How to Analyze Election Voter Data for What They Mean

Ashley Miller

Rationale

Looking at large tables of percentages that fill the page can be overwhelming for any person, let alone a teenager. The first time that I tried to teach students about voting behavior by using just tables of information, I quickly realized my mistake when I saw the confused, deer in the headlights looks that a room full of 11th graders gave me. The overwhelming lists of information with categories such as total voted, male vs female, ages, race/ethnicity, etc, are just too much for students to be given and told to analyze the data without help. That is a realization that came very quickly to me in my teaching. A few years ago, my school district switched the progression of High School Social Studies courses so that Civics and Economics are now taught to 9th graders, instead of 11th graders. The 11th graders now take US History instead of Civics and Economics. There is clearly a difference between 14 year olds and 15/16 year olds in their ability to connect to the content. The 11th graders are closer to voting age than the 9th graders so it was easier to talk to them about when “you” vote. It was easier to get the older students involved in the curriculum since they are more mature and more ready to think about taking on these responsibilities. In planning this unit, I kept in mind that the 9th grade students are many years away from voting and planned activities to immerse them in the content so they could see its relevance to their lives.

Along with the statistical analysis, students need to understand why people don’t vote. I am one of the worst annoyances to my family around election time. I believe that voting is a civic duty and the easiest way that people can get involved in getting their voices heard by the government. I constantly tell my students that if you don’t vote you shouldn’t complain about the politicians making the decisions. I have taken my daughter every election year in her short six years to vote with me, and (don’t tell anyone but) I have let her push the big, green “Vote” button for the past 2 elections for me. The joy and excitement that I see in her eyes as we are going through the process is something that I believe all Americans should feel. This is not the case, and that is why we see dismal voting statistics.

The last thing that I want to cover with the students is how they can help inspire people to get out and vote. I believe that this will be difficult, again because these students are young and far away from voting. My hope is that teaching the students about why people don’t vote and having them counter those arguments will motivate them to vote when they are 18. They will remember the importance of voting and that the reasons
people don’t vote are just excuses that can be overcome. My hope is that their education in my class will help increase the number of 18 to 24 year olds voting, which was 41% in the 2012 Presidential Election.

**School Demographics**

This unit will be taught in a Delaware Magnet school, Conrad Schools of Science. Our school is one that is just finishing up growing into itself as a 6-12 school in Red Clay Consolidated School District. We have only had three graduating classes and now have a little over 1200 students. Students that wish to come to Conrad have to go through an application process and show a minimal interest in science. Once students have been accepted into the High School, they must complete three years of a pathway as a graduation requirement. These pathways are called “strands” and were created in the application for the school to be created. Our pathways are all science related and include Physical Therapy, Nursing, Biotechnology, Computer Science, Biomedical and Vet Tech.

The classes that this unit will be taught in are diverse classes of Honors and College Prep students that include students with 504 Plans and IEPs in grade 9. The class name is Civics and Economics which are two separate half year classes. The students stay with me, but I have to compress the curriculum so the students can have access to everything that I and the state thinks our students need to learn in the 18 weeks, or 45 days under the 85 minute, A/B Day block schedule we follow. According to Conrad’s Delaware Department of Education School Profile for the 2013-2014 school year, Conrad has a population with 65.1% white students, 18.9% Hispanic/Latino, 11.2% African American and 3.9% Asian. Also, there are 7.7% of students who are English Language Learners, 14.6% Low Income and 2.9% Special Education. Conrad has between 98.9% and 100% School Promotion by Grade. Conrad has few discipline issues so I feel very lucky that I am able to focus on the content and teaching, rather than classroom management issues.

This unit will be taught near the end of the Civics curriculum. This will be part of the larger study of “civic participation”. My plan right now is to teach this after students have learned about the three branches of government and political parties. After this unit about voting, we will then cover interest groups, political action committees, lobbyists, and rights vs responsibilities (i.e. paying taxes, jury duty, etc.).

**Objectives of the Unit**

The three main questions I hope to answer in my unit are:

1. Who votes and how do we know?
2. Why do people not vote?
3. How can we convince people that it is important to vote?
The Civics part of the 9th grade Social Studies course has only two marking periods. This equals 18 weeks, or 45 days, or almost 64 hours. How can I fit everything that I think students need to know about government and how to be a good citizen into that amount of time? There are four very general Delaware Social Studies Standards that we are supposed to teach. Most of what I need to focus on for this unit is participatory citizenship, how they can be active participants in the government and society. When creating this unit, I wanted to remember the information about how students learn that is brought up time and time again in district and national meetings I have been to that reference brain research.

“WE REMEMBER
10% of what we read
20% of what we hear
30% of what we see
50% of what we see and hear
70% of what we discuss with others
80% of what we personally experience
95% or what we teach other”

This is by Edgar Dale, an educator, who created his “Cone of Experience” in the 1960s. Even though educational theories have changed so many times that I cannot count them since the 1960s, this Cone of Experience is still the centerpiece of my own educational planning.

With this overall unit, I hope to have the students be able to walk away with a better understanding of who votes, why they vote and ways to influence more people to vote. The greatest deficit that I see with my students is the fact that they cannot understand the large charts of information that we see in the classroom when pulling up voter statistics. Any time that I deal with math in the class, students immediately shut down. They argue with me that, “This is social studies class, not math!” I have many students that also say, “I don’t get math,” which is surprising in a science school, since math and science normally go hand in hand. When students start seeing large blocks of numbers for voters with different numbers based of gender, age, race, and education level, they don’t see how these numbers overlap or what the big picture looks like. They are very confused how some numbers can be larger or smaller than the overall turnout number is. Some time in this unit will be spent on how to analyze this data and understand what it means. Hopefully putting the math into a real-world context will help the students see the practical application of the mathematics involved in looking at data.

The second main objective of this unit is to help students understand why people do and do not vote in elections. Personally, I do not understand why people do not take the 30 minutes or less to go to their polling place to vote. I was very disheartened in this 2014 off year election to see that Delaware only had a 36% voter turnout rate. I want to
make sure that students understand why people say that they don’t vote and how we find that information. Where does the information come from and can we trust it?

The third main objective that I hope to meet is helping the students to develop the means necessary to become active citizen participants by empowering them to convince people to vote. This is where Edgar Dale’s 95% of learning by teaching comes in. Having to explain why someone votes and countering arguments for people who don’t vote will help students learn why they should vote. The students will be immersed in the content as they work to convince their families and friends to participate in the voting process.

Educational Background

Who Votes

This first part of this unit will focus on knowing who votes and analyzing the statistics. Lots of time will be spent on looking at the data, understanding what everything means. In our sessions of the Delaware Teacher Institute, our seminar leader Joel Best has taken us through some exercises to understand what numbers mean. I plan to help my students build a foundation for understanding numbers by discussing the following facts about the demographics of the United States, known as statistical benchmarks. Most of my 9th graders do not know that there are more than 316 million people in the United States. They also don’t know that 77% of the population is over 18 years old. Then, not all people who are eligible to vote are actually registered. Page Gardner, President of the Voter Participation Center, said that only 65% of those adults eligible to vote are actually registered. In this year’s midterm election, only 36% of eligible voters cast their ballot. So at this point, I am telling my students that they need to find out what 36% of 65% of 77% of 316 million people is. And this when my 9th graders’ heads explode. It’s just too much information to start with at first.

There has to be a better way to explain to them the numbers we are looking at and what they mean. Besides this, I am then asking students to look at gender, race, age, ethnicity, place of residency. All of this information is necessary for the final stage of the unit when students are creating pieces geared toward different groups to get them out to vote. The more data that you have, the stronger your argument will be for trying to convince people to support society. I want the students to develop their skills and confidence in analyzing data so they can persuade their families and friends to vote with powerful statistics and not just emotional appeals.

Why People Do Not Vote

After we are done looking at the statistics about who votes, we need to look at why people don’t vote. The Bipartisan Policy Center has some statistics to show why people aren’t voting and most of it seems to be about access to information. People are
apathetic, they were out of town, they were too busy, or they didn’t like the campaign or candidates. People not having information on how to get absentee ballots when they are out of town can be easily fixed with information. You can attempt to combat apathy with information. The BPC brings up an important group that needs more than just information - the disabled. That is a group that does not show up in the voter statistics groups. Usually they are just lumped into the people who say that they couldn’t get to their polling places. Students will need to think about challenges of getting to the polling place in the third part of this unit when they are trying to inspire people to vote. They will have to think about how to help people who want to vote but have roadblocks to overcome (like transportation, disabilities, etc.).

How to Inspire People to Vote

There are many different ways to convince people. During elections, people become desensitized to the television ads that they are bombarded with. In the 2014 midterm election, more than $4 billion was spent on campaigning\(^\text{15}\). Besides television ads, there are mailers, websites, social media with Facebook and Twitter, door-to-door campaigning, etc. All of these are used by politicians and political parties to get people to vote for them. For younger voters, the internet and social media are the best ways to connect. Students will be looking at persuasive techniques to decide what would be a good idea for them to use to convince people to get out and vote. I want to push my students more into utilizing online resources to reach out to perspective voters. That’s what they know, and what first time voters know.

**Strategies**

**Group Work**

Students will be using Think-Pair-Share in class to help them understand the information that is presented to them, especially with the statistical analysis and the reasons that people do not vote. Going back to the Cone of Experience, students working together and explaining what they are learning to a partner will help them really learn the material. This strategy gives students time to work and think individually about the information and data we are considering, pair with another student to further their understanding, and then share with larger groups or the whole class. ReadWriteThink.org has a fantastic resource to help explain this strategy more to gain a better understanding on how to introduce it to your class.\(^\text{16}\)

**Creation**

Students will create a persuasive piece for convincing people to get involved. Part of this assignment is for students to learn about persuasive marketing techniques and choosing the best technique and product to convince certain groups to vote. Students will be given
different choices like a mailer, social media site (Facebook, Twitter, Instagram), brochure, tv commercial, or newspaper advertisement. Students will have to choose the best persuasive technique to motivate the group that they choose to encourage to vote.

Data Analysis

Students will be working a lot in the unit to analyze data and where that data comes from. Most of this data will come from the US Census. I will use the presidential election data to have a larger data set with which to work, instead of the Off-Year elections (midterm or nonpresidential elections).

Activities

Lesson One

Lesson One will focus on the statistical analysis and take one to two classes.

The first major activity will be to fill out a statistics chart of the class that we will then use to transfer knowledge and understanding to voter statistics. I will give the students a blank form to fill out in the class and calculate percentages. We will talk about these numbers and percentages with the class, focusing on age, height, and eye color to be able to then transfer that information to the larger idea of voting statistics. Once we fill out the different parts of the class analysis sheet, I will have the students answer the three questions and then verbally debrief the activity. I want students to see that people can fall into many different categories and some of the information is determined by how people classify themselves. I will bring that back again when we discuss race/ethnicity in the voting statistics. This activity will allow the students to understand that percentages actually stand for people and how they are calculated.

When we are done with that piece, I will have the students start analyzing voting statistics. These statistics will come from the Census Bureau for national Presidential elections. The most current list available is the 2012 Presidential Elections, but choose the best list for your class at the time. There is also information available for Off-Year (midterm) elections that you might want to use as well to show students the further drop in voter participation when the President’s job is not up for election. I will create a basic list of questions for the students to answer focusing on what type of categories the data focuses on, which groups are less likely to vote, and why the students think that is the case. Since we have just gone through calculating these numbers for our class, hopefully the students will have a better understanding of what these numbers mean. I want students to see that race, gender, age, education, and work status (which are the statistics that we are looking at) all have a role in determining the likelihood of whether or not someone will vote. I will remind them of previous learning before looking at the data about restrictions on voting, and that the numbers we are looking at are those people who
are eligible and registered to vote. This data will also be important so the students understand that people are showing up in multiple columns. They can see that someone can show up in the total population column, the registered column, the voted column, the age column, the gender column, the ethnicity column, the education level column, and the workforce column (what job they have). This is a lot of information for the students to understand, but hopefully the class example that we started with will help them understand everything.

I also want to take some time to go over where the data comes from with my students using the Census explanation of their survey and frequently asked questions. We will discuss the survey that the Census gives and how that might affect the results. I want to make sure that the students start to see that statistics are never 100% accurate, but that in this instance, it is the best view that we have for who is voting. We will also discuss how who is giving the survey or statistics should inform us as to the validity of the data.

Lesson Two

Lesson Two will focus on why people do and do not vote and should take one class period. The students will need this information to use in the third lesson when making an argument to convince people to vote.

Students will be working with partners to read through several articles to take notes on reasons people do not vote. If it is available, students will also write down which groups of people give which reasons more often. This information will be important for the next day’s lesson about persuading someone to vote who didn’t. Once they have taken the time to work with the article on their own, students will work with their partners to go over the reasons they found why people do not vote and to create counterarguments for all the reasons people give as to why they don’t vote. Once the students have worked in their small groups, I will have them change into larger groups of four to five students, and we will end the class with a large group discussion. Whatever the students do not have written will be added to their charts. Students will leave this class day with a chart of reasons why people don’t vote and ideas on counterarguments for the next class.

Lesson Three

Lesson Three will focus on persuasive techniques and take two class periods.

I will start this lesson by going over a PDF found at Classzone.com, but originally from the McDougal Littell/Houghton Mifflin Company, about the major persuasive techniques used by advertisers. I will give each student one copy of the first page of that PDF. Then to connect this directly to politics and elections, I will go over examples of the most recent election advertising. I will give students examples of commercials, direct mailers, Facebook pages, Twitter feeds, and pamphlets. For the direct mailers and
pamphlets, I have examples from ones that were sent to my house. I have screenshot examples of Facebook pages and Twitter feeds to share with my students. Examples of commercials can be found on YouTube. Together we will analyze the examples with what types of advertising techniques are they using and which the students think is the most effective. Does the effectiveness change depending on the group that is looking at the advertisement? Meaning, does a Facebook page work as well for 70-80 year olds as it does for 18-24 year olds?

After we have finished analyzing the examples, students will have to create an advertisement to try to increase voter participation. They must choose one of the reasons people don’t vote to create a persuasive piece convincing them to vote. It can be in any format that we analyzed (commercial, Facebook, Twitter campaign, direct mailer), and must include a paragraph explanation. Students in their persuasive piece and paragraph must show their understanding of the reasons people don’t vote, which groups need more active participation, and which persuasive techniques will target their chosen group the best. Their persuasive piece will count as a summative grade, showing their understanding of the Unit.
Bibliography

This website gives a basic summary about the data found on the Census website.

This is a PDF version of persuasive techniques that the students are using in the third lesson of this unit.

This website has the “Cone of Experience” with examples of activities for the classroom at each level of engagement and experience.

This book is a good list of how to attack data and where it is coming from.


This news article has good information about low voter turnout.

Statistics and explanations of voter turnout over the years.

A news article about low voter registration, which leads to lower voter turnout.

Examples of campaign ads that can be used for Lesson Three of this Unit.

"School Profiles - School Profiles Conrad Schools of Science." School Profiles - School

Explanation of how to use the Thing-Pair-Share strategy in your classroom.

This is the 2014 Off-Year election voter data results for Delaware.

Easily understood explanations from the US Census Bureau about how they compile their data.

This includes basic demographic data for the students to look at for the United States. Very easily understood.

Voter Data for the 2012 Presidential Election to use in Lesson One of the Unit. There are many different tables to choose from when you are deciding what types of statistics do you want to include (age, gender, jobs, education level, etc.).

News article for the students to read that describes reasons why people do not vote.

Chicago formatting by BibMe.org.
Appendix 1

Civics Standards

Civics Standard Three

The first standard that this unit will cover is Delaware Civics Standard Three:

“Students will understand the responsibilities, rights, and privileges of United States citizens [Citizenship]. 9-12a: Students will understand that citizens are individually responsible for keeping themselves informed about public policy issues on the local, state, and federal levels; participating in the civic process; and upholding the laws of the land.”

This will be completed when the unit covers the information about the voting population and the reasons that people do not vote. The strategies and activities will cover the students learning that they need to be informed and how they can find that information.

Civics Standard Four

The second standard that this unit will cover is Delaware Civics Standard Four:

“Students will develop and employ the civic skills necessary for effective, participatory citizenship [Participation]. 9-12a: Students will develop and employ the skills necessary to work with government programs and agencies. 9-12b: Students will understand the process of working within a political party, a commission engaged in examining public policy, or a citizen's group.”

This standard will be addressed when the students are working on how to convince people to be involved. I view this as working in a “citizen’s group” as the students are working together to convince others to participate.

Common Core Standard

To support the switch to Common Core Standards in English, I’ll be focusing on the CCSS ELA Literacy 9-10.7 from Integration of Knowledge of Ideas:

Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.
During the unit, students will be analyzing many charts of voter data with the print analysis of why people do and do not vote. They will then have to integrate that knowledge that they learn into the final product that is created, convincing people to get involved and stop using excuses to not vote.
Appendix 2

Class statistical analysis: Total number of students in the class _______________

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<thead>
<tr>
<th>Category</th>
<th>Number of students</th>
<th>Percentage of the Total</th>
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<th>Female Percentage</th>
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<tr>
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<td>5 Feet 6 Inches-5 Feet 11 Inches Tall</td>
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</tbody>
</table>

1. Why are all of the male and female numbers different in the different categories?
2. How many categories do you fit in?
3. How can this help us in the analysis of voter data?
Appendix 3

Read through the given articles to give and explain reasons why people do not vote. Once you have finished reading, work with your partner to share what you found. For each reason, create a counterargument where you try to prove to the person that they could have voted. Be prepared to share with the class. Make sure to add information to your chart as we discuss the information. Keep this chart to use during the next class.

<table>
<thead>
<tr>
<th>Reasons why people don’t vote</th>
<th>Explanation and groups that use this reason</th>
<th>Counterarguments</th>
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</tbody>
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Notes
1 United States Census Voter Data
2 Fair Vote.org, Voter Turnout http://www.fairvote.org/research-and-analysis/voter-turnout/
3 Census 2012 Presidential Election voting Data
4 Mark Pruitt, Principal of Conrad
5 Conrad Schools of Science Student Handbook
6 DOE School Profiles
7 Edgar Dale’s Cone of Experience
8 Delaware Election Results http://elections.delaware.gov/results/html/election.shtml
9 Joel Best, Stat Spotting, A Field Guide to Identifying Dubious Data
10 US Census Quick Facts http://quickfacts.census.gov/qfd/states/00000.html
14 Bipartisan Policy Center http://bipartisanpolicy.org/blog/2013/05/why-people-don%E2%80%99t-vote
15 Real Clear Politics
16 http://www.readwritethink.org/professional-development/strategy-guides/using-think-pair-share-30626.html
17 See Appendix 2
18 http://www.census.gov/hhes/www/socdemo/voting/about/index.html
http://www.census.gov/hhes/www/socdemo/voting/about/faqs.html
19 Appendix 3

# How to Analyze Election Voter Data for What it Means

## Author
Ashley Miller

### Key Learning, Enduring Understanding, etc.

Students will leave this unit being able to analyze voter data and explain why people do not vote. Students will then learn different types of advertising techniques to create their own persuasive piece to convince people to vote.

### Essential Question(s) for the Unit

1. Who votes and how do we know?
2. Why do people not vote?
3. How can we convince people that it is important to vote?

<table>
<thead>
<tr>
<th>Concept A</th>
<th>Concept B</th>
<th>Concept C</th>
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<tbody>
<tr>
<td>Statistical analysis of voter data and where it comes from.</td>
<td>Analysis of the reasons that people do not vote.</td>
<td>Creating a persuasive piece</td>
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</table>

<table>
<thead>
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<th>Essential Questions B</th>
<th>Essential Questions C</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do we know who votes?</td>
<td>Why do people not vote? What are counterarguments that we can use to convince people to vote?</td>
<td>How can you convince someone that voting is important? How do you know what type of persuasive piece to create (ie Facebook, Twitter, Website, Commercial, Direct Mailer, etc) to focus on particular groups that don’t vote?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vocabulary A</th>
<th>Vocabulary A</th>
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<td>Voter Data</td>
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<td>Persuasive Piece</td>
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<tr>
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<td>Direct Mailer</td>
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### Additional Information/Material/Text/Film/Resources

US Census Data, Advertising Techniques, Election advertising examples