

**LEVERAGING YOUTUBE IN ONLINE PEDAGOGY:  
ENHANCING ENVIRONMENTAL MANAGEMENT COMPETENCIES  
FOR INTERNATIONAL STUDENTS**

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In the context of online learning formats for foreign students, using digital resources during lectures and practical sessions is a key factor in developing their competencies in environmental management. As an educational platform, YouTube provides a wide range of materials that help foreign students acquire up-to-date knowledge, improve language skills, and expand technical vocabulary. Students must understand modern environmental standards, international legal frameworks, and ethical approaches to environmental management, which vary depending on governmental policies and economic factors across regions.

YouTube hosts authoritative sources that address environmental issues from diverse perspectives. The European Environment Agency channel shares information on European environmental policies and initiatives, including analyses of reducing industrial emissions and adapting to climate change. The Conservation International channel focuses on biodiversity, natural resource conservation, and global sustainable development programs. The UN Environment Programme highlights contemporary environmental challenges, such as land degradation, water crises, and the health impacts of pollution, while offering solutions proposed by scientists and activists. Earthjustice examines legal aspects of environmental protection, emphasizing litigation for ecological justice. Environment Agency TV explores industrial environmental management and sustainable practices. Access to these channels enables students to deepen their understanding of modern environmental challenges and solutions.

The integration of artificial intelligence (AI) technologies enhances learning efficiency. Automated video transcription, thematic glossary creation, and rapid information retrieval tools help students build a structured understanding of environmental management. Consequently, digital resources like YouTube and AI facilitate a deeper grasp of international environmental standards and their practical application. This prepares future professionals to address global challenges and implement effective environmental initiatives in their home countries.

During visualization-based lectures, we actively utilize YouTube's capabilities. Additionally, we have developed methodological guidelines for practical and laboratory assignments using content from various YouTube channels. A comparative pedagogical experiment revealed that the proportion of students with a high level of competence in environmental management increased by 24%, while the proportion with a low level decreased by 32%.