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Taking Aim at Solutions: Teaching English Through Anthropogenic Global Warming

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New Column: Postgrad Course Review

Plus: Teaching Talking about Global Warming

And: What You Enjoyed/Missed at the 2015 International Conference
Taking Aim at Solutions: Teaching English Through Anthropogenic Global Warming

By Alexandra Panos, James Damico, Hyona Park, Su Jin Park, Yeoeun Park, and Jaclyn Sylvia

Teaching English through anthropogenic global warming (AGW) presents unique challenges including supporting vocabulary acquisition, finding sources that can be used by a diverse range of language learners, and creating authentic opportunities for students to act on their new knowledge. Promoting a focus on solutions to a complex topic such as AGW with students who speak multiple first languages also has the distinct advantage of becoming a potentially global experience, enriching not only the topics of English classrooms but expanding what it means to be active participants on the global stage in responding to the threat of AGW.

A Classroom Activity Focused on Solutions

This activity is appropriate for learners studying English at various stages. It centers on supporting students to engage with a quality source – a web-based TED Talk video – that emphasizes solutions to AGW. The video, which includes subtitles and transcripts in 27 languages (including Korean), is a talk given by Vicky Arroyo, Executive Director of the Georgetown Climate Center at Georgetown Law, titled Let’s Prepare for Our New Climate (Arroyo, 2015). She begins by presenting contrasting images of before and after Hurricane Katrina, a natural disaster in the U.S. that left more than 1000 people dead and the city of New Orleans devastated. Her main argument is that countries are competing with one another in order to avoid the economic, environmental, and human toll of natural disasters. She argues instead for addressing the consequences of natural disasters cooperatively. In doing so, Arroyo emphasizes the power of human resources, and how our awareness of the effects of climate change and readiness for the future is crucial to life on Earth.

Before Viewing the TED Talk Video

In order to support students across language acquisition levels, teachers need to create opportunities to ignite background knowledge and develop some understanding of key vocabulary. A graphic organizer allows students to use words and drawings to demonstrate their knowledge of causes, effects, adaptations, and solutions to AGW (view example image at http://tinyurl.com/zja8gbj). These different ways that students can use to express understanding of the topic also enables students of different English abilities to work together. For example, an advanced student working with a beginner could write a caption for a beginner’s drawing.

Students who struggle with listening comprehension may successfully access these ideas by watching the wordless cartoon Tears in the Arctic by Haeseol Kim, (YouTube, 2015) which addresses issues of AGW. After watching the cartoon, students can use the “Effects” section of the organizer to write or draw the effects of climate change from their own knowledge and ideas they learned from the video.

For more advanced students, the effects of climate change could be considered by introducing vocabulary from the TED Talk video. A graphic organizer can group related lexical items into boxes (view example image at http://tinyurl.com/zja8gbj). Students can also identify the relationship between words through discussion. In this way, the relevance of the vocabulary is immediately apparent and becomes a part of a memorable web of words; additionally, students are primed for the content of the TED Talk. Finally, in the last section of the organizer, labeled “Adaptations and Solutions,” students can write or draw solutions they are aware of or make predictions about the content of the TED Talk.

Differentiated Viewing

The TED Talk supports differentiation for English learners via subtitles and transcriptions in English and Korean. Each group can view the video, engage in small group work to discuss the main ideas and vocabulary from the video, and continue to add to the graphic organizer section.
on Adaptations and Solutions. Table 1 lays out how instructors can approach varying levels of English when presenting this video.

For each group, the viewing should start by watching the video with the directive to take notes on the main ideas, key vocabulary, and adaptations and solutions for AGW. Students should take notes in the language with which they feel most comfortable. After viewing, transcripts can be distributed to students to support small group discussions of the main ideas and key vocabulary they took note of as they watched the video. Instructors can have small groups then share with the larger class. Finally, the students can all return to their first graphic organizer and continue to work in small groups to add ideas to the Adaptations and Solutions section. Instructors can encourage students to use their own background knowledge, original ideas, and those presented in the TED Talk.

<table>
<thead>
<tr>
<th></th>
<th>Beginning</th>
<th>Intermediate</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Video Viewing</strong></td>
<td>With Korean subtitles</td>
<td>Once with Korean subtitles; once with English subtitles</td>
<td>With English subtitles</td>
</tr>
<tr>
<td><strong>Small Group Discussion</strong></td>
<td>Focus on main ideas in Korean and English</td>
<td>Focus on main ideas and vocabulary in Korean and English</td>
<td>Focus on main ideas and vocabulary in English</td>
</tr>
<tr>
<td><strong>Transcription Support for Small Groups</strong></td>
<td>Use Korean transcript</td>
<td>Use Korean and English transcripts</td>
<td>Use English transcript</td>
</tr>
<tr>
<td><strong>Adaptations &amp; Solutions, Graphic Organizer Work</strong></td>
<td>In Korean, English, and drawings</td>
<td>In Korean and English</td>
<td>In English</td>
</tr>
</tbody>
</table>

Writing Authentically to Propose Solutions

All this work supports students in learning the language and vocabulary necessary to begin promoting their own ideas on AGW and to note potential solutions to AGW (their own and those from the video). AGW requires action around the world in terms of adaptations and solutions, and these students are poised to offer useful ideas to audiences in at least two languages. Writing that engages in contexts beyond the classroom is considered an authentic literacy activity because it not only helps students to develop both comprehension and writing ability, but also to communicate in an “outside of a learning-to-read-or-write context” (Duke et al., 2006).

In small groups, students can work to produce their own writing about solutions they propose for AGW by developing brochures in both Korean and English. The form of the brochure can vary, but students can include English and Korean vocabulary they have learned in the AGW lesson and use images to help others connect to the ideas they propose. Brochures can be created using word-processing software on the computer, finding images online, or by drawing them themselves after printing. Students can also choose for whom they write and how they might distribute the brochures to make the greatest impact. For example, they could distribute their work around their school, share it with their family, or send it to a school in another part of the country or world.

Conclusion

Pope Francis, in his recent encyclical on climate change, reminded us that while AGW presents incredible challenges, “... all is not lost. Human beings, while capable of the worst, are also capable of rising above themselves, choosing again what is good, and making a new start” (W2.Vatican.va, 2015). The teaching of English through AGW is a unique opportunity to help position students as informed participants in a global dialogue on climate change. This activity promotes English language learners at all levels
as capable of adding to the conversation about solutions to anthropogenic global warming.

**References**


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