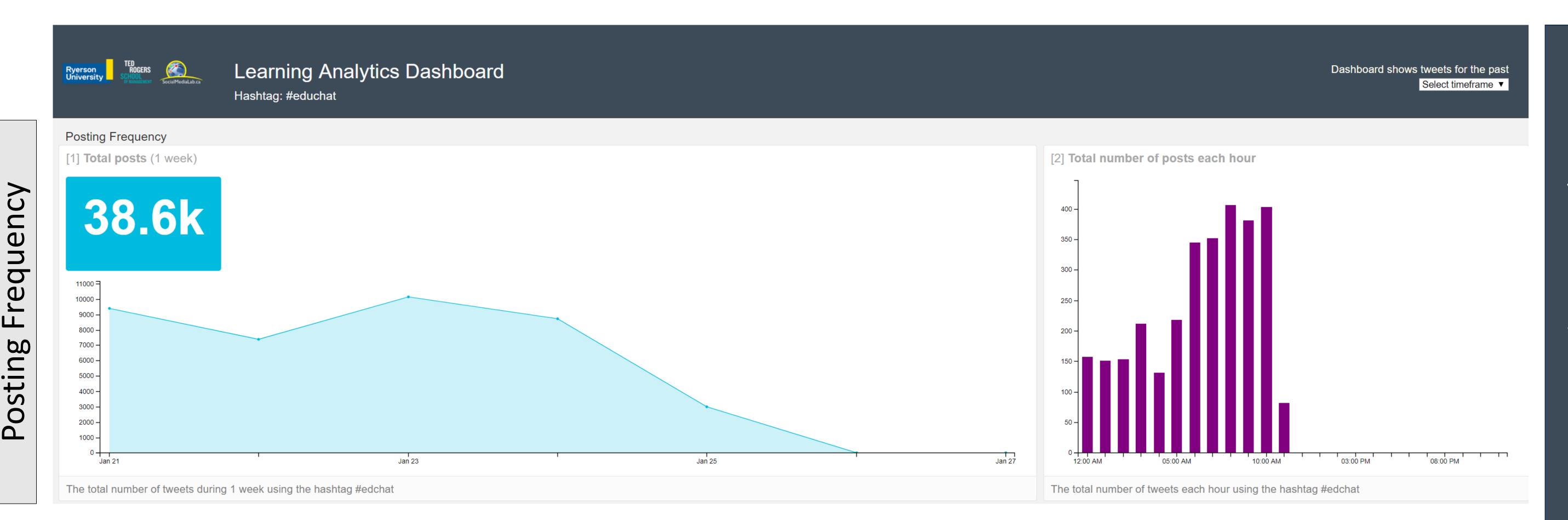# Learning Analytics Dashboard for Twitter

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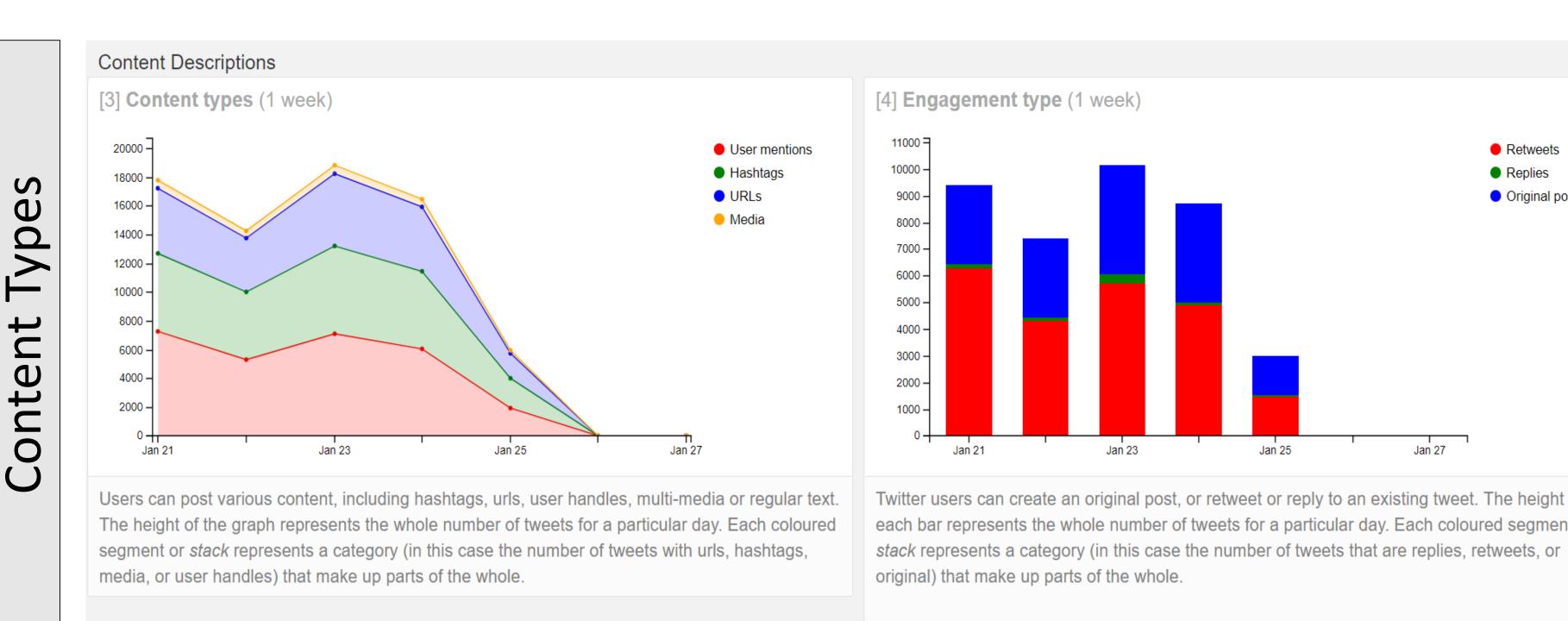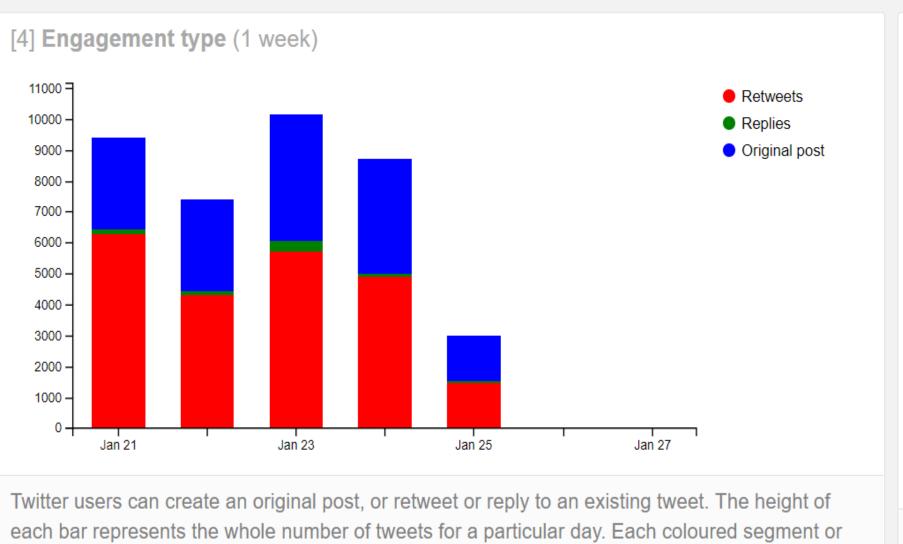Ryerson University, Toronto, Canada

Try it: http://dashboard.socialmediadata.org/educhat/

Ryerson University

SocialMediaLab.ca — "Making sense of a networked world"

Learning Analytics Dashboard
Hashtag: #educhat

Dashboard shows tweets for the past
Select timeframe ▼

Posting Frequency

Posting Frequency

[1] Total posts (1 week)

38.6k

The total number of tweets during 1 week using the hashtag #edchat

[2] Total number of posts each hour

The total number of tweets each hour using the hashtag #edchat

Content Types

Content Descriptions

[3] Content types (1 week)

Legend: User mentions, Hashtags, URLs, Media

Users can post various content, including hashtags, urls, user handles, multi-media or regular text. The height of the graph represents the whole number of tweets for a particular day. Each coloured segment or *stack* represents a category (in this case the number of tweets with urls, hashtags, media, or user handles) that make up parts of the whole.

[4] Engagement type (1 week)

Legend: Retweets, Replies, Original post

Twitter users can create an original post, or retweet or reply to an existing tweet. The height of each bar represents the whole number of tweets for a particular day. Each coloured segment or *stack* represents a category (in this case the number of tweets that are replies, retweets, or original) that make up parts of the whole.

[5] Sentiment type (1 week)

See examples of tweets by sentiment type ⬈

Legend: Positive, Negative, Neutral

Sentiment describes the emotionality of the tweet, and whether it is positive, negative or neutral. We use the NLTK SentimentAnalyzer , a Python package to implement and facilitate Sentiment Analysis tasks using NLTK features and classifiers.

Sentiment & NLP

[6] Subjectivity type (1 week)

See examples of tweets by subjectivity type ⬈

Legend: Opinionated, Non opinionated

Subjectivity is the degree of factuality or opinionated language in tweets. To calculate the subjectivity of sentences, we use the NLTK subjectivity classifier, trained on the Subjectivity Dataset (Pang & Lee, 2004).

[7] Top 10 Hashtags (1 week)

Hashtag	Frequency
edtech	1208
education	1081
sunchat	414
leadupchat	352
science	340
k12	246

Hashtags contained in the tweet (excluding #edchat)

[8] Top 10 named entities (1 week)

Legend: Jim Rohn, Theodore Roosevelt, Abraham Maslow, Paulo Freire, EdTechReview Summit & amp, Oakland Unified School District, Google Chrome Apps, Digital Tools, John Wooden, PT Career Path.., Linda Lyon

Named entities are proper names of persons, places, or organizations

User Data

User Information

[9] Top 10 contributors (1 week)

EdGameTec, kevin_sait, ousdcareers, Lynch39083, techedvocate, Advocatef, nick_chater, NICSCareers, teacherma, ExploreLe, Rdene915

Twitter users who post, retweet or reply most frequently

[10] Top 10 most negative (1 week)

See examples of tweets by sentiment type ⬈

EdGameTec, ousdcareers, kevin_sait, NICSCareers, ExploreLe, techedvocate, Advocatef, Lynch39083, nick_chater, teacherma, goswixl

Users with most negative sentiment

[11] Top 10 most positive (1 week)

See examples of tweets by sentiment type ⬈

techedvocate, Lynch39083, Advocatef, EdGameTec, ousdcareers, JTM22Tech, nick_chater, MrHlow, aaron_hogan, mraspinall, kevin_sait

Users with most positive sentiment

[12] Top 10 most mentioned (1 week)

loudlearning, justintarte, jeffhsseredu, DavdGeurin, Alex_Corbitt, PhiTuition, ShakeUpL., NowakRo, Wes_Kiesc., LitCoachC., bethhil2829

Users most mentioned

Recent Tweets

[13] All tweets (1 week) See previous tweets for the hashtag #edchat ⬈

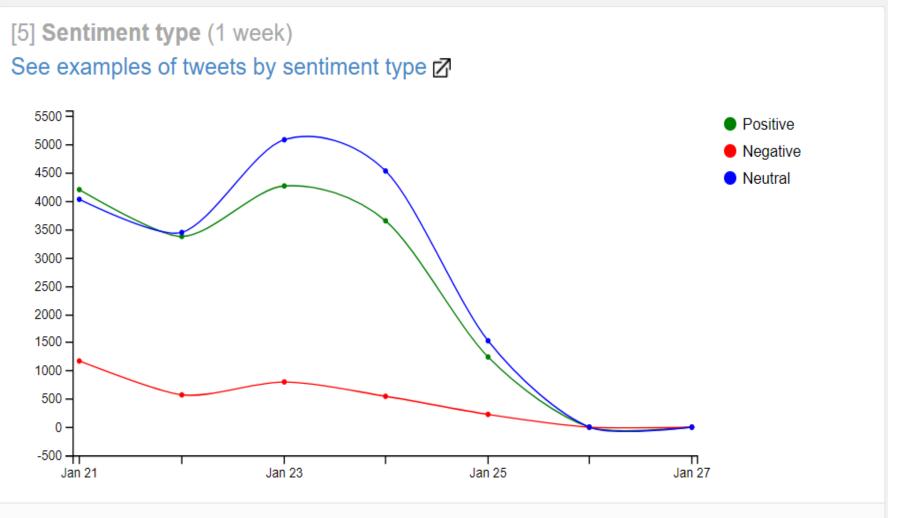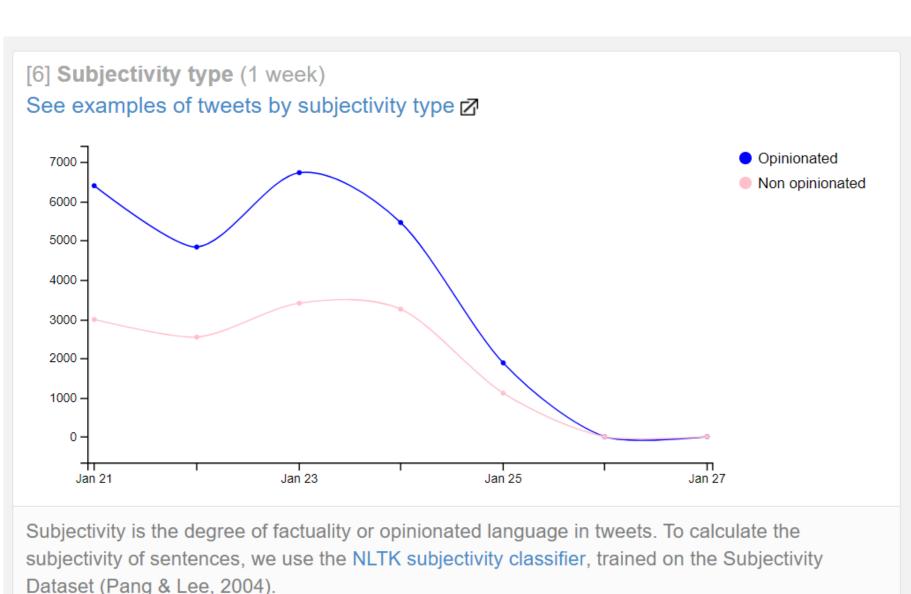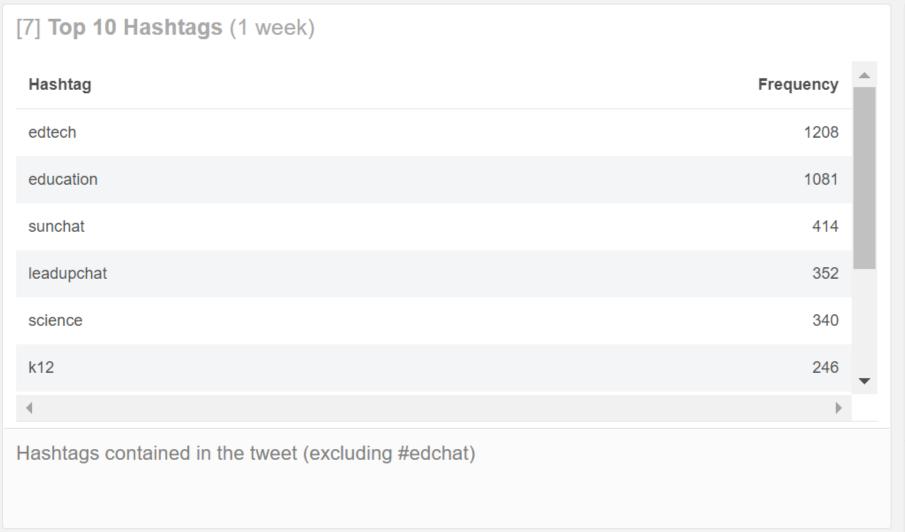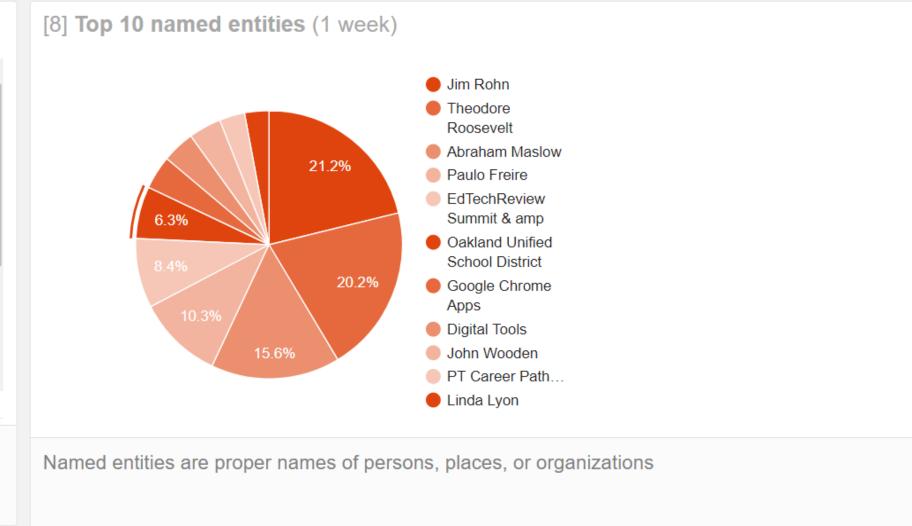|	
Gifted Kids & Teens wurde soeben publiziert! https://t.co/c6HajMyEE1 Vielen Dank an @NAGCGIFTED #gifted #edchat	2018-01-21T05:29:07.868Z
The latest The Kovescene Daily! https://t.co/5l0kxvsgD0 #edchat	2018-01-21T05:29:38.151Z
Increase your Ss math fact fluency to prep for testing! Apply now for a FREE 12-month math grant! Join #math teache https://t.co/iI099UfzNZ	2018-01-21T05:30:09.203Z
Never STOP learning. Learning is Awesome Incredible #education#edchat https://t.co/WtVhXwiCAv	2018-01-21T05:30:16.837Z
Enhance students geography journeys with apps that bring an exciting component to studying their world. https://t.co/Ah2rvtMX56	2018-01-21T05:31:13.010Z
Something ive experienced and an issue for every budding entrepreneur in school systems that dont recognise their p https://t.co/VdZFneayl3	2018-01-21T05:32:40.665Z
The latest Nfactory SocialSupport krant! https://t.co/UzNEfnjghh Thanks to @redsshaggy @sycrett @De_Zwijger #education #edchat	2018-01-21T05:34:00.445Z
How to get a 6 year old to understand that if she's taught 27=Twenty seven in school and only that will be asked in https://t.co/CHcnDjYycC	2018-01-21T05:36:57.797Z
What You Need to Know as an Educator: Understanding the 4 Main Branches https://t.co/0gf5uxgUG4 #edchat #edchat https://t.co/Wsd3RyCRbm	2018-01-21T05:38:40.842Z
What You Need to Know as an Educator: Understanding the 4 Main Branches https://t.co/3uTFoP9dMs #edchat #edchat https://t.co/ZNoOcmFMx1	2018-01-21T05:38:47.031Z
What You Need to Know as an Educator: Understanding the 4 Main Branches https://t.co/yYgaGNU6Fn #edchat #edchat https://t.co/4P0ZHSOmoY	2018-01-21T05:38:53.211Z
4 ways university professionals can boost student success https://t.co/gWoC6tLIGW #edchat #edchat https://t.co/QtyGd2ZOLY	2018-01-21T05:38:59.870Z
4 ways university professionals can boost student success https://t.co/7ORrShHF5r #edchat #edchat https://t.co/RWFqkptDuo	2018-01-21T05:39:05.950Z
4 ways university professionals can boost student success https://t.co/x75DRE5UP0 #edchat #edchat https://t.co/mrE2wSynCP	2018-01-21T05:39:11.958Z
We need to let kids occasionally say no. Teach them how and when and they wont abuse it. #edchat #parenting https://t.co/30vVezf8o2	2018-01-21T05:39:24.446Z
Hey I know this guy. https://t.co/2sKV5No9sP	2018-01-21T05:42:34.772Z

PURPOSE
The Learning Analytics dashboard is a tool for instructors to monitor and analyze Twitter activities generated by their students in real time.

FUNCTION
It collects, processes, and visualizes class-related tweets to support instructors' use of social media as a pedagogical tool and develop strategic interventions.
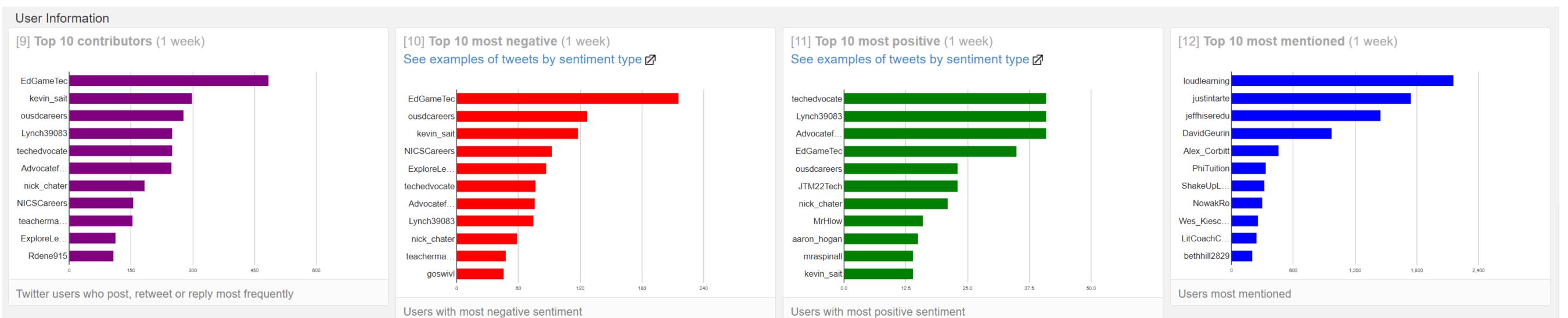
DESIGN PROCESS
Informed by an online survey of instructors who teach with Twitter, we used an iterative design approach with elements of speculative design,

FUTURE WORK
- Gather additional evaluation feedback from instructors
- Improve interactivity and indicator graphs
- Adjustable timeframes for visualizations
- Exportable reports

PROJECT FUNDED BY

eCampus Ontario