Communication on Social Media: A Study of How High Schools Use Twitter

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1. Introduction

Twitter is an open and simple solution that allows communities to connect ideas and people in useful ways (Halavais, 2014).

Very few studies address:
- The use of Twitter in high schools;
- The use of Twitter in educational institutions in Canada.

1. Introduction
Research Questions

RQ 1. What is the nature of the information diffused on Twitter by the administration of Edmonton high schools?

RQ 2. Who are the intended recipients of the information disseminated through Twitter by Edmonton high schools?

2. Methodology
A. Participants

Public high schools belonging to the Edmonton Public School Board AND using Twitter

78 public high schools in Edmonton → only 8 use Twitter

2. Methodology
B. Data Collection

- Twitter's API + *R*
- Data collected from **September 8th to October 6th of 2015**.
- Data collected consisted of *tweets*, *retweets* and *replies* to users (R&T).
- Metadata-per-tweet approach: each tweet/reply was considered unique and analyzed as such.

A codebook was created to analyze the data collected.

23 categories:
- 19 subject categories
- 4 recipients categories.

Code	Meaning	Explanation	Examples
Ce	Celebration	Celebrations: birthdays, national recognition days (ex: Teacher appreciation day), anniversaries etc.	• Today @melazerte celebrates the spirit of an incredible young man #terryfox #marathonofhope @TerryFoxCanada @EPSBNews http://t.co/R61tkCg6qR • World Teachers' Day - Monday October 5 Do you have a teacher you want to thank? A teacher you want to show your... http://t.co/HVbcscKnda
Gr	Student Groups	Information about student groups that are not athletic in nature.	Join the Eid Dinner Committee Here is your chance to get involved right away by joining and helping organize the... http://t.co/KHjFDqrD4c
SM	Social Media promotion	Encouragement to use the school's other social media tools.	Find detailed content, class photos and more over on our Facebook page! http://t.co/n4QU9lvoHv #yeg #epsb
SW	Link to the school's website	Attributed when the content posted includes a link to the high school's website.	

SAll	For those individuals and groups associated with the school.	Content addressed to individuals and groups associated with the schools. For example, alumni, or parents and students etc.	Elementary Running Club (grades 4-6) information sheets and permission slips were sent home today. Forms and money are due back by Sept. 15
P	For Parents	Content for parents.	Our next School Council meeting and AGM is Tuesday, September 22, at 6:00 p.m. in the Library Learning Commons. Al parents are welcome!

1 T/R → multiple subject categories
1 T/R → 1 recipient category

3. Results

- 8 out of 78 high schools have a school Twitter account → 10% of Edmonton high schools have a Twitter account.
- 6 high schools were active on Twitter from September 8th to October 6th of 2015.
- 542 T&R
- 242 (45%) T&R belonged to school A
- 19 (3.5%)T&R belonged to school B
- **Significant differences in Twitter use by schools.**

3. Results
RQ 1

RQ 1: What is the nature of the information diffused on Twitter by the administrations of Edmonton high schools?

30.8% of T&R → General Information of administrative nature

26% of T&R → Expression of gratitude

25.8% of T&R → Picture attached

T&R: General information of administrative nature

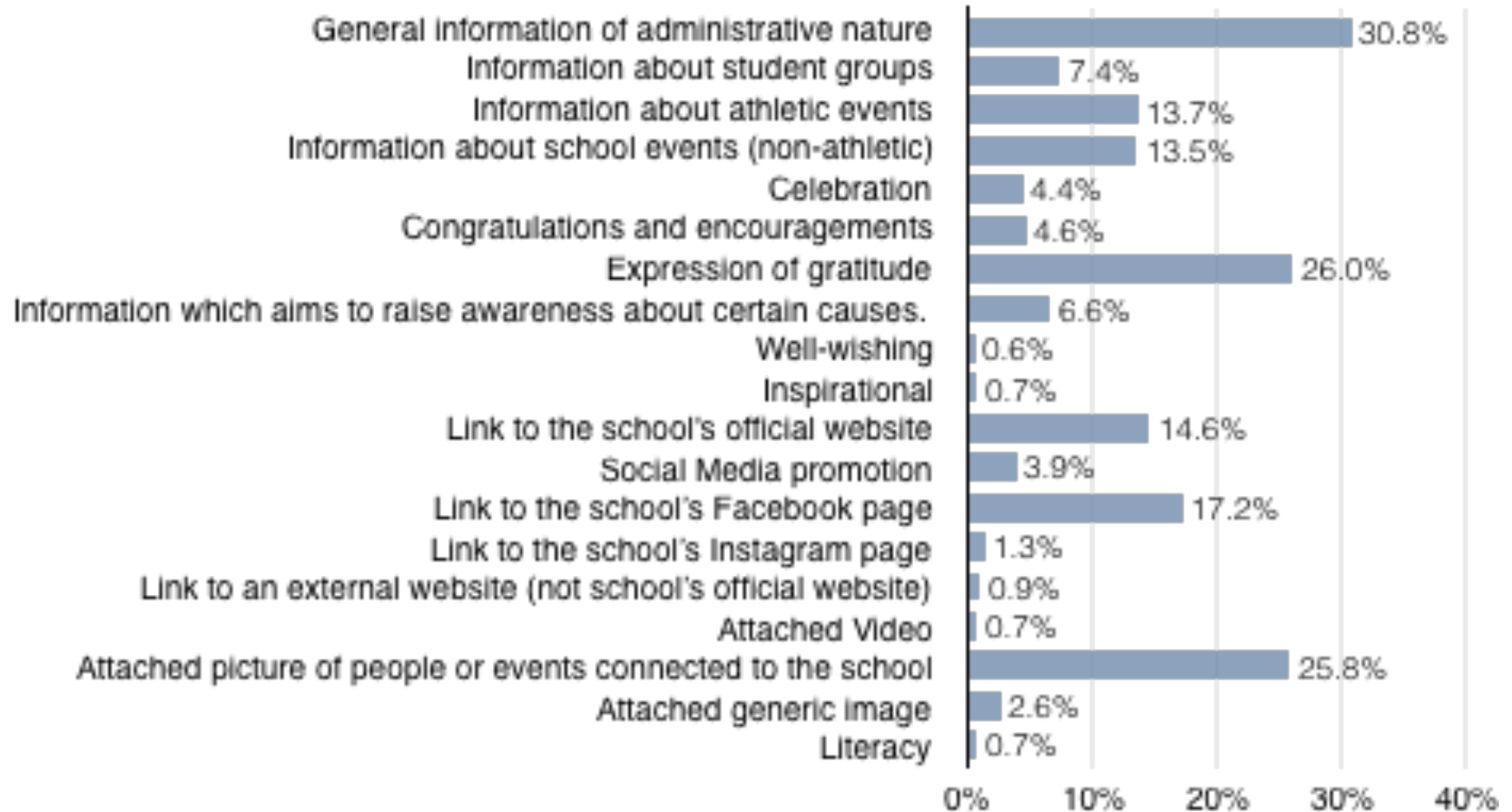*Just a reminder that Today is the Last Day for Course Changes. 3:30-5:30pm*

T&R: Expression of gratitude

Thanks Principal Backs and our awesome admin team for school assembly presentations today #wethenorth #family

3. Results
RQ 1

| Category	Percentage
General information of administrative nature	30.8%
Information about student groups	7.4%
Information about athletic events	13.7%
Information about school events (non-athletic)	13.5%
Celebration	4.4%
Congratulations and encouragements	4.6%
Expression of gratitude	26.0%
Information which aims to raise awareness about certain causes.	6.6%
Well-wishing	0.6%
Inspirational	0.7%
Link to the school's official website	14.6%
Social Media promotion	3.9%
Link to the school's Facebook page	17.2%
Link to the school's Instagram page	1.3%
Link to an external website (not school's official website)	0.9%
Attached Video	0.7%
Attached picture of people or events connected to the school	25.8%
Attached generic image	2.6%
Literacy	0.7%

3. Results
RQ 2

RQ 2: Who are the intended recipients of the information disseminated through Twitter by Edmonton high schools?

58% of T&R were not addressed to a particular group of people

27% of T&R were addressed to students

Legend:
- Parents
- Students
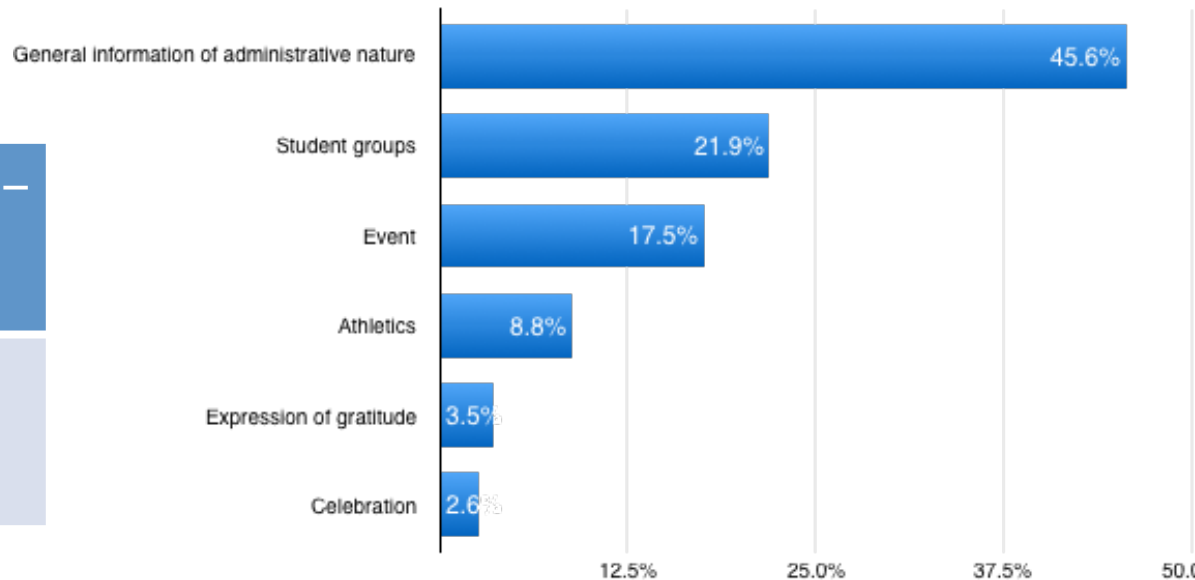- Members of the public
- Members of the school community

Pie chart values:
- 4%
- 27%
- 58%
- 11%
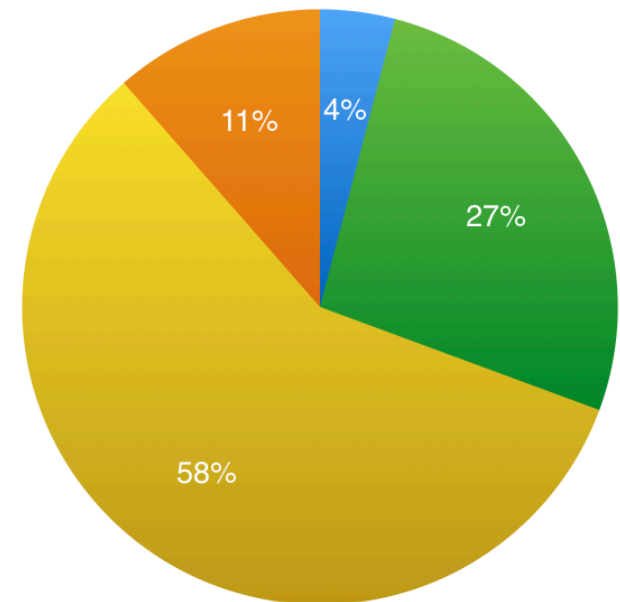
3. Results
RQ 2

Content aimed at students

46% T&R → general information of administrative nature

T&R: Content at at students – general information of administrative nature

Grade 10's pick up your free Queen E tee shirts in the front foyer during lunch time today.

General information of administrative nature	45.6%
Student groups	21.9%
Event	17.5%
Athletics	8.8%
Expression of gratitude	3.5%
Celebration	2.6%

What does it all mean?

Conclusion 1:

The frequency of Twitter use amongst high schools varies greatly between schools.

- Lack of social media policy
- Solution: Regulation by the Edmonton Public School Board?

4. Discussion of Results

Conclusion 2: The nature of the information disseminated by public high schools in Edmonton is very diverse.

- 19 categories needed to classify the T&R
- 30.8% of T&R conveyed general information of administrative nature.
- Study confirms past research:
  - Langford's (2013): 25% of Twitter content created by elementary schools in England was of administrative nature.
- Literacy accounts for the lowest percentage of Twitter content (0.7%).
- Twitter used as a means to update local community?

Conclusion 3: Most Twitter content is not aimed at a particular audience.

- Study confirms past research:
  Linvill, McGee and Hicks (2012) : most Twitter content generated by colleges and universities in the United States was not aimed at a particular audience.

5. Limitations
A. Generalizability of the study

- Study excluded private schools and separate schools.

- <u>Geographical limitations</u>: only Edmonton schools were considered.

- <u>Temporal framework</u>: Results might differ if Twitter content was to be collected over a longer period of time.

5. Limitations
B. Data Reliability

Having only one coder can lead to an incomplete or redundant codebook. It is suggested that at least two coders be used to ensure reliability (Ruggeri, Gizelis, and Dorussen, 2011; Campbell et al, 2013).

Manual coding introduces the risk of human error (Ruggeri et al, 2011).

6. Conclusion

This study can serve as a guide for schools interested in adopting Twitter as a communication tool.

Further research:

- Examine the motivations of high school administrators for posting content on Twitter
- Examine the perceptions of the public with regard to Twitter use by schools.

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