2024 CT ASA Poster Competition Fact Sheet

Sponsored by The Connecticut Chapter of the American Statistical Association

Posters must be received by: March 29, 2024

Overview:

Posters may be submitted either physically or digitally. A digital submission may be a high-quality photograph of the completed poster, or prepared using computer software (for example Microsoft PowerPoint or Adobe Illustrator).

Posters will be judged in four grade categories:

K-3
4-6
7-9
10-12

Winners will be awarded certificates and monetary prizes. In each category, first place poster will receive \$100, second place poster will receive \$75, and third place poster \$50. (Prizes are awarded per poster, not per individual for team entries.)

Winning and honorable mention posters will be entered into the ASA National Poster Competition. Posters may also be submitted directly to the national competition.

Important dates:

The deadline for submission is **Friday**, **March 29**, **2024**. Teachers and students with winning posters will be notified by **Tuesday**, **April 9**.

An awards ceremony will be held at the annual CT ASA mini-conference, in mid-tolate April 2024, exact date and location TBD.

Submission instructions:

Please send physical submissions by mail to:

Zhou Fan 219 Prospect Street Department of Statistics and Data Science, Yale University New Haven, CT 06511

Please send digital submissions by email to: CT.ASA.2024.poster.competition@gmail.com

Sincerely,

Zhou Fan and Leying Guan CT ASA K-12 Outreach Coordinators

Poster Contest Rules

One separate entry form must be completed and submitted with each poster.

- Any application form which <u>cannot be read</u> will not be included in the judging.
- Any poster which does <u>not have</u> an accompanying application form will also not be included in the judging.

Please read these rules carefully

- Students may work individually or in teams:
 - For those in the K-3 category, there is no restriction on the size of the team; it may be as large as the entire class.
 - > For other grade categories, the maximum number of team members is 4 students.
 - For teams with members from different grades, the <u>highest grade</u> determines the entry category.
- Posters <u>must be the original design and creation</u> of the entrants themselves. Subject matter is the choice of the participant(s) or their classmates.
- Except for the K-3 category, *more than one graph* is required.
- Posters *must* measure between 18 and 24 inches high and 24 and 30 inches wide. For digital posters, please ensure that the document page size falls within these limits.
- Computer graphics may be used in both physical and digital posters. For digital posters, please ensure that all text is in at least 16 point font.
- An example of the original data and <u>brief</u> descriptions of method of collection and purpose of the experiment should be taped to the back of the poster for physical submissions, and included as a separate image or text file for digital submissions. References must be cited for published data.
- Be sure the poster itself gives *no information* that identifies the team or school.

In submitting a poster, students agree that the poster may be displayed at the ASA's Joint Statistical Meetings, featured in its publications, and posted on the ASA or CT Chapter website.

All entries become the property of the sponsors and cannot be returned.

Guidance on Poster Content

- Students should keep in mind the following goals:
 - 1. Select a carefully focused question to investigate.
 - 2. Choose appropriate data to collect in order to answer this question.
 - 3. Analyze the data thoughtfully, and summarize the data graphically and visually.
 - 4. Use the data to draw the correct conclusion about the original question.
- A poster must be able to stand alone without a narrator to tell the story or a report to discuss the data. Not only must viewers understand the individual graphics, but they must also understand the relationships among the graphs, and how the graphs address the central question.
- Focus the <u>central idea or conclusion</u> should be the <u>most prominent feature</u> of the poster.
- Be consistent. Use graphs consistently to present the same types of data. Consistent use of colors and patterns is important. Use colors with restraint; colors should enhance recognition of the conclusion. If two graphs will be compared, make the size and axis labels consistent.
- Each graph should have its own title, labels, and legend. Units should be correctly marked on axes, and axes should be scaled appropriately.
- Use an informative title. The title may convey the major conclusion to be drawn from the data or ask a question which draws the viewer in.
- The poster is <u>not</u> a report and <u>not</u> an art project. The <u>central focus should be on the</u> <u>graphs, and the graphs should convey the central message</u>. Excessive artwork should be avoided. Data tables and detailed written explanations should not appear on the front of the poster.
- Do not have too many graphs If the poster contains more than five graphs then it almost certainly has too many. Usually three to five graphs suffice some show what data were collected and others summarize the conclusions. Each graph on the poster should convey new information about the data that cannot be seen in the other graphs. *It is generally not a good idea to plot the exact same data two different ways (i.e., a pie chart and a bar chart).*
- Sample sizes Percentages are often an appropriate tool for comparing different groups of data; however it is important to always report group sizes. For example, percentages would be misleading if a poster says that 75% of girls and 60% of boys like pokemon, and omits to report that 40 boys were surveyed, but only 4 girls were.

Judging Criteria

Judging will be based on the rubric available at <u>https://www.amstat.org/asa/files/pdfs/EDU-PosterJudgingRubric.pdf</u>. The poster will be scored on a 1-to-5 scale in each of the following criteria:

- **Overall impact of the display (poster design).** Poster design aspects, colors/patterns, grammar, spelling, dimensionality, readability, neatness
- **Formulate statistical investigative questions.** Statistical question that anticipates variability leads to productive investigations.
- <u>**Collect/consider data.**</u> How useful are the data for answering the statistical investigative question?
- <u>Appropriateness of the data visualization</u>. Visualizations address the investigative question
- <u>Creativity (topic is of interest).</u> "Who cares factor"

You can see examples of past winning posters here: <u>https://community.amstat.org/connecticutchapter/home/ct-poster-winners-2022</u>

For more information on the national competition, please visit: <u>https://www.amstat.org/asa/education/ASA-Statistics-Poster-Competition-for-Grades-K-12.aspx</u>

CT Chapter of the American Statistical Association 2024 Data Visualization Poster Competition

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ENTRY APPLICATION FORM

A separate entry form must be completed and emailed together with each poster. Please make certain that the poster itself gives no information that identifies the team or school.

email **: ______

Phone **: () _____ - _____

Please give students' name(s) and grade level(s) below.

Attach a separate list of all students if there are more than four team members (Note: This is only allowed for Grades K-3. All other grades must not have more than 4 members within a team.)

For winning posters, the names provided below will be as they are noted on the Award Certificates, therefore make sure full names are given and these names are legible.

1	Grade
2	Grade
3	Grade
4	Grade

I/we verify that this is my/our original work, and I/we understand that it will become the property of the American Statistical Association as a work for hire under the copyright act. In submitting a poster entry, students agree that the poster may be displayed at the ASA's Joint Statistical Meetings, featured in its publications, and included on its website.