

## Appendix

Figure A1: Visual dashboard for engagement data

**Activities** ?  **Actions** ? All Actions

**Granularity** ?  12

**Dates**  14 April 2016 16 22  
To 24 April 2016 16 22

Apply filter

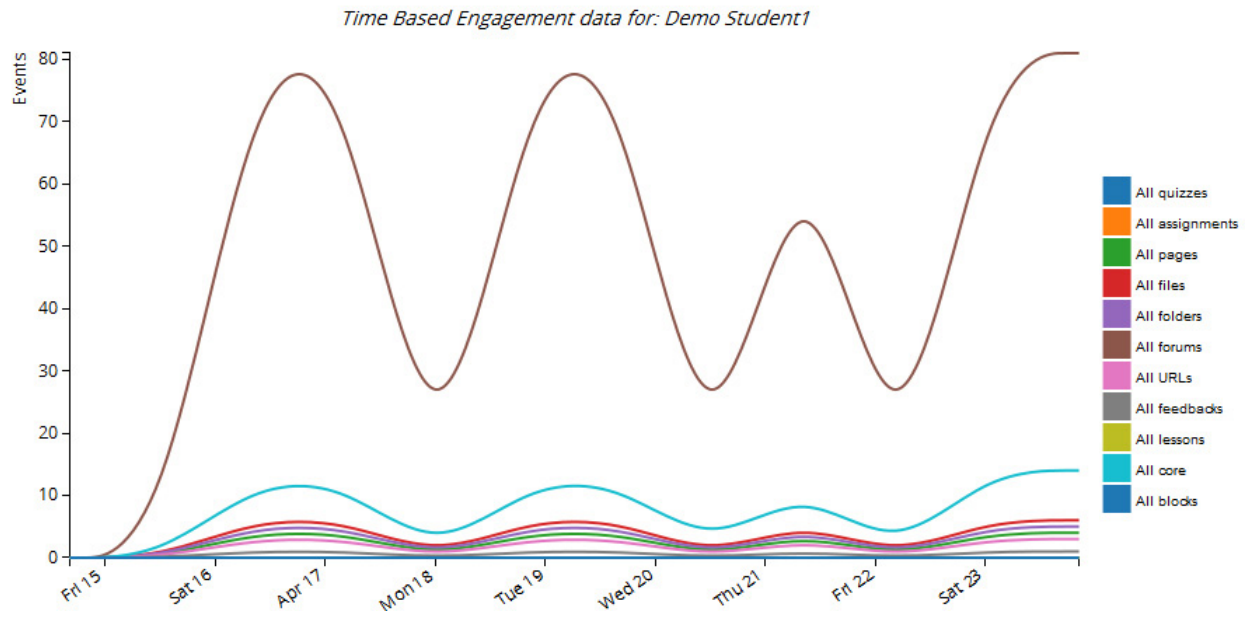


Figure A2: Time-based engagement data

**Activities** ?  **Actions** ?

**Granularity** ?

**Dates**

To

*Time Based Engagement data for: Demo Student1*

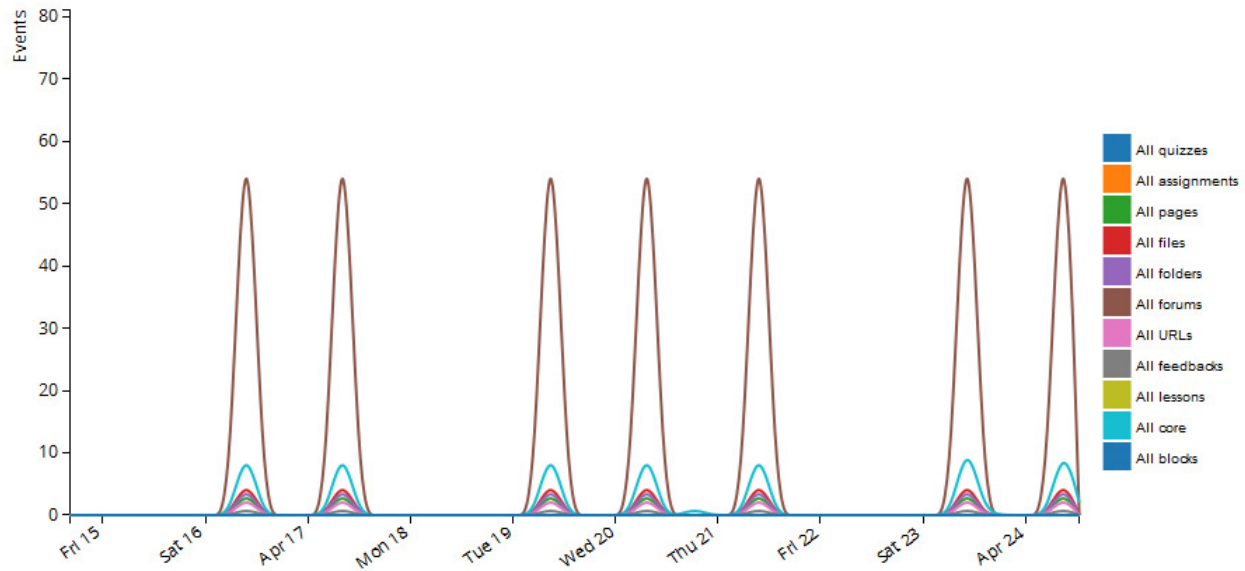


Figure A3: Time-based granularity for learning objects

**Activities** ⓘ All selected ▾

**Dates**  24 ▾ April ▾ 2016 ▾ 16 ▾ 21 ▾  
 To 24 ▾ April ▾ 2016 ▾ 16 ▾ 21 ▾

**Show averages**

Apply filter

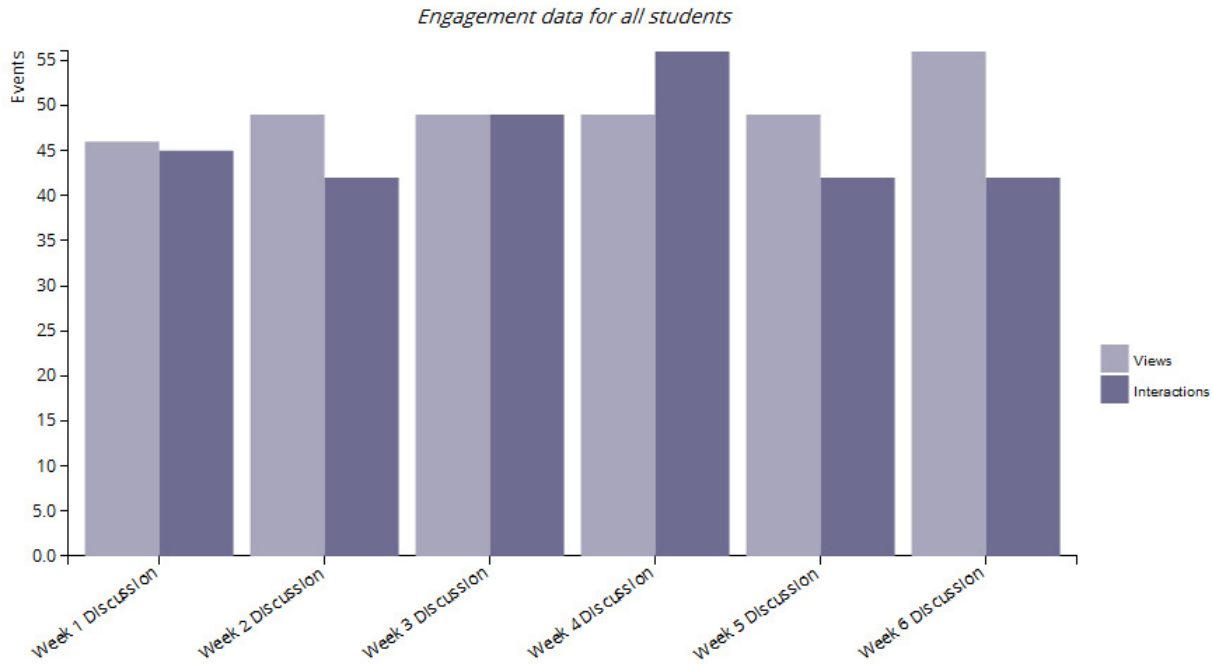


Figure A4: Weekly discussion engagement data for all students

**Activities** ⓘ 14 of 35 selected ▼

**Students** ⓘ [Students: Amy Adkiss... ▼]

**Dates**  1 ▼ September ▼ 2015 ▼ 08 ▼ 20 ▼  
 To 31 ▼ December ▼ 2015 ▼ 08 ▼ 20 ▼

**Show averages**

Apply filter

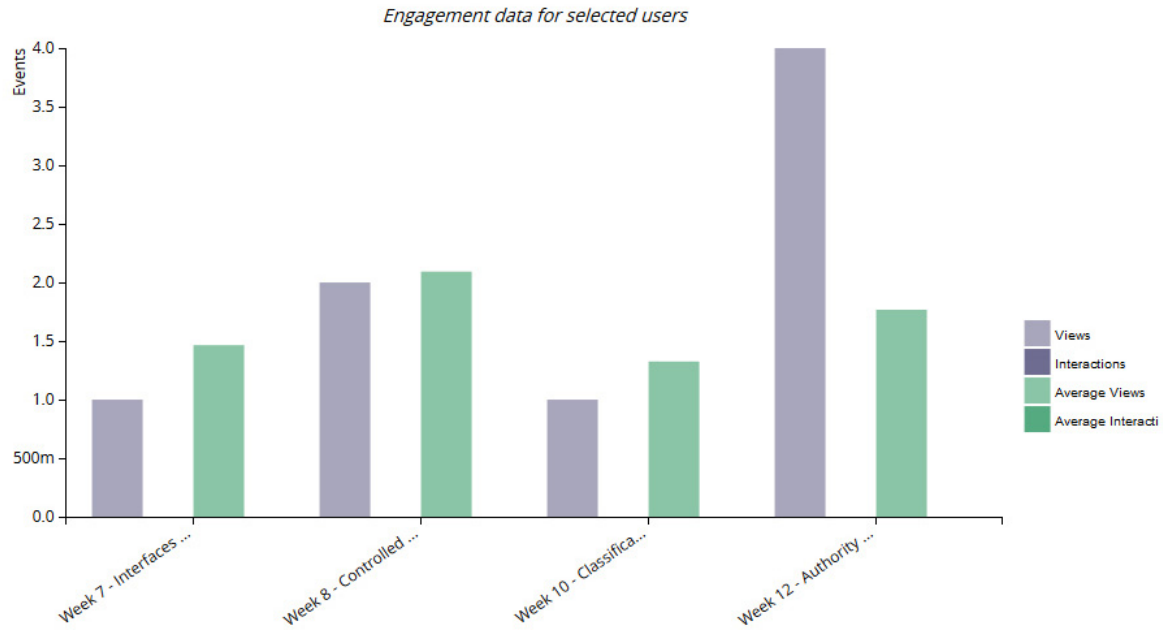


Figure A5: Engagement data for selected students across weeks

Activities

Actions

Students

Dates  8 September 2016 21 07

To 8 September 2016 21 07

Show averages

Unique

Apply filter

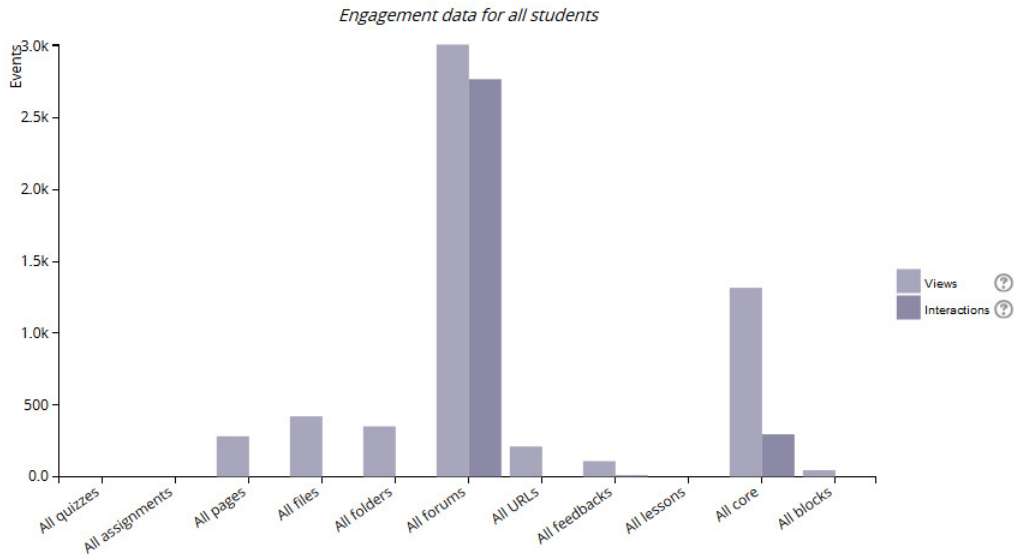


Figure A6: Sample content of an engagement graph

**Activities** ?  **Actions** ?

**Granularity** ?

**Dates**  1 April 2015 08 52  
 To 31 August 2016 08 52

**Students** ?   **Sort by course grade**

Apply filter

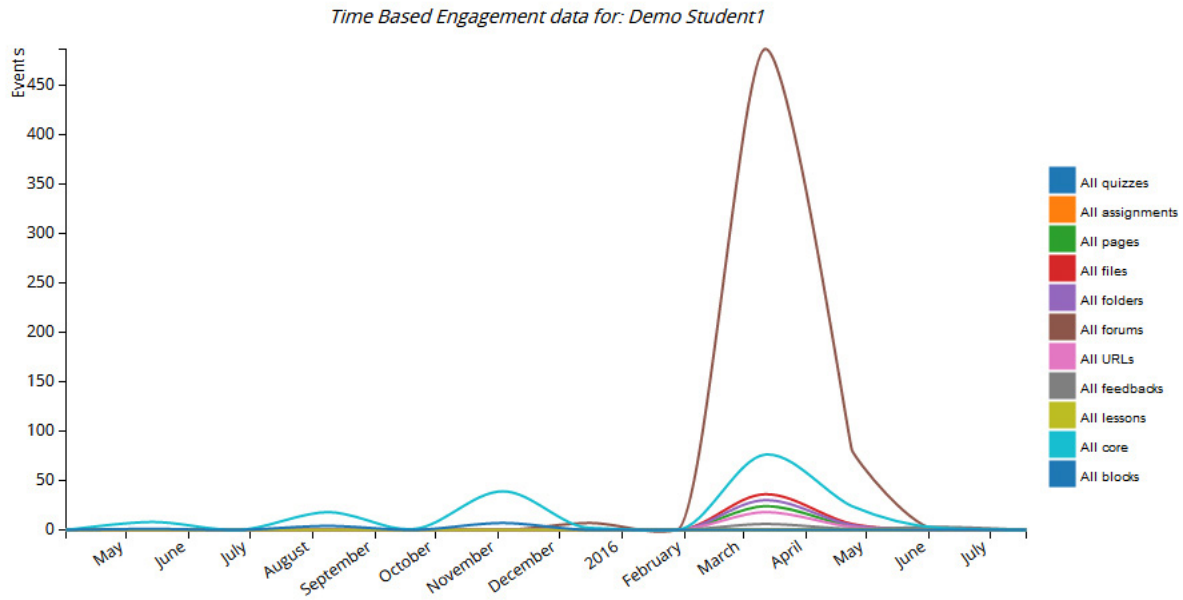


Figure A7: Sample of a time-based engagement graph