Information for High School Authors

The Nova Scotian Institute of Science (NSIS) is launching its annual Student Science and Technology Writing competition in November 2027 for High School Students enrolled at a public, private, or First Nations school in Nova Scotia.
Students are encouraged to submit a self-written, **research essay** on a science or technology topic in a format accessible to the public for a chance to win a cash prize.

A research essay is defined as: a written paper that presents an argument or analysis about a specific topic and requires substantial research from credible sources to provide a well-supported, evidence-based perspective. Sources must be cited in the essay text and in an organized bibliography.

Why should you submit an Essay?

The competition offers students the opportunity to explore a topic that interests them in depth, to practice their ability to research, evaluate, and synthesize information and communicate this to the public, and to receive meaningful feedback on their writing from our panel of judges.

A minimum cash prize of $600 will be awarded to the best high school essay. Prize amounts may increase depending on competition sponsorship.

The winning student may be featured on the NSIS website and may be invited to submit their essay to the Proceedings of the Nova Scotian Institute of Science, a peer-reviewed, Atlantic Canadian journal. Winning essays submitted to the Proceedings are subject to the journal's normal editorial and peer review process and are not automatically guaranteed publication.

Topics and Guidelines

The competition welcomes any science or technology topic. Possible topics include climate change, Earth's ecosystems and cycles, the environment, human health, sustainable development, renewable energy, digital technology, artificial intelligence, innovations in space exploration, science communication, mathematics, and statistics. These are only suggestions to guide your brainstorming, and other topics within science and tech will be accepted.

The goal of your essay is to communicate an important science or technology topic at a level accessible to a general adult (18+) audience. In this context, assume the audience may have some limited general knowledge of common science and technology topics trending in popular culture, but are not necessarily experts on your topic. Avoid jargon

and acronyms. If you must use specific technical terms, they should be defined or explained, preferably in a Glossary. Scientific American, The Smithsonian, and The New Scientist can serve as models for this level of writing.

Competition entries must be an original essay that:

- Provides a thorough review of a science or tech topic, including why it is important and relevant to current society
- Represents your own analysis and opinion based on research from peer reviewed sources such as scientific journals, books, and reputable science magazines (e.g. Scientific American, Smithsonian Magazine, and The New Scientist)
- Includes a list of at least six (6) references from peer-reviewed science or technology sources
- Explains the topic in a way that is easily understood by a general, non-scientific audience and avoids using highly specialized or technical terms and acronyms. If technical terms are necessary, you must define or explain them.

Essay Formatting:

- Language: English*
- Line Spacing: 2.0 (double-spaced)
- Document size: Letter (21.59 cm x 27.94 cm)
- Margins: Standard 1-inch (2.54 cm) margins
- Font: Times New Roman, size 12
- Page numbers: number all pages except the title page

*Please reach out to the coordinators if a different language of submission is preferred. We will try our best to accommodate but cannot guarantee acceptance of your essay if we do not have judges available who speak the language of preference.

Essay Sections:

Your essay should include the following sections:

1. **Title Page**
   This is the first page with your essay's title, your name, your grade, your school's name, and the date submitted.

2. **Introduction**
   Start by explaining your topic and why it matters. Give some background information so the reader understands the importance of exploring the topic further, and end this section with your main idea or argument (thesis statement).
   Aim for 150-200 words in your introduction. Note introductions are usually about 10% of your total essay length.

3. **Body**
   This is the main part of your essay. Write several paragraphs, each focused on one main point that supports your thesis.
   Begin each paragraph with a topic sentence (a sentence that states the main idea of that paragraph).
   Use evidence or examples to back up your point.
   Explain how your evidence supports your main argument.
   Be clear and to the point—avoid adding unnecessary words or details.

   Aim for 1500-2000 words in the body of your essay. **Word count does not include the titles or captions of figures/graphs/tables included in your essay** and does not include the other sections, such as references or acknowledgments.

   Essays that do not fall within the word count range will be disqualified.

4. **Conclusion**
   Wrap up your essay by summarizing your main points. Restate your thesis in a new way and explain why your argument or findings are important.

5. **Acknowledgments**
   Note, to qualify for the competition, you must be the only author of the essay, however, if any others play a role in the preparation of your essay, it should be minimal, such as minor editorial suggestions from a teacher, parent/guardian, or fellow student, and they should be mentioned in this section. Write a short paragraph recognizing how they supported your efforts in creation of the essay and providing thanks for their support.

   If you use original photos or data from a science fair or class project that was completed with other people, you must recognize the peers that you completed that work within the acknowledgments section.

6. **References**
   List all the sources you used in your essay using **APA formatting.** The list is double-spaced and in alphabetical order by author's last name, and uses a hanging indent for each entry. Each reference includes the author's name (last name first, followed by initials), the publication year, the title of the work, and the source information like publisher or DOI/URL.

   For reference examples to help you with formatting see: The American Psychological Association's page on Reference Examples:
   https://apastyle.apa.org/style-grammar-guidelines/references/examples
   Grammarly also offers a Citation Generator.
   Do not include your name, school name, or other identifying personal information in the body of the essay. This information should only be placed on the title page.

Copyright, Plagiarism, and AI Use:

Please respect copyright laws. If you need to use an illustration, graph, chart etc. from a journal or book, you must have written permission from the original publication to reproduce their figures.

All essays will be screened for plagiarism and use of AI using software. Plagiarism or AI assisted writing such as ChatGPT will result in immediate disqualification from the competition.

Registration & Privacy Disclosure

Students must register by completing the Google Form linked below on or before the end of day (11:59 pm) on **Wednesday, December 23, 2026.**
Link to registration form: https://forms.gle/EbZHNzHVwNDDzHpt6

The following information is asked for on the registration form:

- Your name, grade, school name and student email address
- The topic of your proposed essay
- Parent/guardian name, email, and phone number

By submitting this form, parents/ guardians and students consent to the NSIS competition coordinators collecting and storing your personal information on our Google Server to contact you about future student opportunities. Your information will not otherwise be shared publicly unless your entry is selected as a winner or honorable mention, in which case your name, school, and grade may be released on our website, social media, and by public announcement during our Annual General Meeting in May or June.

Essay Submission & Competition Coordinators

Email submission is strongly preferred. Please submit an electronic copy of your article as a Word document (doc or .docx) to the e-mail address below.

Competition Coordinator:
Connor Smith, Saint Mary's University
E-mail: nsis.1862.competition@gmail.com

If electronic format is unavailable to you, please contact the Coordinators to arrange drop off or mailing of your essay before the submission deadline so it is received by the deadline.

Submission Deadline: Submit your essay by: **Saturday January 30, 2026 at 11:59 pm. Late Submissions will not be accepted or judged.**

Judging Criteria

All essays will be judged according to the following criteria:

- **Significance and relevance of the subject**
  What are the advantages of exploring this topic further or raising public awareness about this topic, and does it address an important current or future need?

- **Comprehensiveness, accuracy, and analysis**
  Have you done significant research using peer-reviewed sources to provide a good depth of ideas and provide support for your main points with evidence and in-text citations?

- **Scientific or technical correctness -** Have you explained the subject accurately?

- **Clarity of presentation -** Is your purpose/thesis clear?
  Is the essay well- explained with a logical flow of ideas that work together to come to a strong evidence-based conclusion? Is your language concise (avoiding run-on sentences) and easy to read for a general audience (free of technical terms or with clear definitions if needed)?

- **Writing Mechanics -** Is your essay free of spelling and grammar errors? Is it formatted properly according to the guidelines provided? Does it have a properly formatted reference section and in-text citations?

- **Overall impression of the paper -** Did the essay have a significant impact on the reader? Did they learn something new, or were they swayed by your persuasive and well-supported argument? Would they recommend your essay to someone else to read?

- **Bonus Points** will be awarded if you clearly and thoroughly explain why your topic is of specific relevance, importance, or benefit to Nova Scotia with supporting evidence.

Our panel of 5+ judges come from a wide variety of scientific and technological backgrounds and perspectives, and may include professors, teachers, senior scientists, graduate students, post docs, and those currently working in science and tech industries. To make the judging process as fair and unbiased as possible, judges work from a scoring rubric with the above criteria, and essays are subject to a blind review process. This means your name, school, and grade will be removed before

sharing your work with the judges. Judges will only be aware that you are a high school student since we also have a university/college category. Decisions made by the panel of Judges are final and not subject to appeal.

Winners and Presentation of Awards

The winners of the competition will be contacted around **April 3, 2027,** and the winning entries will be announced on the NSIS website.

Presentation of the awards (certificates and cheques) will take place at the Annual General Meeting of the NSIS in May or June 2027.

Winning students who are unable to attend the awards presentation in person in Halifax may join us on Zoom to be recognized virtually and their award will be mailed out to a location of their choosing.