



# Critical Thinking Through Global Learning

Minory Nammouz

# 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



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



Increase awareness among students regarding global issues and challenges



Increase awareness on the effects of culture and society on global issues and challenges



Increase awareness and understanding of diverse student population



Improve communication skills

# International Virtual Exchange



TECHNOLOGY  
ENABLED



SYNCHRONOUS OR  
NEAR  
SYNCHRONOUS



STRUCTURED  
INTERCULTURAL  
EXCHANGE



STUDENT TO  
STUDENT



# 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

- Incorporate global learning into college-level coursework

Assist

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

Develop

- Students will develop a shared lesson plan

Apply

- Students will teach the lessons in parallel at local elementary schools

Analyze and Evaluate

- Students will share, analyze and evaluate experiences.

Original  
Project  
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

## Revised Objectives

# Methods

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Shared Zoom meeting with the two courses

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*"Canvas Free for Teachers"* for discussion and cooperation

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Final presentations through *Zoom*

# Students' Testimonials - Clemson Students

*"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

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Shared Zoom meeting with the two groups

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*"Canvas Free for Teachers"* for discussion and cooperation

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Final presentations through *Zoom*

# Courses Objectives

## 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.

# Final Projects Titles

<b>Tel Hai - Research Topic</b>	<b>ENSP 2000 Group - Final Project Topic</b>
Microplastics in the marine environment and its impact on animals and the human food cycle	Microplastic in the ocean and its impact on animals and human food cycle.
Phosphorus recycling from agricultural wastewater and the circular economy to reduce its pollution to water and soil	Water pollution due to fertilizer runoff.
Large-scale biodiesel production from different oil types using immobilized lipase	Biodiesel production from different oil types in the US.
The impact of invasive insects on the development of eucalyptus trees and ecosystems in Israel	Invasive forest insects in North America.
A comparative economical and environmental overview of hydrogen production processes	Hydrogen production in the USA.

# Final Project Titles- Cont.

<b>Tel Hai - Research Topic</b>	<b>ENSP 2000 Group - Final Project Topic</b>
The effect of climate change on underwater circulations on the shores of Israel / and an overview of circulations on the eastern coast of the Mediterranean region	The effects of climate change on the Atlantic Ocean
Production of energy from growing algae - limitations and challenges in the production process	Production of energy from growing algae in the USA.
The effect of the closures following the Covid19 pandemic on global warming and air pollution in particular	The effects of the closures following the Covid19 pandemic on global warming and air pollution in the USA.
Use of Entomopathogenic fungi in integrated pest control in agriculture	The use of Fungi as a biological control of pests in agriculture.
Wind energy - onshore versus offshore turbines to generate electricity	Wind energy for electricity generation in the USA.

# Students' Reflections

- How did this international collaboration affected 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."*