



Level Up Village®

Powered by Language Testing International®

Case  
Study

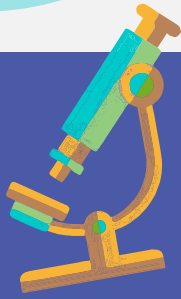
# From Virginia to Mexico:

A Journey of Environmental  
Discovery and Collaboration  
with LUV's Global Scientists



Pembroke Meadows Elementary School, USA  
and Colegio Champal, Mexico

This case study has been created in collaboration with Lauren Pate,  
Instructional Technology Specialist at Pembroke Meadows Elementary School



# Summary

As an Instructional Technology Specialist, Lauren Pate sought ways to expand her students' experiences beyond the confines of the traditional classroom setting. Her goal was to equip them with essential skills for the future, foster a global perspective, and cultivate empathy. Six years ago, she discovered Level Up Village (LUV) and has since facilitated connections between 1-2 classrooms each year. The impact of LUV courses on both teachers and students has been profound, reshaping their worldview.

In the spring of 2024, one of the courses Lauren implemented was "Global Scientists," focusing on vital water-related topics like pollution, scarcity, and solutions. Through hands-on experiments, students designed aquifers and water filters, empowering them to tackle real-world challenges. Two fourth-grade classes from Pembroke Meadows Elementary, where Lauren teaches, collaborated with their peers at Colegio Champal in Mexico. They exchanged video messages after each lesson, fostering cultural exchange and understanding. Initially, the focus was on sharing aspects of their respective cultures and gaining insights into daily student life. As the academic lessons and experiments progressed, the video messages evolved to include brainstorming and analysis. At the end of the project, the two schools arranged a live chat session to further enhance cultural understanding and conclude this enriching educational experience.



Engaging in the LUV Program was an amazing learning experience, fostering creativity and problem-solving skills in our young learners. Connecting with kids from another country enriched the experience by promoting cultural understanding and collaboration. This project not only cultivated a passion for STEM but also instilled valuable global perspectives, preparing students to thrive in an interconnected world. We can't wait to do it again next year!

**Charlene Widel, Gifted Resource Teacher**



## Goals



Equip students with VBCPS Future Ready skills.

- *Cross-Culturally Competent:* Recognizing and respecting one's own culture and other cultures to work well with others and more fully understand the impact of national and world events.
- *Socially Responsible:* Acting with integrity and empathy while demonstrating personal accountability and making a positive contribution to society.
- *Problem Solvers and Value Creators:* Identifying and solving problems through creative thinking and innovation to address challenges.
- *Communicators and Collaborators:* Listening and articulating effectively for a variety of purposes and working well with others while being willing to understand and offer alternate points of view.



## Implementation

- Connect with a school in rural Mexico using the Level Up Village platform.
- Exchange videos about the project over 4 weeks.
- Investigate human effects on their environment, specifically, access to clean water.
- Design experiments on three different water filtration systems as solutions (aquifer, charcoal filter, desalination filter).





## ● Results

- Successful design of three water filtration systems.
- Deeper understanding of how humans affect their environment and issues with access to clean water facing communities around the world.
- Improved communication, collaboration, and digital literacy skills.
- Enhanced understanding and appreciation of other cultures.





## Goals

With 13 years in education, Lauren Pate currently serves as the Instructional Technology Specialist for grades K-5 at Pembroke Meadows Elementary School in Virginia Beach, Virginia. Six years ago, Pate embarked on a quest to find projects that would broaden student understanding through authentic learning opportunities, while fostering worldwide connections and student agency. Her search led her to Level Up Village, a platform endorsed with the ISTE Seal of Alignment, offering courses that address various UN Sustainable Development Goals. LUV's pedagogy embraces a student-centered approach where students take charge of their learning through engaging hands-on, collaborative global projects.

Establishing a strong partnership with Level Up Village, Pate has facilitated numerous connections for her students, including the recent collaboration with fourth graders from Mexico in the "Global Scientist" course. This exciting opportunity was extended to 48 fourth grade students, promising a unique and enriching experience around the topic of water conservation.

Beyond benefiting her students, Pate recognized the opportunity to enhance the professional development of the classroom teachers involved. By participating in such projects, the teachers can further support their students in making academic connections and fostering empathy towards individuals from diverse backgrounds.





## ● Implementation

In November 2023, Pate led fourth-grade classes taught by Mrs. Mahl and Ms. Rinaldi as they embarked on their academic journey with Level Up Village. The collaborative project, titled “Global Scientist: Water Experimentation,” focused on researching the human impact on the environment in their respective regions. Students engaged in video exchanges to uncover environmental issues they faced and explore potential solutions. Their global partner classes, located at Colegio Champal in Mexico and facilitated by Enrique May Rodriguez, provided a unique cross-cultural experience.

The central theme of the course was access to clean water worldwide. Students delved into the water cycle, investigated various filtration systems, and designed experiments to address clean water challenges. Working in small groups, they constructed and tested three types of filters: aquifer, charcoal, and

desalination. During the discussions, students also drew parallels to their local communities by comparing the filtration systems to natural sources, such as the oysters in the Chesapeake Bay in Virginia Beach. Following each experiment, they shared video messages containing reflections and queries related to the weekly filter topic with their partner class. This exchange allowed students to watch their peer's videos and provide responses.

Throughout the project, Pembroke Meadows students gained insight into the daily lives of their Mexican counterparts and learned about their access to clean water resources. The students from Mexico communicated in English, facilitating understanding of their videos on the secure LUV platform. These videos provided a cultural window into their partners' school environment, clothing, interactions, and available resources for their projects.



Chrissie Mahl, a 4th Grade Teacher at Pembroke Meadows School said this about the experience: "My fourth-grade students at Pembroke Meadows embarked on an incredible experience of learning and discovery. Engaging in various experiments and collaborative projects with their peers in our classroom, they not only expanded their knowledge but also fostered meaningful connections across borders.

One of the highlights of our study was creating an aquifer to understand the dynamics of freshwater supply. This hands-on experiment was exciting for them as they became very involved in accessing clean water. Through trial and error, they gained a deeper understanding of environmental science and the importance of sustainable water management through Level Up Village."



## • Results



This inquiry-based learning approach seamlessly integrates real-world skills with cross-curricular connections. From literacy components tied to research, to geographical knowledge acquired about another country, and the interactive experience of product design and building, the students engaged in a multifaceted learning journey. By the project's conclusion, they demonstrated increased cultural

awareness and content knowledge, transitioning from novice to proficient learners.

The enthusiasm was transparent among the students. The engaging nature of the project catered to students of diverse abilities and interests. They eagerly participated in weekly activities, often stopping me in the hall to inquire about upcoming lessons or share newfound facts about aquifers from their water bottle labels during lunch.

**Lauren Pate**





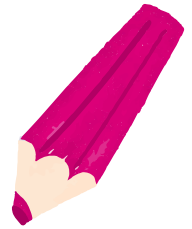
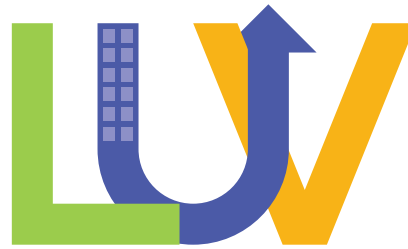
Beyond subject-specific gains, students honed communication, collaboration, and technological skills. Collaborating in groups, they researched, designed, and answered reflection questions using tools like Google Docs and Canvas. Their final presentations took the form of videos, fostering confidence in public speaking and digital citizenship. As global ambassadors, they learned the 'netiquette' of working on an international scale.

**“Despite differences in location and time zones, our students discovered common ground with their counterparts in Mexico. Shared interests in food, sports, and holidays bridged cultural gaps. A culminating live Google Meet at the end of the project provided a unique opportunity for mutual acquaintance of deeper conversations about their respective cultures. A particularly delightful moment was the**

**reciprocal rendition of national anthems, underscoring the cultural exchange at the heart of the project,”** Pate reflected on her experience.

Furthermore, this experience has instilled in the students a sense of personal and social responsibility. They have embraced practices such as recycling, cleaning up trash, avoiding chemicals and pesticides, and conserving water. By taking these actions, they are actively contributing to a healthier environment and demonstrating their commitment to sustainable living. Given the presence of many military-affiliated families in Virginia Beach, this newfound awareness of environmental issues not only positively impacts their immediate surroundings but also equips them with the essential skills to make informed and responsible choices for the future as global citizens in our interconnected world.





# Level Up Village®

Powered by **Language Testing International®**

The mission of Level Up Village here is to globalize the classroom by facilitating cultural collaboration between students from around the world. Guided by our carefully curated content, students build communication skills and collaborate with their global peers to explore topics in Arts & Sciences or Languages & Cultures through our safe and secure online platform. Through these exchanges, students enhance their understanding of other cultures, strengthen their intercultural communication skills, and gain empathy.



580 White Plains Road, Suite 660,  
Tarrytown, NY, 10591, USA



+1 (203) 357-5271



levelupvillage.com

©2024 Language Testing International®