Erasmus+ GEOSCHOOLS Project

MEETING MINUTES

11 - 13 March 2025 in Afyon, Turkey

Day 1: Conference on Innovative Teaching of Climate Change (11 March 2025)

The Erasmus+ Geoschools Project meeting in Afyon, Turkey, brought together partners from Poland, Romania, Iceland, and Turkey to continue their collaboration on integrating geosciences and climate change education into school curricula. Hosted by Ali Çağlar Anadolu Lisesi in cooperation with Afyon Kocatepe University, the two-day event combined a conference on innovative teaching methods with a field excursion to Kula Geopark, offering participants both theoretical and practical insights into geosciences.

The first day began at *Afyon Kocatepe University Küçükkurt* Conference Hall, where the host institution welcomed participants and introduced the main themes of the conference. The opening session provided an overview of the project's achievements so far, emphasizing the importance of geoscience education, the role of geoparks in raising awareness about climate change, and the potential for European schools to collaborate on innovative teaching methods. A video presentation highlighted key moments from previous mobilities in Iceland, Poland, and Romania, setting the stage for further discussions on how the project's outputs—lesson plans, geoactivities, and the board game—can be effectively implemented.

Following the introduction, the first session featured a presentation on Kula Salihili Geopark, which explored the geopark's unique topography, its volcanic history, and its relevance to climate education. The landscape of Kula—formed by volcanic activity millions of years ago—provides an ideal setting for teaching students about earth sciences.

The morning continued with keynote speeches from project partners, each addressing a different aspect of geosciences and education. Arnbjörn Ólafsson from Iceland spoke about the role of geoscience education in fostering climate awareness, drawing on experiences from Iceland's geothermal and glacial landscapes. Dumitru Nicolae from Romania provided insights into how paleontology and fossils help us understand past climate changes and how this knowledge can be used to inform modern climate models. A representative from Poland introduced geoactivities designed for teaching climate change in an engaging way, including interactive lesson plans and board game concepts that encourage student participation.

To further engage participants, an interactive Twister-inspired game designed by Turkish students was introduced, incorporating climate change facts into physical movement challenges. Attendees participated in a quiz that tested their knowledge of climate science, and the conference concluded with reflections on how these educational tools could be adapted for different school settings, ensuring that the lessons learned would continue beyond the project's duration.

In the afternoon, the group departed for a walking tour of *Ayazini*, an area renowned for its rich historical and geological heritage. *Ayazini*, located in the *Phrygian* Valley, is famous for its rock-hewn churches, tombs, and settlements carved into the soft volcanic tuff. This ancient site provided a striking example of how geology has shaped both natural landscapes and human civilization.

As participants walked through the valley, local guides explained how the volcanic deposits of the region had been eroded over centuries, creating the dramatic rock formations that served as dwellings and places of worship. The tour also touched on the cultural significance of Ayazini, with its blend of Phrygian, Roman, and Byzantine influences. Discussions centered on how such locations can serve as outdoor classrooms, where history, geology, and environmental science intersect to create a multidisciplinary learning experience. The day ended with free time for participants to reflect on the conference and explore the village's unique surroundings before returning to Afyon for the evening.

Day 2: Kula Salihili UNESCO Global Geopark (12 March 2025)

The second day of the meeting was dedicated to an excursion to Kula Geopark, a UNESCO-listed site recognized for its volcanic landscapes, basaltic columns, and rich biodiversity. The group departed early from Afyon and traveled to the geopark, where the first stop was the Kula Fairy Chimneys, striking rock formations shaped by volcanic activity and erosion. Here, discussions focused on the processes that create such formations and how they serve as natural laboratories for teaching students about geological time scales, erosion, and climate impact.

A guided walking tour of the geopark allowed participants to explore its diverse geological features. The geopark's staff regularly host student groups for field trips, research projects, and citizen science

initiatives, focusing on how mineral identification and fossil analysis are used to reconstruct past environmental conditions, providing a tangible link between geosciences and climate education. Through school visits the students conduct soil and rock analyses, observe the effects of erosion and weathering, and participate in interactive workshops on sustainability and conservation.

Following the morning's visit, the group gathered for lunch at Ramiz Usta Plus before continuing with a cultural excursion to the historic Kula houses. This tour highlighted the intersection of geology and architecture, as many of the traditional houses were built using volcanic stone from the region. Discussions centered on the sustainability of using locally sourced materials and how architecture reflects the geological environment.

Throughout the visit, participants exchanged ideas on how geoparks can be more effectively integrated into school curricula. As the meeting drew to a close, reflections focused on the importance of hands-on, field-based education in geosciences. Participants expressed appreciation for the opportunity to learn from the unique landscapes of Kula and Ayazini and discussed how they could incorporate these experiences into their own educational settings.

Day 3: Project Meeting (13 March 2025)

The final day of the Geoschools Project Meeting in Turkey was dedicated to evaluating the project's overall impact, reviewing the outcomes, and ensuring that the work developed throughout the Erasmus+ collaboration will continue beyond the funding period. The meeting took place at Ali Çağlar Anadolu Lisesi, where participants had the opportunity to reflect on the key learnings from the conference and field visits, as well as to discuss next steps for sustaining and expanding the project's results.

The morning session included a visit to the school, where project partners met with students and teachers to discuss how the Geoschools activities had influenced their learning experiences. Students who had participated in the project's activities shared their thoughts on how outdoor education and geopark visits helped them better understand climate change and geology, making science more engaging and relevant. Teachers reflected on the new teaching methods they had explored, particularly the integration of place-based learning, interactive lesson plans, and digital resources. The discussions

highlighted how schools can continue working with geoparks and local environmental organizations to sustain the momentum created by the project.

Following the school visit, the partners convened for a final project meeting. A key focus was on documenting the results and ensuring all materials are accessible for future use. To facilitate this, all partners were instructed to upload presentations, project outcomes, and educational materials to the shared Google Drive folder before 31 March 2025:

Documentation and Project Archiving

Each partner agreed to contribute to the shared Google Drive folder before 31 March 2025 by:

- *Uploading all presentations, outcomes, and products developed during the project.*
- *Writing both personal and professional reflections on the impact of the project.*
- *Describing how their school will implement the results in the future to ensure long-term sustainability.*
- *Collecting feedback from students and parents about the impact of the project and submitting a short report.*
- *Checking and updating the project status on the eTwinning platform, with a focus on ensuring Romania's participation.*
- *Uploading and organizing photos from all project meetings into the correct folders.*
- *Ensuring that attendance sheets from all project events are properly documented.*

Public Engagement and Outreach

To continue spreading awareness about the Geoschools initiative, each school committed to:

- *Promoting the project on their school's social media and website by 10 April 2025.*
- *Encouraging more engagement and followers on the project's Facebook page: www.facebook.com/geoschoolsproject*

Sustainability and Future Implementation

Partners engaged in a final discussion on sustainability and the long-term future of the results of the project, outlining their plans for:

- *Incorporating geoscience-based learning into their curricula to ensure continued student engagement.*
- *Strengthening collaborations with geoparks, environmental educators, and international networks to sustain project momentum.*
- *Continuing outdoor education initiatives and field-based learning opportunities to reinforce climate awareness and geoscience literacy.*

Participating partners in the Geoschools project expressed gratitude for the collaboration and friendships formed throughout the journey. As the Erasmus+ phase of the project concludes, partners reaffirmed their commitment to geoscience awareness, outdoor education, and climate action in schools. The lessons learned, resources developed, and networks built will serve as valuable tools for educators beyond the project's official timeline, ensuring that Geoschools continues to inspire future generations.