North American Computational Linguistics Open competition

What is it?

NACLO is a contest for high school and older middle school students involving linguistic puzzles. Participants apply their skills in logical analysis, learn about the diversity and consistency of language, and have fun.

See nacloweb.org for more information.

How to get involved?

There are several ways you can be involved with NACLO:

Host the contest: Any college or high school can provide a site for local students to take the test.

Create puzzles: Every year we need a new set of puzzles, ideally covering a diverse range of topics and subfields.

Vet puzzles: All puzzles must be rigorously tested to ensure they are logically consistent, solvable, and fun.

Donate: If you or your organization would like to be a sponsor of NACLO, contact levin@andrew.cmu.edu.

Timeline

• Late January: Open Round
  • Roughly 1500 students participate.

• Early March: Invitational Round
  • Top 10% from the Open Round participate.

• Summer: International Linguistics Olympiad
  • Top finishers from the Invitational Round represent the US and Canada.

Contact us

If you have questions or would like to volunteer, email: naclow23org@googlegroups.com.

Try some puzzles!

Luvian

The following are inscriptions in hieroglyphic Luvian, an ancient Anatolian language related to (and once thought to be) Hittite. These writings were totally incomprehensible until one scholar discovered the key: many of the words were names of regions, cities, and kings.

1. 6
2. 3
3. 5
4. 7
5. 2
6. Luvian

Above are six inscriptions that correspond to the names of two regions (Elbanite, Pallas), two cities (Karshuma, Tarasmuna), and two kings (Turpaleu, Tarbemara). Your job is to match each inscription with the name that it represents. The process you use to solve this puzzle is very similar to what archeological linguists actually do when they discover writings and inscriptions in unknown languages.

(Original problem by A. S. Bickel; English adaptation by Valinder Fyhrin.)

Indonesian

Below are some Indonesian sentences along with their English translations:

<table>
<thead>
<tr>
<th>Indonesian</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sapi-sapi dengar anjing besar</td>
<td>The cows hear the dog</td>
</tr>
<tr>
<td>Sapi lihat pisang</td>
<td>The cow sees the banana</td>
</tr>
<tr>
<td>Kucing suka pisang-pisang</td>
<td>The cat likes the bananas</td>
</tr>
<tr>
<td>Sapi lihat pisang besar</td>
<td>The cow sees the big banana</td>
</tr>
</tbody>
</table>

Question: How would you say “The big cat likes the dogs” in Indonesian?

Created by Tom McCoy

Visible speech

Alexander Melville Bell (father of Alexander Graham Bell) invented Visible Speech as a more detailed and systematic writing system for English, to help deaf students learn to pronounce spoken language more accurately.

Question 1: The following words in Visible Speech represent boot, cops, peaks, and tap, but not in that order. Which is which?

Question 2: What English words are represented by the following?

Created by Natalie Weber and Patrick Littell