

Graphing Text with Civil War Letters

Grade Level: Grade 3

Topic: Mathematics, Social Studies, Vermont History

Resources Needed:

- Pens, pencils, markers
- A flip chart
- Link cubes (if necessary)
- Letters from the Vermonters in the Civil War Collection

Learning Context: As stipulated by the Common Core standards, students in the third grade are expected to understand and be able to collect, record and analyze data in basic forms such as a bar graph or line plot. Students will benefit from being able to practice these necessary skills through a historical lens. They will be asked to look for patterns and themes in the letter collection, which will improve their abilities to analyze data from multiple angles while simultaneously getting them to explore common concerns and opinions during the Civil War era. Ultimately students will be gaining perspective across subject areas. This will lead to future instruction on more complex forms of data analysis, possibly from a scientific standpoint as well.

Student Learning Objectives:

- Students demonstrate understanding of the texts' content by extracting commonalities and patterns from the letter correspondences.
- Students will be able to represent data gathered from the collection's letters and diary entries in a scaled bar graph.

Assessment of Stated Objectives:

Student Learning Objective	Assessment	Below Expectation (1)	At Expectation (2)	Above Expectation (3)
<i>Students demonstrate understanding of the texts' content by extracting commonalities and patterns from the letter correspondences.</i>	The student will read 1 or 2 letters from the collection, comparing what they find to their group members in order to gather data for the bar graph.	The student does not read their assigned letters or compare what he/she found to group members.	The student reads 1 letter from the collection and compares what they find with group members.	The student reads 2 or more letters from the collection and compares what he/she finds with group members, picking out themes on their own before sharing results with group members.
<i>Students will be able to represent data gathered from the collection's letters and diary entries in a scaled bar graph.</i>	The student will contribute to his/her group's presentation of their data in a scaled bar graph by fulfilling his/her assigned role.	The student does not fulfill his/her role when gathering, analyzing and presenting data.	The student fulfills his/her role when gathering, analyzing and presenting data.	The student fulfills his/her role and proactively finds patterns in the data collected among group members.

Standards:

USA- Common Core State Standards (June 2010)

Subject: English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects

Grade: Grade 3 students:

Content Area: Informational Text K–5

Strand: Reading

Domain: Range of Reading and Level of Text Complexity

Standard:

10. By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2–3 text complexity band independently and proficiently.

Subject: Mathematics

Grade: Grade 3

Domain: Measurement and Data 3.MD

Cluster: Represent and interpret data.

Standard:

3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.

Differentiation: *Struggling* learners will be allowed to use link cubes as manipulatives in order to put together bar graphs before writing them down. Each link will represent one piece of data, which they can then link together like a three-dimensional bar graph to show how many of each pattern/theme they found after collecting their data.

Advanced learners will calculate the mean, median, mode and range of their respective data sets.

Procedures:

Orientation: Students will presumably have been introduced to the collection already. They will be familiar with the content and understand what kinds of topics the letters generally cover. Students will be split up into groups of 4 or 5, depending on the class size. The class will review the concepts of basic data collection: looking for data, recording data, graphing data, and analyzing data for patterns and themes. Students will also be familiar with graphing in a bar graph. This lesson is aimed at practicing using a scaled graph.

Students will read pre-selected passages from each letter that have common themes such as battle, death, money, family, food, soldiers, etc. Helpful prompt questions will be used to direct students: " *What do the authors write about most? What are they thinking about as soldiers or family members of soldiers? Do they mention things like battle, or family? What words do you see in the letters the most?*

Students in groups will read 10-15 letters altogether. They will read each letter through once, then go back and read it a second time looking for words or phrases that appear more than once, circling them as they go. For example, if the word 'family' pops up more than once, a student would circle it and keep track on a tally sheet how many times the word is mentioned. The group members will then compare data on which words are occurring most frequently.

Once each group has identified 5 or 6 words/phrases that appear frequently, the instructor will provide materials to graph the data.

The instructor will assign a role to each group member. One student will be the group manager to make sure group members are on task. One student will be the materials collector who will be in charge of the graphing materials, one member will be the recorder, and another group member will be the presenter.

Teaching/Learning Process:

The instructor will circulate the room as the students read their letters and look for common words/phrases. Students should be on-task identifying words/phrases, recording data in tally charts, and graphing their findings.

Closure / Wrap Up:

Each group will be called on to present. The presenter will speak for their group. Each group will be asked which words/phrases they found most frequently and why they think these words are mentioned most often. Peers will ask questions as time permits.

Time allotment: one class period of 60 minutes per class

Lesson plan created by Kathryn Seelen 4/17/2013 as part of the University of Vermont Education Class: *EDEL 157 – Social Education and Social Studies*.