group or an individual's current performance on a number of activities that are **performed more by successful students** according to the data analysis of former cohorts. These metrics are also shown to the students to stimulate them to do more of these activities. The data are generated and updated live following students' online activity during the course (provided the course runs).



Average Accessed Resources: This counter shows the average number of times students in your group (on average) or an individual student accessed module resources.

Average Accessed Feedback: This counter shows the number of times students in your group (on average) or an individual student accessed instructor feedback during the module.

Average posts: This counter shows the number of times students in your group (on average) or an individual student posted on the discussion fora during the module.



Which resources do students use most/least?

The rankings for pages allow you to verify which resources students focus on most/least in terms of

1. average number of retakes for that exercise (repeated after a while),
2. time spent on average on that exercise

The exercises are sorted from most to least based on a combination of these metrics. This helps you to identify problem areas that might require more explanation in class.

Resource difficulty by multiple criteria (i)

#	Name		
1.	Group 1	566	13h 18 min
2.	group_forum	249	7h 50 min
3.	Welcome	67	4h 05 min
4.	groups	131	19 min
5.	check_grade	103	19 min
6.	Group 2	38	07 min
7.	Assignments	22	01 min
8.	Module Information	14	12 min
9.	EB3006 assignment 1, part 1 brief	5	17 min
10.	MOCK email assignment	5	09 min

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Which students are most/least active online?

These rankings allow you to identify which students have been the least (or the most) active in the past weeks. Research has confirmed that timely online activity, such as at least one session per week, correlates with study success. When students access the online materials before/for the weekly classes they have the best chances to get the most out of the face-to-face classes and to get a good result at the final exam. Students who are ranked on the “least active” list on the left score below the median or even lower quartile on one or more of the metrics of number of sessions, number of accessed resources and last login. These students might need to be “poked” or reminded to access their online learning materials for the course.

In the individual student view, the position of the student in the (left or right) ranking compared to peers in his/her group is marked in yellow.

Remark: These rankings can vary from week to week following the changing degree of online activity. They only give an indication of the students’ online engagement and no conclusions should be taken from these ranking in terms of how well the student is doing, since he or she can also be engaged with the course contents off-line. Adversely, students ranked at the right on the most active list aren’t necessarily going to succeed for the final exam.

#	Name	Last login	
1.	68581	2016-10-18 14:01:44	✉
2.	63301	2016-10-25 13:41:53	✉
3.	68281	2016-11-03 20:02:48	✉
4.	66511	2016-11-09 13:10:39	✉
5.	66181	2016-12-07 12:42:29	✉
6.	63751	2016-12-15 12:59:59	✉
7.	60811	2016-12-15 13:00:26	✉
8.	64021	2017-01-02 13:15:03	✉
9.	63211	2017-01-16 11:10:38	✉
10.	67411	2017-01-16 15:47:58	✉

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#	Name	Last login	
1.	62431	2017-01-30 18:27:32	✉
2.	60991	2017-01-28 11:35:48	✉
3.	61381	2017-01-24 21:50:19	✉
4.	62161	2017-01-24 21:27:31	✉
5.	61441	2017-01-24 14:02:35	✉
6.	62101	2017-01-24 12:44:24	✉
7.	63181	2017-01-23 18:49:45	✉
8.	62611	2017-01-23 12:33:36	✉
9.	60781	2017-01-01 11:16:55	✉
10.	62911	2016-12-05 09:55:37	✉

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