Spreadsheets & Surveys

Taking another page from Math Applications, we'll be investigating how spreadsheets can help us analyze survey data for patterns & trends. This should be a lot of fun.

In this assignment, you are asked to prepare a survey for your classmates on a topic of your choosing.

You will be using Excel to visualize, analyze and interpret the data you collect.

STEP 1: Choose a topic

All of your questions will revolve around a certain topic. This can be anything from computers, to Facebook, to hockey teams, to books. Choose something that interests you.

STEP 2: Design your questions

You need to ask questions in a way that gives you easy-to-interpret responses. This means you shouldn't be asking for typed word responses. **You can't sum words.**

✓ **You *must* ask for name and gender.**

In addition to this, your questions need to meet the following requirements:

✓ **2 binary choice questions**
   Questions with only two answers, e.g. true / false, yes / no, Leafs / Habs, etc.
✓ **2 multiple choice questions**
   Questions with a limited number of responses for respondents to choose from
✓ **2 questions whose responses are numbers**
    E.g. How many pounds do you weigh, what is your age in years, etc.
✓ **2 Likert-scale questions**
   These are the type of questions where respondents specify to what extent they agree with a statement.
   For example: **"I brush my teeth every night"**

   1 - always, 3 - sometimes, 5 - never

STEP 3: Analyze your data

Once your classmates take your survey, you need to look at the data you've collected and find **three trends** in the information. **For each trend**, you need to **display a graph** that provides visual evidence for your conclusion.

You can earn 5 bonus marks by using a pivot table as evidence.

Present your findings in a typed report, using Microsoft Word.

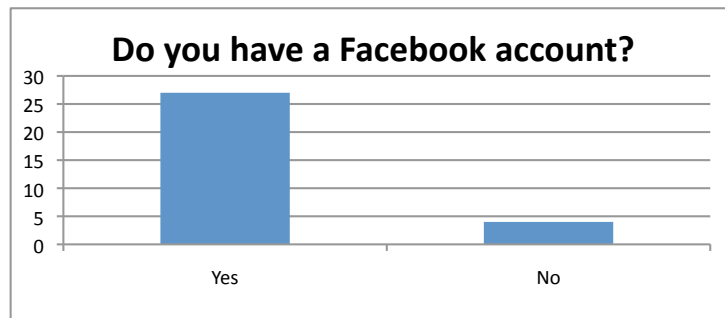Remember to include a **title page, introduction,** and **conclusion.**

An Example of the Finished Product

Introduction

This report contains findings from a survey conducted on the topic of Social Networking. The respondents were 31 Grade 8 students from a boarding school in New Brunswick.
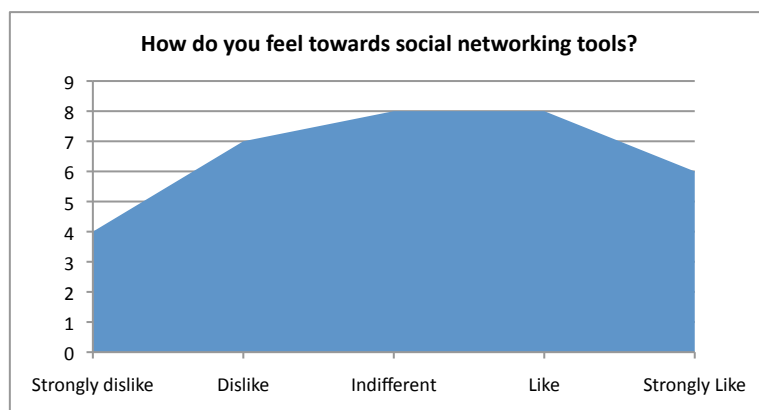
Findings

1. From my data, one of the trends that was immediately obvious was that the majority of respondents were familiar with social networking tools, and Facebook in particular. The following graph illustrates this:

Do you have a Facebook account?

(Bar chart showing "Yes" at approximately 27 and "No" at approximately 4, with a y-axis from 0 to 30.)

2. A second trend that emerged from my study was that students seem to prefer real-time networking tools over delayed ('asynchronous') tools. This is evident in that half the respondents indicated their preference for MSN over competing networking sites.

Top Social Networking Tools

(Pie chart showing MSN 48%, Facebook 32%, Myspace 13%, Twitter 7%.)
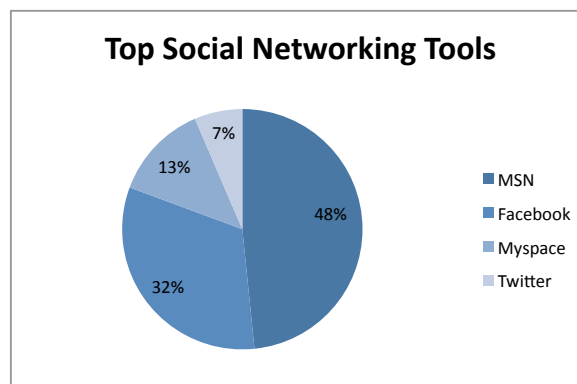
3. Finally, when asked about their feelings toward social networking tools, the majority of respondents indicated that they were either indifferent to them, or liked them somewhat. It is interesting to note that few respondents indicated a 'strong like' for these tools, given their widespread use.

How do you feel towards social networking tools?

(Area chart with categories: Strongly dislike (4), Dislike (7), Indifferent (8), Like (8), Strongly Like (6), with a y-axis from 0 to 9.)

Conclusion

From a close study of the data, it seems that social networking is a big component of Grade 8 students' lives in New Brunswick. However, most students seem to take these tools for granted. Perhaps their initial novelty has worn off?

Assessment Checklist

	Value	Your score
Survey Questions		
2 binary questions	2	
2 multiple choice questions	2	
2 number response questions	2	
2 Likert scale questions	2	
Survey Report		
Identified 3 trends in the data.	6	
Displayed appropriate graphs to support conclusions.	9	
Proper introduction & conclusion	4	
No spelling mistakes, organized & neat layout.	3	
Bonus		
Used a pivot table as evidence of findings.	5	
TOTAL	30	