Tinkering with Elections

Among the fantastic resources on the Statistics Canada website, you'll find results from past elections. This is a timely activity/exploration that can be done with Tinkerplots just in time for the upcoming Federal Election.

Visit the Statistics Canada website at: http://www.statcan.ca/start.html. Follow the link identified as Learning Resources and then click on the Estat link. (Login and Password are available from your District's OESS representative) At the bottom of the next page, choose the 2000 results from Elections Canada for Provinces and Territories.

You'll next be presented with a pull-down menu of options. For this example, I chose "Percentage of Valid Votes, by Political Affiliation". When you click "Go", you'll have the chance to determine what data to select and how to display your results.

I chose to "Select All Characteristics" and to display the results in a table with "Areas as Rows".

Canada, by Province and Territory

Area Name:	Bloc Québécois	Canadian Action Party	Canadian Reform Conservative Alliance	Communist Party of Canada	Liberal Party of Canada
Newfoundland	0	0	3.9	0	44.9
Prince Edward Island	0	0	5	0	47
Nova Scotia	0	0	9.6	0	36.5
New Brunswick	0	0	15.7	0	41.7
Quebec	39.9	0	6.2	0.1	44.2
Ontario	0	0.2	23.6	0.1	51.5
Manitoba	0	0.2	30.4	0.3	32.5
Saskatchewan	0	0.2	47.7	0	20.7
Alberta	0	0.1	58.9	0	20.9
British Columbia	0	0.8	49.4	0.1	27.7
Yukon Territory	0	0	17.7	0	45.6
Northwest Territories	0	0	27.7	0	32.5
Nunavut	0	0	0	0	69

A portion of the data appears above. This would be a good time to explain what the numbers mean. For example, .8% of voters in British Columbia voted for the Canadian Action Party. Had we chosen a different results table (i.e. the number of valid votes by party), we could determine exactly how many counted votes .8% represented.

Let's work some Tinkerplots into this.

Using your mouse, highlight the data from the table and copy it. (Don't forget to copy the column headings.)

Open Tinkerplots and drag a new set of cards onto the desktop and paste your data. If things have been done correctly, you'll have 13 cards in your collection. Click on the arrows to navigate through your collection and you'll see that you have results, by province and territory, with each political party.

Note that it might be helpful to grab the divider between the Value and Unit columns and make the column bigger to be able to view the entire province or territory name.

Double click on "Collection 1" and rename your collection "2000 Canadian Election".
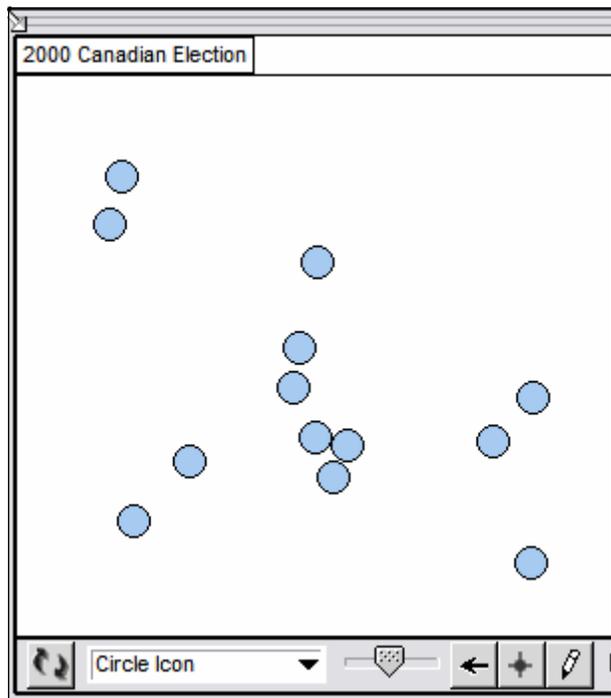

By itself, the initial plot doesn't display much. However, go into your cards and click on the multicoloured icon beside "Area Name" and you'll see that each icon in the chart changes to represent the different provinces and territories.

What colour is New Brunswick?

What colour is Quebec?

Election discussions in Canada inevitably end up being a comparison of regions.

If you click on the Key button on the toolbar, Tinkerplots will generate a legend for you so that you can track your favourite province!
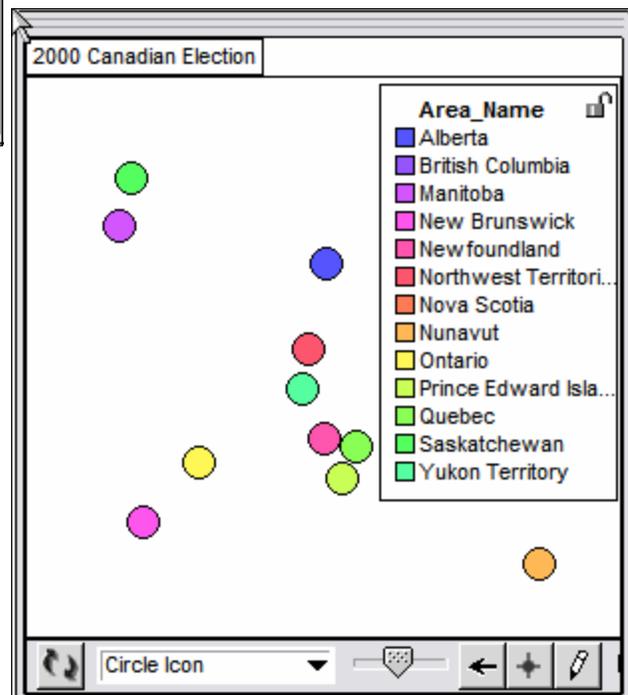
Tinkerplots makes exploration of election results easy. So far, we haven't organized any of our data. Let's do so now. The Liberal Party of Canada formed the latest government, so let's take a look at their support by province or territory.

From the Card table, drag the Attribute "Liberal_Party_of_Canada" onto the horizontal axis. Tinkerplots will arrange the data according to the percentage of voters in that particular area. Using the colour legend, determine which area had the highest percentage of voters supporting the Liberal Party. Who was the lowest? Where was Ontario?

In addition to using the legend, you can click directly on one of the data to go directly to that card.
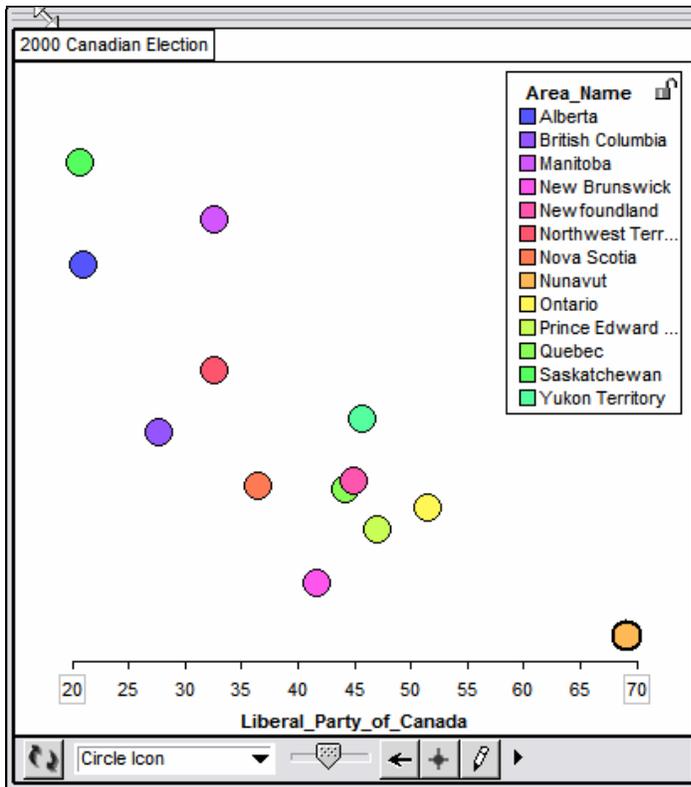
The key sometimes gets in the way of your data. As long as its location is unlocked, you can move the legend to reveal data hidden behind the key.

Select the results from different political parties. In the example to the right, you'll see the voting results for the New Democratic Party.

It's important to put comparisons in perspective. Tinkerplots will always scale the results for the best appearance in the window.

Note the difference in scale between the Liberal Party and the New Democratic Party results.
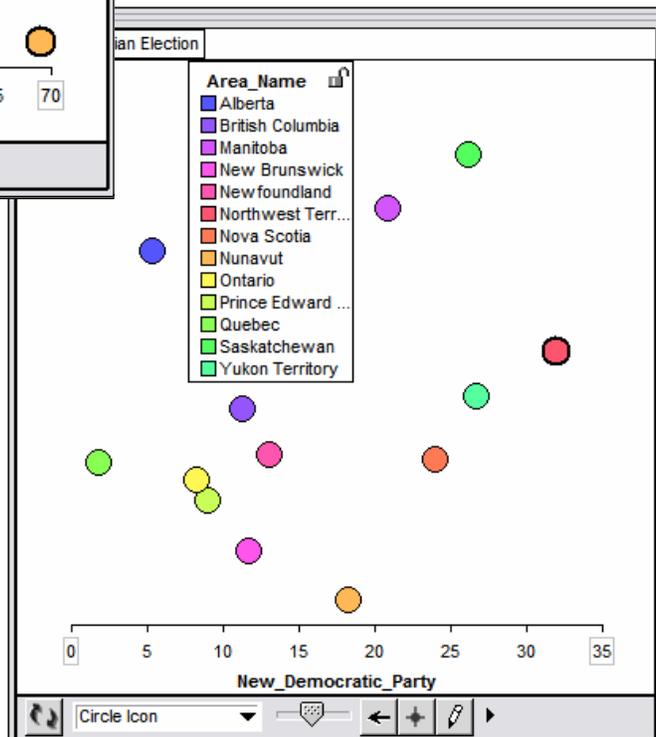
Is a collection of circle icons the best way to represent the data? Consider the following two plots showing the results of the Progressive Conservative Party.
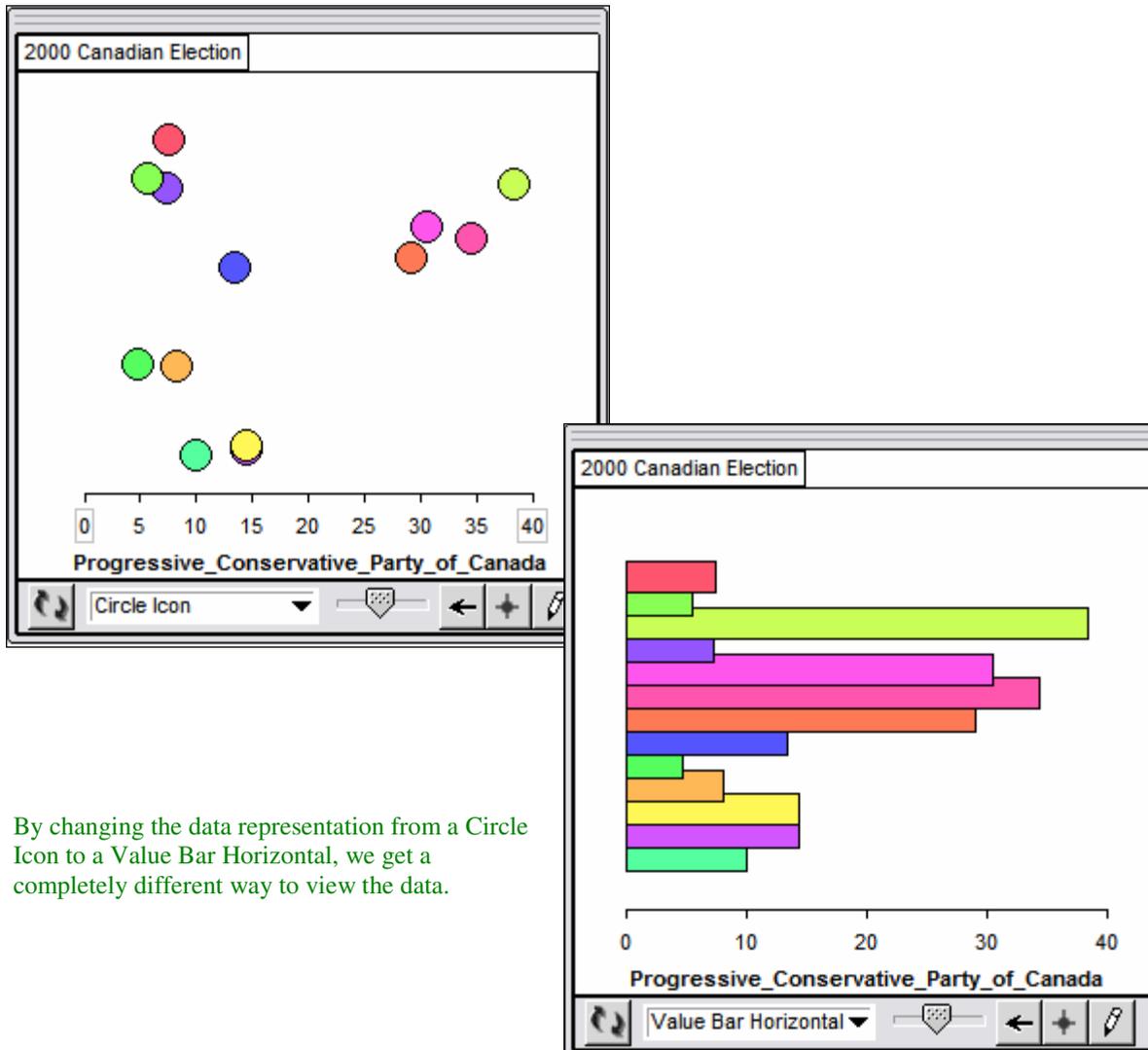
By changing the data representation from a Circle Icon to a Value Bar Horizontal, we get a completely different way to view the data.

Tinkerplots lets students manipulate data easily in an effort to draw inferences or to test hypotheses. Digging deeply into the resources provided by Statistics Canada can generate all kinds of activities for both the Mathematics and Social Studies Classroom.

For more resources dealing with the 2006 Federal Election, visit http://www.gecdsb.on.ca/d&g/2006election.htm.

Armed with data and Tinkerplots, perhaps your class can accurately predict the results of the upcoming election!

Doug Peterson
Greater Essex County District School Board
Doug_Peterson@osapac.org
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