

Who Went Fishing? Migration and Labor in Gloucester's Fleet: teacher guide

Teacher guide. Keep separate from student materials.

Grade band	Grades 9-12
Subjects	History and Social Science, Mathematics, Digital Literacy and Computer Science
Towns	Gloucester
Duration	Two 55-minute class periods (sequence totals 110 minutes)
Prerequisites	Students can sort and filter a spreadsheet and use COUNTIF or a pivot table, or can tally by hand from a printed list.; Students can calculate a percentage and explain what the denominator is.; Students have been introduced to late 19th century immigration to the United States (U.S. History I, Topic 6).
Essential question	What can a list of fishermen lost at sea tell us about where Gloucester's fishing workforce came from, and what can it never tell us?
Version	1.0, 2026-10-05
Review status	Draft: awaiting classroom teacher review
Lesson ID	CAC - LES - 010

Objectives

Students will be able to:

- write a testable hypothesis about the birthplaces of Gloucester fishermen in 1876, 1895 and 1910 to 1912 before looking at the data.
- count entries by normalized birthplace and region for three samples and report each count as a percentage of entries that give a birthplace.
- count and report the entries with no birthplace and explain how missing data limits each sample.
- apply and critique a set of normalization rules, recoding at least three hard cases and explaining how a different rule would change the results.
- combine their counts with two public domain primary sources from 1875 and 1887 to explain at least one cause of migration into Gloucester's fleet, citing evidence from both.
- name at least three limits of a death register as evidence about a workforce.

Massachusetts curriculum frameworks

Code	Standard (verbatim) and source	How this lesson addresses it
------	--------------------------------	------------------------------

Code	Standard (verbatim) and source	How this lesson addresses it
USI.T6 (Rebuilding the United States: industry and immigration), standard 4	Using primary source images, data, and documents, describe the causes of the immigration of Germans, the Irish, Italians, Eastern Europeans, Chinese, Koreans, and Japanese to America in the late 19th and early 20th centuries, and the major roles of these immigrants in industrialization and the building of railroads. History and Social Science Curriculum Framework (2018), High school, United States History I. Official framework , page PDF p. 126.	Students use a primary-source-based data set and two 19th century government documents to describe who came to work in Gloucester's fishing industry and why, and compare those groups with the immigrant groups the standard names.
RCA-H.9-10.7	Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text. English Language Arts and Literacy Curriculum Framework (2017), Grades 9-10. Official framework , page PDF p. 144 (printed p. 141).	Students integrate their own counts and percentages with the written evidence of an 1875 customs collector's letter and an 1887 federal fisheries report.
RCA-H.11-12.9	Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources. English Language Arts and Literacy Curriculum Framework (2017), Grades 11-12. Official framework , page PDF p. 149 (printed p. 146).	Students build one account of the fleet's workforce from the register data and the two documents, noting where the sources disagree or measure different things.
9-12.CT.c.4	Analyze a complex data set to answer a question or test a hypothesis (e.g., analyze a large set of weather or financial data to predict future patterns). Digital Literacy and Computer Science Curriculum Framework (2016), Grades 9-12. Official framework , page PDF p. 45.	Students analyze a 449-entry data set by sorting, filtering and counting to test a hypothesis about change over time.

The U.S. History I standard names Irish, Italian, German and other immigrant groups but does not name Nova Scotians, Newfoundlanders, Scandinavians or Portuguese from the Azores, who appear most often in this data. The lesson uses the standard's skills (primary source data, causes and roles of immigrants in industry) and treats the comparison with the named groups as a discussion point. Grade 4 standard 4.T4a.5, which names Portuguese immigration to the Northeast, is not tagged because this is a high school lesson.

Standards checked against the official Massachusetts DESE framework documents on Oct. 5, 2026.

Materials

- Data sheet (XLSX or Google Sheets copy), one per student or pair: 449 entries with year, vessel, birthplace as printed, our normalized birthplace and region
- Student handout with the readings, abbreviation key, normalization rules, tally table and writing frame
- Slides for projection
- Devices with a spreadsheet program, or printed copies of the data sheet for hand tallying

Setup

Make a copy of the data sheet for each student or pair. Try one COUNTIF or pivot table yourself so you can help students who get stuck. Read the teacher background, especially the notes on missing data and on whole crews lost together, which shape the results more than students expect. If your class will tally by hand, split the printed data sheet so each group takes one sample (1876, 1895 or 1910 to 1912) and groups share totals.

Teaching sequence

10 minutes Day 1: Warm up, reading single rows

Teacher: Project slide 2. Students look at the 16 sample rows in Reading R3 and answer: What does one row tell you about one man? What can it not tell you? Collect a few answers on the board in two columns.

Students: Read the sample rows with the abbreviation key and list what a row can and cannot tell them.

10 minutes Day 1: Mini lesson, the register and the rules

Teacher: Use slides 3 and 4 and Readings R1, R2 and R4 to explain what the register is, what code F means, why we use three samples, why names were left out of the data sheet and how we normalized birthplaces. Stress that one row is one death, not one worker.

Students: Annotate the normalization rules and mark any rule they think is questionable.

5 minutes Day 1: Write a hypothesis

Teacher: Students write a hypothesis in the frame in Activity A1 before counting. Collect a few hypotheses aloud.

Students: Write a testable hypothesis about where lost fishermen were born and how that changed from 1876 to 1910 to 1912.

25 minutes Day 1: Count the data

Teacher: Students complete the tally table in Activity A2 using COUNTIF, a pivot table, filters or hand tallies. Circulate and check that percentages use entries with a birthplace as the denominator, and that Not given is counted separately.

Students: Count each sample by region, count missing birthplaces and calculate percentages.

5 minutes Day 1: Checkpoint

Teacher: Ask each group for one number they are confident in and one result that surprised them. Note disagreements in counts to resolve on Day 2.

Students: Share one result and one surprise.

10 minutes Day 2: Audit the rules

Teacher: Students work through the hard cases in Activity A3. Ask two pairs who disagree to explain their coding choices.

Students: Recode hard cases, decide whether the result would change and explain why.

15 minutes Day 2: Words from the 1870s and 1880s

Teacher: Students read Reading R5 and complete Activity A4. Point out that the 1887 report counts living workers in about 1880, while the register counts deaths.

Students: Compare the documents with their counts and identify causes of migration named in the sources.

10 minutes Day 2: What this register cannot tell us

Teacher: Lead the discussion in Activity A5 using slide 9. Push students to separate what the data shows from what it suggests.

Students: Discuss the limits of the data and how each one could change their conclusion.

20 minutes Day 2: Write the findings brief

Teacher: Explain the assessment with slide 10. Students write individually and attach one table or chart.

Students: Write a findings brief of 250 to 350 words with a table or chart, a tested hypothesis, evidence from the documents and at least three limits.

Background for the teacher

The data. The City of Gloucester Lost at Sea register (2010) has 6,626 entries. We may present facts from it in tables we build, with credit, but not copy its pages or reproduce it column for column; that is why the data sheet has no names and only four of the register's facts. The 449 entries in the data sheet are every entry coded F (fishing) dated 1876, 1895, 1910, 1911 or 1912, after removing one entry in 1876 and one in 1895 about men under 18. Entries coded F? (two in 1910 to 1912), T, U or blank, and entries marked with "#" (non-maritime deaths), are not included. Seven entries whose year was split across two columns in our copy of the register were repaired by hand and included.

Results, counts and percents (percent of entries that give a birthplace):

1876: 206 entries; 134 Not given (65 percent of the sample); 72 with a birthplace. Maritime Provinces and Newfoundland 51 (71 percent), United States 12 (17 percent), Nordic countries 5 (7 percent), Unclear 2 (3 percent), Britain and Ireland 1 (1 percent), Other Europe 1 (1 percent). Nova Scotia alone 48; Newfoundland 1; Maine 10.

1895: 131 entries; 29 Not given (22 percent); 102 with a birthplace. Maritime Provinces and Newfoundland 54 (53 percent), Nordic countries 34 (33 percent), United States 5 (5 percent), Portugal and the Azores 5 (5 percent), Britain and Ireland 4 (4 percent). Nova Scotia 35; Newfoundland 16; Sweden 18; Norway 7.

1910 to 1912: 112 entries (1910, 23; 1911, 49; 1912, 40); 6 Not given (5 percent); 106 with a birthplace. Maritime Provinces and Newfoundland 79 (75 percent), United States 11 (10 percent), Nordic countries 8 (8 percent), Portugal and the Azores 3 (3 percent), Other Europe 2 (2 percent), Unclear 2 (2 percent), Britain and Ireland 1 (1 percent). Nova Scotia 53; Newfoundland 24; Massachusetts 2.

Small differences (one or two) between student counts and these figures are fine if students can explain their method.

What the data suggests. In every sample, men born in the Maritime Provinces and Newfoundland are the largest group among entries that give a birthplace. Newfoundland's share grows across the samples (1 of 72, then 16 of 102, then 24 of 106). The Nordic share peaks in 1895. Very few entries give a Massachusetts birthplace, and none of the

449 prints Gloucester as a birthplace. The data cannot tell us why: it may be that fewer local men died, that compilers recorded birthplaces mainly for men from away, or both. Do not present any of these as fact.

Cautions students should find. Missing data: two-thirds of the 1876 entries give no birthplace, so the 1876 picture rests on 72 men. Clustering: whole crews were often lost together, so one vessel can move a region's count. In 1895 two vessels, the Mary S. Hontvent/Hontvet and the J. H. Carey (as printed), account for 20 of the 34 Nordic entries, and in 1876 three vessels account for 28 of the 48 Nova Scotia entries. Deaths are not workers: the register counts men who died, which over-represents dangerous voyages and vessels lost with all hands. Birthplace is not residence: some entries also print a residence in Gloucester or nearby. Incompleteness: the city's page says the list is unavoidably incomplete.

The documents. Babson's 1875 letter, quoted in the 1887 federal report, names pull factors (better vessels, good provisions, prompt cash settlement instead of payment in goods, quick promotion) and says the newcomers made up much of the crews and so bore most of the deaths. The 1887 report's estimates for about 1880 rank Gloucester's foreign-born fishermen as British Provincials (1,600), Scandinavians (nearly 400), Portuguese (250), men of British birth, a large proportion Irish (140) and French (about 70). The report also gives push factors for Nova Scotia (poverty in coast districts) on p. 15; we have not printed that passage, but advanced students can read it in the scan. Note that the report's own language about nationality and "race" reflects its time; if students open the full report, prepare them for that.

Connection to the standard. USI.T6.4 asks about causes of immigration and immigrants' roles in industrialization. Gloucester's fleet shows a different set of groups from the ones the standard names, which is a useful point in itself: most of the newcomers in this data came from British North America and Scandinavia, and the Irish appear mainly through the 1887 report's note about men of British birth.

Related Cape Ann Current story. Twelve of the 1876 entries name the schooner Joseph F. Allen: 10 for the crew lost with the vessel in October 1876, all printed as born in Nova Scotia, and two for men lost from her on the Grand Banks that April (one born in London, England, and one in Port Hood, Cape Breton). The 10-man October loss is the subject of the Cape Ann Current story linked below. This is a good example of how one vessel can add a cluster to a sample. Our story on that vessel is linked below.

Handling sensitive topics

Every row in this data set is a man who died at sea, and some students may have family who fished from Gloucester or who were lost. Open by saying so. Keep names out of the analysis, as the data sheet does, and remind students that a count is not a verdict on anyone's life. Avoid language that treats migrants as a problem or that ranks groups by worth. If students open the full 1887 report, they will find 19th century language about nationality and race; frame it as evidence of how officials wrote then, not as fact about any group. Do not discuss individual entries about children; they were excluded on purpose.

Discussion prompts

- Babson wrote that the fleet depended on newcomers. Who benefited from that arrangement, and who carried the risk?
- Is it respectful to turn people who died into counts? What can we do to keep them in view as people while still analyzing the data?
- If you could add one column to this data set, what would it be and where would you find it?
- How would you check whether the 1895 Nordic result is a real pattern or the effect of one or two vessels?
- What would you need to make a claim about why the share from Newfoundland changed, rather than only that it changed?

Formative checks

- After the warm up: each student names one thing a single row cannot tell them (for example, where he lived, how long he fished or why he came).
- During counting: check that each group's 1876 sample total adds up to 206 and that Not given is counted, not dropped.
- Spot check: ask a group to explain its denominator for one percentage.
- During the audit: ask pairs whether recoding the Unclear entries could change any region's rank; listen for reasoning with numbers.
- Before writing: students write one sentence that states a result and one sentence that states a limit, and swap with a partner for feedback.

Assessment

Write a findings brief of 250 to 350 words for a local history website. State your hypothesis, say whether the data supports it and include one table or chart comparing the three samples, described in words. Use at least one quotation from Babson's 1875 letter or the 1887 report to explain why people came to fish from Gloucester. Name at least three limits of the evidence and say how each could affect your conclusion. Cite the register and the 1887 report.

Points: 25

Answer guidance

A1

- Any clear, testable hypothesis earns full credit here. A common and reasonable one is that most were born in Nova Scotia and other provinces. Strong hypotheses name a direction of change and a result that would disprove them.

A2

- See the counts in the teacher background. Check denominators: region percentages use entries that give a birthplace (72, 102 and 106); Not given percentages use all entries (206, 131 and 112).
- Weakest sample: 1876, with 65 percent Not given.
- Nova Scotia and Newfoundland: Nova Scotia is the largest single place in every sample (48, 35, 53); Newfoundland rises from 1 to 16 to 24.
- 1895 vessel effect: the Mary S. Hontvent/Hontvet (as printed) has 10 entries with Nordic birthplaces (Norway 4, Sweden 4, Denmark 1, Finland 1). Removing it drops the Nordic count from 34 to 24; the J. H. Carey adds another 10. Deaths come in crew-sized clusters, so samples of deaths are lumpy.
- Massachusetts: 2 entries in all three samples (Provincetown and Brewster, both 1910 to 1912), plus 2 Unclear entries (Manchester and Rockport) that might be in Massachusetts. Possibilities: local men died less often (Babson's claim); compilers' sources recorded birthplace mostly for men from away; local men are among the Not given entries. The data cannot separate these.
- Charts should be described in words, for example: 'In all three samples the Maritime Provinces and Newfoundland bar is the tallest; the Nordic bar is highest in 1895.'

A3

- Lisbon: needs a country or state, or another record (a death record or census) for the same man. Coding it Portugal adds one entry to a region of three; it does not change any ranking.
- Rockport: the assumption is reasonable but unverified, and the same logic would code every unclear place by guesswork. Even both Unclear entries recoded to Massachusetts would only raise Massachusetts from 2 to 4.
- Pubnico differs from Lisbon because the name is known only in Nova Scotia, so the risk of error is small. Students should see that both rules weigh evidence, not convenience.
- Antigonish,CB: keep the entry as printed, normalize to Nova Scotia (both readings give the same province) and add a note. When a printed detail may be wrong but does not change the category, note it rather than silently correcting it.
- Newfoundland separated: the Maritime Provinces then hold 50 of 72 (69 percent) in 1876, 38 of 102 (37 percent) in 1895 and 55 of 106 (52 percent) in 1910 to 1912, and Newfoundland becomes its own group that grows over time. Nova Scotia and its neighbors still lead in every sample, but Nordic countries (34) come within 4 of the Maritimes (38) in 1895.
- New rules: accept reasoned proposals, for example a separate column for residence, or a confidence flag for inferred provinces.

A4

- Pay and conditions: prompt settlement and payment in cash instead of goods; liberal and excellent provisions; superior vessels. Advancement: rapid promotion to command of a schooner.
- 1876 count: supports it among the 72 entries with a birthplace (71 percent from the Maritimes and Newfoundland; only 2 Unclear entries name towns that might be in Massachusetts), but cannot test it fully because 134 of 206 entries have no birthplace.
- Order comparison: both put the Provinces first. The 1887 estimates put Scandinavians second, which matches 1895 (Nordic second at 33 percent) but not 1876 (United States second, mostly Maine). The Portuguese appear in the 1887 estimate (250) and in 1895 (5 entries) but not in the 1876 deaths.
- Living versus dead: deaths cluster on dangerous trips and lost vessels; men in different jobs or fisheries faced different risks; the 1887 figures are estimates gathered from ports; the register is incomplete and often lacks birthplaces.
- Standard's named groups: Irish appear once (1912) in the data sheet, with England and Scotland adding a few British-born men; no Italian or German birthplaces appear in these samples. One local industry can draw on different migrant streams from the national pattern, so local evidence complicates national generalizations.

A5

- Missing people: men whose deaths were never reported in Gloucester, those lost from other ports, or those whose records did not survive. Missing birthplaces fall most heavily on 1876.
- Birthplace versus residence: 'born in Nova Scotia' does not mean newly arrived; the data measures origin, not how recently someone migrated.
- One record per death: for example, in 1876 the William T. Merchant, Joseph F. Allen and James L. Shute each account for 12 to 14 entries.
- Gaps between samples: changes in the fishery, in laws or in migration between our snapshots would be invisible.
- Our rules: choices about Unclear entries and about grouping Newfoundland change percentages, which students tested in A3.

Rubric

Criterion	4	3	2	1
Hypothesis and conclusion (5 points)	States a testable hypothesis and a clear verdict that matches the data, including any part that was wrong. (5 points)	Hypothesis and verdict are clear; the verdict slightly overstates the data. (4 points)	Hypothesis is vague or the verdict is not tied to the data. (3 points)	No hypothesis or no verdict. (1 to 2 points)

Criterion	4	3	2	1
Data analysis and presentation (8 points)	Counts and percentages are accurate with correct denominators; Not given is reported for each sample; the table or chart compares all three samples and is described in words. (7 to 8 points)	Counts are mostly accurate; one denominator or label is off; the description is brief. (5 to 6 points)	Several errors, or Not given is ignored, or only one sample is analyzed. (3 to 4 points)	Little usable data analysis. (1 to 2 points)
Integration of documents (6 points)	Quotes Babson or the 1887 report accurately and explains how the document's causes or estimates fit or challenge the counts. (6 points)	Uses a document accurately but connects it to the data only loosely. (4 to 5 points)	Mentions a document without quoting or explaining it. (2 to 3 points)	No use of the documents. (1 point)
Limits of the evidence (6 points)	Names at least three limits and explains how each could push the results in a specific direction. (6 points)	Names three limits; explains the effect of two. (4 to 5 points)	Names one or two limits without effects. (2 to 3 points)	No limits named. (1 point)

Differentiation

Multilingual learners

- Preview the abbreviation key and glossary words (provinces, fares, provisions, settlement) with a map of New England and Atlantic Canada described aloud, and invite students to add home-language terms.
- Provide the hypothesis frame and these writing frames: 'The data shows ____.' 'This supports / does not support my hypothesis because ____.' 'One limit is ____, which could make ____ look larger or smaller.'
- Let students present their findings as an annotated table with short sentences instead of a full brief.

Students with disabilities

- Give a pre-filtered copy of the data sheet with one sample per tab, or assign one sample per group and share totals.
- Offer a partly completed tally table with the totals filled in so students focus on percentages and interpretation.
- All tables are text; charts must be described in words. Students may present results as a table rather than a chart.
- Allow speech-to-text or dictated briefs and extended time.

Advanced learners

- Add a fourth sample of your choice from the register's facts, such as 1923 to 1927, following the same rules, and test whether the pattern holds. Keep entries after 1950, entries about children and entries marked with '#' out.
- Read the 1887 report's passage on the causes of immigration from the Provinces (p. 15 of the scan) and compare its push factors with Babson's pull factors.
- Calculate how much the Nordic share in 1895 depends on the largest Nordic crew by recomputing it without that vessel, and write a sentence about the stability of the result.

Print, low-bandwidth and extension options

Print: Print the student handout for everyone. Print the data sheet as one copy per group (about 10 pages) or split it by sample so each group tallies one period and the class pools results on the board.

Low bandwidth: The data sheet works offline in any spreadsheet program once downloaded, and the whole lesson can run from printed copies with hand tallies. The 1887 report scan is optional.

Extensions:

- Visit the Cape Ann Museum library or the Sawyer Free Library to look for an 1880 or 1900 census page for a Gloucester fishing household, and compare birthplaces of the living with this data.
- Write a short public explanation of how to read the register's abbreviations for a museum or library display.
- Interview a family member or neighbor with a Gloucester fishing connection about where their family came from, and compare their story with the patterns in the data.

Google Classroom: ready to paste

Assignment title: Who Went Fishing? Findings Brief

Student instructions:

Make your own copy of the student handout and the data sheet. Write your hypothesis first. Then use the data sheet to complete the tally table for 1876, 1895 and 1910 to 1912, audit the normalization rules and read the 1875 and 1887 documents. Finish with a findings brief of 250 to 350 words that includes one table or chart (described in words), at least one quotation from the documents and at least three limits of the evidence. Cite the City of Gloucester Lost at Sea register and the 1887 report. The slides are attached for reference.

Suggested points: 25

Attach:

- **student-handout.docx:** Make a copy for each student
- **slides.pptx:** Students can view file
- **data-sheet.xlsx:** Make a copy for each student

Never attach the teacher guide to student work. See [how to use this lesson in Google Classroom](#).

Citations and rights

- City of Gloucester Archives Committee, Lost at Sea register (2010), based on the work of Roberta Sheedy. <https://www.gloucester-ma.gov/74/Lost-at-Sea>. Facts only; tables compiled by Cape Ann Current; the register's pages are not reproduced

- G. Brown Goode and Joseph W. Collins, The Fisheries and Fishery Industries of the United States, Section IV, The Fishermen of the United States (Government Printing Office, 1887), Internet Archive.
<https://archive.org/details/fisheriesfishery04good>. Public domain (U.S. federal government work, published 1887)

Lesson text by Cape Ann Current, free to use and adapt under our [Free Access and Attribution Policy](#). Credit: "Source: Cape Ann Current." with a link to <https://capeanncurrent.com/classroom/who-went-fishing/>. Public domain excerpts remain public domain; other sources keep their own terms, listed above. Version 1.0, 2026-10-05. Draft: awaiting classroom teacher review.