

`code style standard`

💡 If you are teaching at the University of British Columbia, you may also be interested in the tool **Threadz** which provides visualizations and data from your Canvas discussion forums through a user interface in Canvas. You can learn more about the tool and how to request access in your course from the [LTHub Instructor Guide](#). **Threadz** was developed by Eastern Washington University.

Canvas Discussion

Data

`{course_id}-discussion.csv`

This project pulls data via the Canvas API the discussions for the specified Canvas course(s) and exports the results as CSV. The columns exported are:

- 'topic_id',
- 'topic_title',
- 'topic_message',
- 'topic_author_id',
- 'topic_author_name',
- 'topic_created_at',
- 'topic_posted_at',
- 'response_author_id',
- 'response_author_name',
- 'response_id',
- 'response_parent_id',
- 'response_message',
- 'response_likes',
- 'response_timestamp'

Where a **topic** corresponds to a **discussion_topic** and **response** refers to all posts and replies to the **discussion_topic**. If a **discussion_topic** has no posts or replies then you will see the **topic_** columns filled with no corresponding **response_** data. A **response** may have a **response_parent_id** if it is part of a threaded response (i.e is a **reply**).

Summary Data

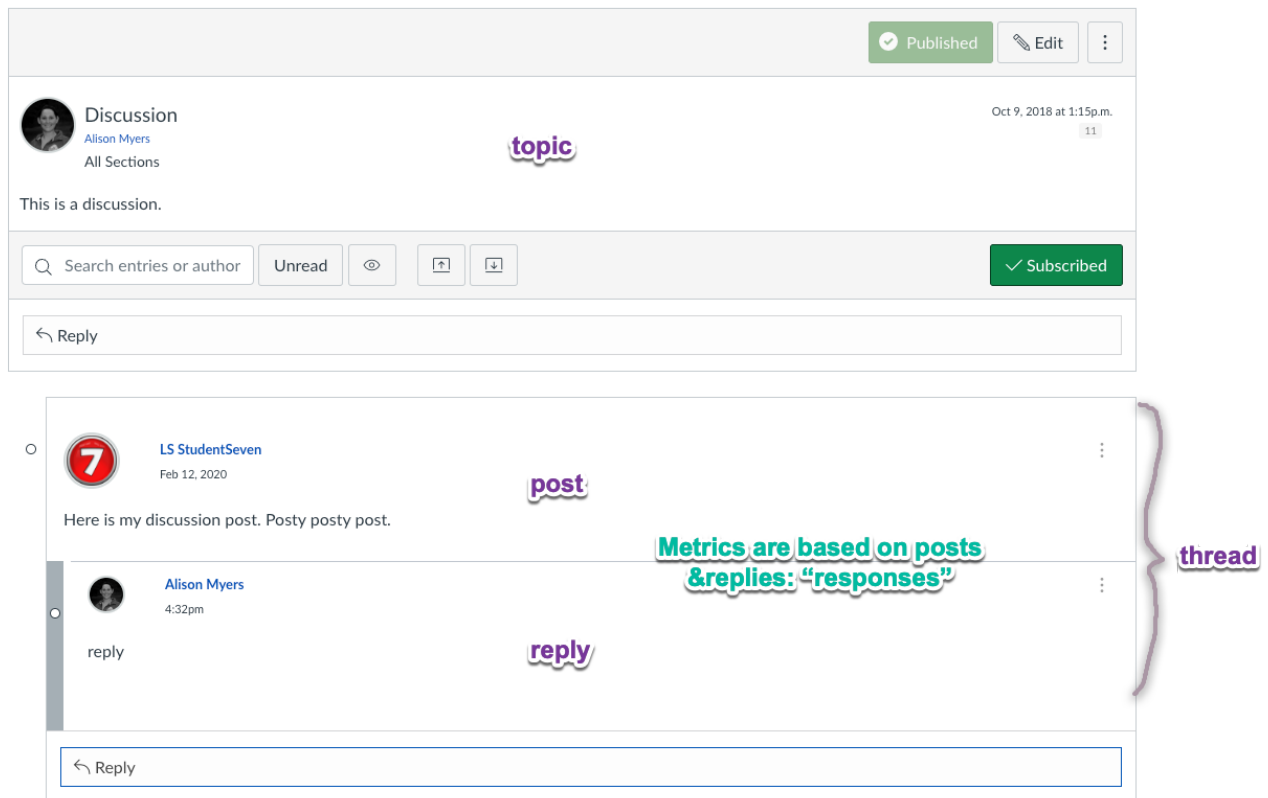
`{course_id}-discussion-summary.csv`

We have calculated summary metrics for each topic. The csv with the summary information includes the following columns:

- 'topic_id',
- 'topic_title',
- 'topic_author_id',
- 'topic_author_name',
- 'topic_posted_at',

- 'number_of_responses': the total number of posts and replies in the topic
- 'average_responses_per_author': the average posts per author (does not include enrollments with no posts)
- 'median_responses_word_count': the median word count for all posts and replies to the topic
- 'average_days_to_respond_from_posted_at': the average number of days to post from the topic posted_at date. A 'day' is calculated by date, not hours
- 'first_response_timestamp': the timestamp of the first post
- 'average_days_to_respond_from_first_response': the average number of days to post from first topic response. A 'day' is calculated by date, not hours

Where a **post** is a direct response to a topic, and a **reply** is a reply to the post. Together the **posts** and **replies** are **responses**.



Additional Explanations

- A 'day' is calculated by date, not hours

For instance, for the topic discussion summary, if the topic was posted_at '2024-01-02 12pm' and there was 1 response at '2024-01-03 4pm', then the average_days_to_post would be 1. If the topic as was posted_at '2024-01-01' and all replies were the same day ('2024-01-01') then the average_days_to_post would be 0.

- does not include enrollments with no posts

The calculations are only based on posts or authors who contribute, not expected posts or number of authors; for instance, in a class of 10 students, if 5 students made 1 post each and 5 students made 0 posts the average_responses_per_author is 1 (mean: 1,1,1,1,1), **not** 0.5 (mean: 1,1,1,1,1,0,0,0,0,0).

Getting Started

These instructions will get you a copy of the project up and running on your local machine for use with your own API tokens and Canvas domains.

Prerequisites

1. Install **Node 10 or greater**.
2. Install **Git**.

Installation and execution of script

1. Clone this repo. `git clone https://github.com/ubccapico/canvas-discussion.git`
2. Then cd into the repo. `cd canvas-discussion`
3. Run the installation script. `npm install` (If you see `babel-node: command not found`, you've missed this step.)
4. Generate Canvas API token and copy it to clipboard

- See [Get Started with the Canvas API](#) for more information.
- ⚠ Your Canvas API token is the equivalent to your username and password and must be treated as such (following any security guidelines of your home institution).

5. Create a `.env` file.
6. Add the following: `CANVAS_API_TOKEN={YOUR API TOKEN}, CANVAS_API_DOMAIN={YOUR API DOMAIN}, COURSE_IDS={YOUR COURSE ID(s)}`. > - At UBC the `CANVAS_API_DOMAIN` is `https://ubc.instructure.com/api/v1`

- At another institution it might be something like `https://{school}.instructure.com/api/v1`

Your `.env` file should look like

```
CANVAS_API_TOKEN=22322...
CANVAS_API_DOMAIN=https://ubc.instructure.com/api/v1
COURSE_IDS=1111,1112
INCLUDE_MODULE_SUMMARY=false
```

7. Run the script. `npm start`.
8. A `{course_id}-discussion.csv` and a `{course_id}-discussion-summary.csv` file should be generated with discussion data in the output folder for each provided `course_id`.

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