Critical Thinking Through Global Learning

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Critical Thinking

- Is “in short, self-directed, self-disciplined, self-monitored, and self-corrective thinking, which requires rigorous standards of excellence and mindful command of their use” (Paul & Elder, 1999, P.2)
Global Learning as Window to the World

1. Assist students in seeing the connections between their studies and the world outside the classroom
2. Increase awareness among students regarding global issues and challenges
3. Increase awareness on the effects of culture and society on global issues and challenges
4. Increase awareness and understanding of diverse student population
5. Improve communication skills
International Virtual Exchange

TECHNOLOGY ENABLED
SYNCHRONOUS OR NEAR SYNCHRONOUS
STRUCTURED INTERCULTURAL EXCHANGE
STUDENT TO STUDENT

International Virtual Exchange Workbook- Office of Global Engagement, Clemson University
International Virtual Exchange in Undergraduate Courses
Spring 2020 IVE Project

Clemson University pre-service teachers specializing in science and math for elementary schools.

Oranim College pre-service teachers specializing in special education for elementary schools.
Incorporate global learning into college-level coursework

Assist students in seeing the connections between their studies and the world outside the classroom

Students will develop a shared lesson plan

Students will teach the lessons in parallel at local elementary schools

Students will share, analyze and evaluate experiences.
Revised Objectives

Incorporate
- Incorporate global learning into college-level coursework

Assist
- Assist students in seeing the connections between their studies and the world outside the classroom

Discuss
- Discuss the effects of the current pandemic on the educational system in both countries

Apply
- Apply your knowledge by developing and presenting an online activity for elementary classroom

Evaluate
- Evaluate the importance of global learning
Methods

Shared Zoom meeting with the two courses

“Canvas Free for Teachers” for discussion and cooperation

Final presentations through Zoom
“Global education is important because with the availability of the internet, we come across and connect with so many people. This broadens our perspectives and allows us to network with people across the globe. Students from different areas of the world have different experiences and ideas that opens minds and increases critical thinking. Despite the language barrier, I think this global learning project has the ability to teach us new things and experience learning in a way we have not before.”

“It really does make the world feel a bit smaller, it shows that we’re more connected than we realize. It’s been so interesting to meet people from around the world that are studying and interested in the same field of work that we are too. I think this global learning project will be a great experience for everyone and I’m really looking forward to collaborating with my group! I wish more students on campus and in other schools had the opportunity to do this.”
Students’ Testimonials - Oranim Students

Global learning contributes to the development and promotion of students’ social growth. It contributes to learning about different perspectives, which broadens students’ knowledge horizons.

Global learning/education is important in our modern world because it contributes to intellectual development, so that the student can learn about different perspectives that would affect his lifestyle for the better.

global learning gave us a lot of different perspective from all around the world and showed us that many countries suffers from a lot of common issues
Spring 2021 IVE Project

Clemson University
Course: Introduction to Environmental science and Policy - ENSP 2000
Population: Sophomores to Seniors
Field of Study: All majors

Tel Hai College
Course: Advanced Seminar
Population: Juniors
Field of Study: Biotechnology majors
Methods

Shared Zoom meeting with the two groups

“Canvas Free for Teachers” for discussion and cooperation

Final presentations through Zoom
CU - ENSP 2000 (CT2, STS)
Basic principles of environmental science, including ecology, energy, resources, waste management; and air, water, and soil pollution. Consideration of issues, specific cases, investigative approaches, and remedial actions.

Tel Hai College - Advanced Seminar
Advanced practice in scientific writing, an in-depth research study of a selected topic in the field of environmental science, writing a scientific manuscript, and giving a scientific presentation in a binding form.
Project Agenda

Zoom meeting - Introduction, Breakout rooms with a Tel Hai leader and a group from CU.

Discussion post: "Ice Breaker."

Discussion post: "Your project topic as a global challenge?"

Canvas groups: Tel Hai student as a leader of CU group.

Zoom meeting - Tel Hai students' presentations, CU students should ask at least one specific question about one topic presented and give constructive comment on another.

Zoom meetings - CU students' presentations, Tel Hai students, invited to attend based on their availability.
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<thead>
<tr>
<th>Tel Hai - Research Topic</th>
<th>ENSP 2000 Group - Final Project Topic</th>
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<tbody>
<tr>
<td>Microplastics in the marine environment and its impact on animals and the human food cycle</td>
<td>Microplastic in the ocean and its impact on animals and human food cycle.</td>
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<td>Phosphorus recycling from agricultural wastewater and the circular economy to reduce its pollution to water and soil</td>
<td>Water pollution due to fertilizer runoff.</td>
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<td>Large-scale biodiesel production from different oil types using immobilized lipase</td>
<td>Biodiesel production from different oil types in the US.</td>
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<td>The impact of invasive insects on the development of eucalyptus trees and ecosystems in Israel</td>
<td>Invasive forest insects in North America.</td>
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<td>A comparative economical and environmental overview of hydrogen production processes</td>
<td>Hydrogen production in the USA.</td>
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<td>The effect of climate change on underwater circulations on the shores of Israel / and an</td>
<td>The effects of climate change on the Atlantic Ocean</td>
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<td>overview of circulations on the eastern coast of the Mediterranean region</td>
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<td>Production of energy from growing algae - limitations and challenges in the production</td>
<td>Production of energy from growing algae in the USA.</td>
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<td>The effect of the closures following the Covid19 pandemic on global warming and air</td>
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<td>pollution in particular</td>
<td>warming and air pollution in the USA.</td>
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<td>Use of Entomopathogenic fungi in integrated pest control in agriculture</td>
<td>The use of Fungi as a biological control of pests in agriculture.</td>
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<tr>
<td>Wind energy - onshore versus offshore turbines to generate electricity</td>
<td>Wind energy for electricity generation in the USA.</td>
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Students’ Reflections

◦ How did this international collaboration affect your understanding of global challenges related to our environment?

  ◦ “It was interesting to hear these topics explained from someone with a new perspective…”
  ◦ “It made me realize that even though our environments may be very different and in very different places, we still face very similar issues.”
  ◦ “…People all over the world are aware of and trying to find solutions that we hear about all the time in America.”
  ◦ “It was really and eye opener…”
  ◦ “It made me feel that I was a part of a solution to bigger issues than just our own.”
  ◦ “…to hear about these issue first hand from international students really emphasized the meaning of global challenges.”
  ◦ “Overall this project was a fun experience and pretty eye opening…”
  ◦ “It was very interesting to see students from other county and the way they go about learning materials like the way we do…”
  ◦ “….it provided a large awareness of how global challenges are not only similar across countries but also are connected throughout the world.”