## Using Circle Charts to Visualise Class Data for PeppeR

By: Keeley Toope, Ryan Perez and Carrie Demmans Epp

## What is PeppeR?

PeppeR is message-board software developed for University classes. It is currently being used in the Faculty of Education at the University of Toronto.

Currently, student statistics such as post counts are usually displayed in unappealing or confusing formats for viewers.

Why PeppeR needs upgraded charts

Better presentation of data will lead to an improuved class experience for both students and professors.

- × 36 (90.0%) 32 (88.9%) 1,011 (71.7%) 14 (77.8%) 277 (19.6%) 34 (87.2%) 510 (36.2%) 2,877 10 (76.9%) 580 (41.1%) 10 (83.3%) 3,753 162 (11.5%) 38 (82.6%) 389 (27.6%) 21 (84.0%) 5,423 755 (53.5%) 46 (93.9%) 7,316 62 (91.2%) 10,190 1,127 (79.9%) 87 (75.7%) 10 (66.7%) 3,604 882 (62.6%) 82 (93.2%) 36 (85.7%) 13 (81.3%) 229 (16.2%) 763 (54.1%) 71 (91.0%) 36 (92.3%) 9 (90.0%) 297 (21.1%) 49 (86.0%) 47 (95.9%) 570 (40.4%) 25 (83.3%) 15 (88.2%) 2,774 393 (27.9%) 4 (36.4%) 134 (9.5%) 3 (33.3%) 133 (9.4%) 0 (0.0%) 4,890.5 24.4 417.8 1,402 (99.4%) 3 (37.5%) 80 (5.7%)

Select an Activity Measure Number of Words Written ~ Number of Words Written User 3049 Go to profile Go to profile User 968 User 3173 Count: 279 Go to profile User 3736 Count: 1052 Go to profile User 1993 Count: 367

Design considerations and features

Usability was a major work as expected users will become frustrated. Clicking on a table row or on a circle highlights the circle & zooms in, bringing prominence to it.

Circles were chosen

because they can be

compared based on

their surface area

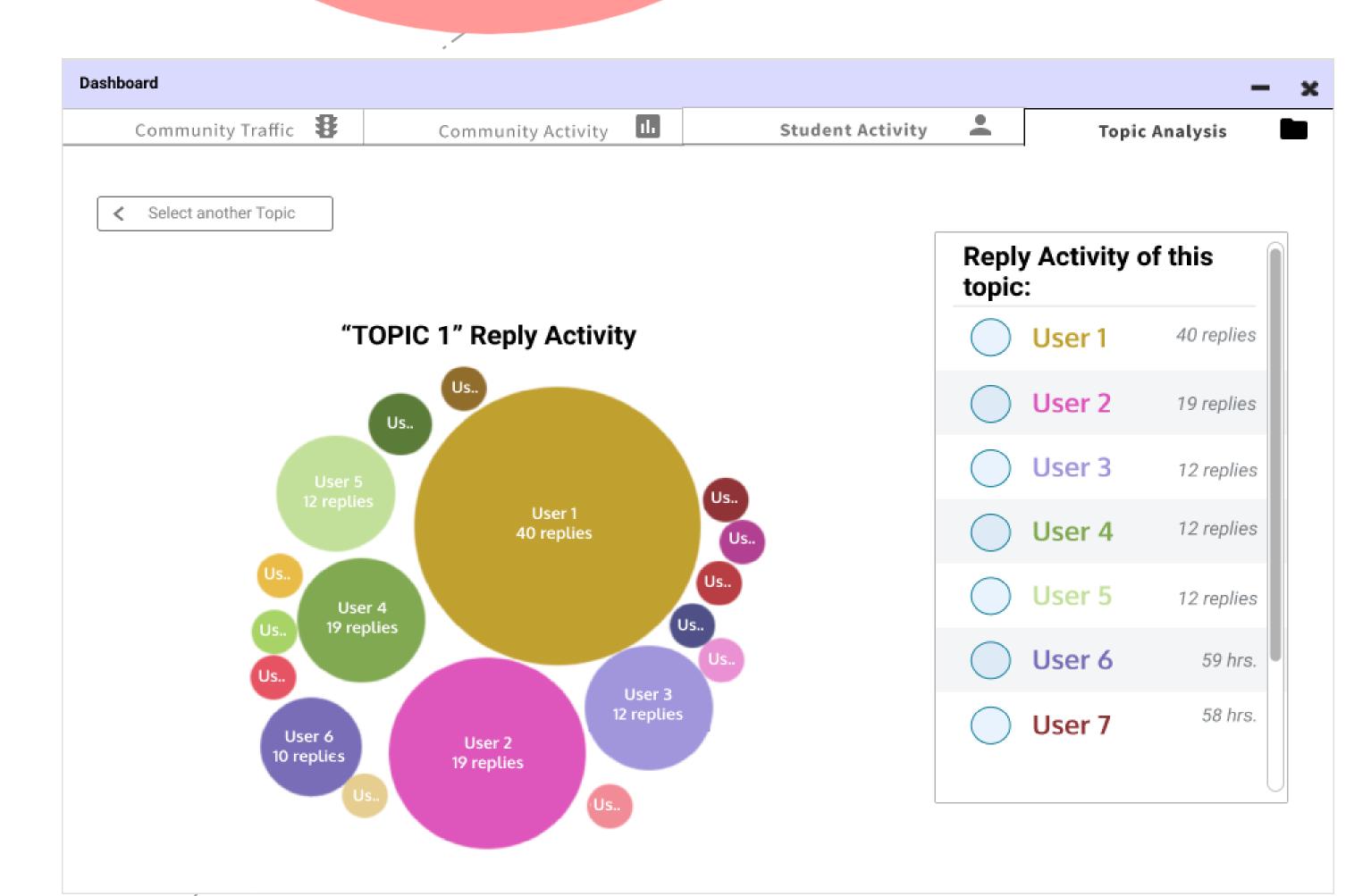
and are also simple

& visually appealing.

Discussion

Further visual styling using CSS will make the chart more visually appealing.

The chart will be used as the topic analysis tab, and will reflect only a certain conversation, which will help instructors compare which discussions and students are most active.



## Acknowledgments

Thank you to the entire Educational Technology, Knowledge, Language and Learning Analytics(EdTeKLA) research group at the University of Alberta as well as the Ontario Institute for Studies in Education at the University of Toronto for their support. In particular, thank you to Carrie Demmans Epp and Ryan Perez. I would also like to thank Process Solutions, the

University of Alberta and Canada Summer Jobs.

concern- if the chart doesn't



Plant Automation Services