

STUDYING THE TERMINOLOGY RELATED TO ECOLOGY AND ENVIRONMENTAL PROTECTION DURING THE PROCESS OF INDEPENDENT LEARNING

Tolkunov Ibrohim Kamoliddin o'g'li

Student, Ecology and Law Faculty

"TIAME" NRU

Scientific Advisor: Kenjaeva Kamila Anvar kizi

Teacher, English Department

"TIAME" NRU

Abstract: This article looks at how learning environmental and ecological terminology on your own can help improve language skills and raise awareness of environmental issues. As ecological problems become more urgent, knowing key environmental vocabulary helps people better understand and talk about these challenges. Using the IMRAD format (Introduction, Methods, Results, and Discussion), this paper shows how self-directed learning of eco-terminology supports both personal education and a deeper understanding of sustainability. The article also suggests different learning strategies that combine language learning and environmental awareness, and emphasizes the value of digital tools, creative projects, and interdisciplinary thinking. It is meant to serve as a guide for students, educators, and independent learners alike.

Keywords: Environmental vocabulary, Eco-terminology, Independent learning, Self-study, Environmental literacy, Ecological concepts, Language learning, Vocabulary acquisition, Environmental education, Sustainability, Digital learning tools, Online resources, Case studies, Learning strategies, Thematic immersion, Content-based learning, Task-based learning.

1. Introduction

Serious global issues such as climate change, the loss of biodiversity, pollution, and overuse of natural resources make it more important than ever to understand ecological

concepts. Not only scientists and experts need this knowledge—everyday people should also be able to take part in conversations about the environment. The specific vocabulary used in environmental topics acts as a key to understanding these discussions. Today, many people prefer learning on their own, outside of school, which is known as independent learning. This article explores how people can learn environmental vocabulary independently and how this can help them become more environmentally aware and responsible.

Research shows that environmental education helps learners think critically and encourages them to take part in solving problems (Tilbury, 1995). The language used in this education—sometimes called the "eco-lexicon"—helps learners understand and talk about environmental issues (Stibbe, 2015). Since language shapes the way we think (Sapir & Whorf, 1956), learning eco-terms can change how learners see and interact with the world around them.

Environmental literacy, or the ability to understand and respond to environmental issues, is a big part of sustainable development education. Learning ecological vocabulary independently fits well with UNESCO's (2017) recommendation that learning should be learner-centered and connected to real-life problems. As more learners use digital tools and study informally, it's important to understand how eco-terminology can be learned and applied on one's own. Independent learning also supports lifelong education, allowing people to continue growing their understanding over time. By promoting both flexibility and responsibility, independent learning can help individuals adapt to ongoing environmental challenges.

2. Methods

This article is based on reviewing existing research and educational approaches from several fields, including language learning, environmental studies, and independent learning. It uses four main methods:

2.1 Literature Review

Books, academic journals, and conference papers were studied to find useful ideas and techniques for learning environmental vocabulary. The sources include works by Nation (2001) on vocabulary learning, Stibbe (2015) on eco-linguistics, Godwin-Jones (2018) on language learning and technology, and Clayton & Myers (2009) on the psychological side of environmental education. These studies show how important it is to learn vocabulary in a way that connects words to real-world topics. They also provide evidence that vocabulary acquisition is more effective when learners are emotionally engaged and when the vocabulary is tied to global challenges.

2.2 Case Study Analysis

Some real-world examples were used to show how learners can gain eco-terminology independently. One key case is the project by Ter Horst and Pearce (2008), where students worked on the Appropedia platform by translating environmental articles into German. This allowed them to practice language skills while learning about sustainability and working with a global audience. The experience helped them use both everyday and technical language in practical contexts, and several students expressed pride in contributing to a global cause.

Another case includes student-run podcasts and YouTube videos focused on environmental topics in different languages. These projects helped learners use eco-vocabulary in a creative and public way, making learning more meaningful and real. Learners also reported feeling more confident in using new vocabulary when their work had a real audience. Some learners even collaborated with peers from other countries to exchange feedback and expand their language exposure.

2.3 Learning Strategies

Several learning methods were explored for their usefulness in self-study:

- **Flashcards:** Apps like Anki or Quizlet use spaced repetition to help learners remember vocabulary. These flashcards can include definitions, sample sentences, audio, and images, making them a useful tool for memorization. Learners can also create their own decks, which makes the learning process more personal and relevant.
- **Thematic Immersion:** Learners focus on one topic—like climate change or plastic pollution—by watching documentaries, reading blog posts, and following news stories. This helps them understand vocabulary in real-life contexts. For example, watching a documentary on coral bleaching can introduce terms like “marine ecosystem” or “ocean acidification.” The immersion method also builds background knowledge, which supports better understanding of complex texts.
- **Content-Based Learning:** This involves learning a language while also learning about a topic. For example, reading a report about renewable energy in English and then discussing the vocabulary. This method helps learners understand both the language and the content. It also helps learners use critical thinking to compare ideas across languages. Teachers can also guide learners to highlight key terms and reflect on their use.
- **Task-Based Learning:** Learners complete a task, such as writing a short article about an environmental issue or giving a presentation using new vocabulary. This kind of learning is practical and encourages communication. These tasks can be shared in blogs or social media, giving learners the chance to connect with others. Learners are encouraged to write about local environmental problems and relate them to global issues, using the new terminology in meaningful ways.
- **Building a Personal Glossary:** Learners can create their own dictionary of eco-terms using Google Sheets, a notebook, or a mobile app. They write definitions, include pictures, and use the terms in sentences. This supports active learning and

reflection. Reviewing and updating a glossary regularly also helps reinforce memory. Learners can also organize the terms by theme or category, such as "climate terms" or "waste management."

2.4 Using Technology

Various tech tools help with vocabulary learning:

- **Apps:** Duolingo and Memrise now include lessons on environmental topics. Learners can use these as a quick and simple way to review.
- **Online Courses:** Platforms like Coursera or edX offer free courses on sustainability that include new vocabulary. These often come with videos, quizzes, and readings that give learners chances to apply what they've learned.
- **YouTube:** Channels such as *Kurzgesagt*, *National Geographic*, or *BBC Earth* explain science and ecology in simple and clear ways. Watching with subtitles helps connect spoken and written forms of new terms.
- **Educational Games:** Games like *Mission 1.5* or *Climate Challenge* help learners learn vocabulary while solving environmental problems. These games are interactive and can make learning more fun.
- **Programming Projects:** Learners with coding skills can build websites or apps that teach eco-vocabulary. This combines language learning with tech practice and creativity. These projects can be shared online and used by others.

All these tools give learners many ways to learn new words while staying interested and engaged. The use of multiple methods also supports different learning styles, whether visual, auditory, or kinesthetic.

3. Results

Research and case studies show that self-learners can successfully learn and use eco-terminology, especially when they use high-quality materials and helpful tools.

Main outcomes include:

- **Better Memory:** Using flashcards with spaced repetition helps learners remember words longer. Nation (2001) found this method to be very effective. Many learners found reviewing flashcards daily to be a simple but powerful habit. This method also supports long-term retention and regular self-assessment.
- **Understanding in Context:** Watching videos or reading real texts about the environment helps learners understand how to use terms like “carbon footprint” or “deforestation” correctly. Seeing the words used in real examples improves both understanding and confidence. Learners also start recognizing these terms in new settings, such as news reports, debates, or social media posts.
- **Improved Language Use:** Students who worked on the Appropedia project learned how to express complex ideas more clearly in a second language. Their writing and speaking skills improved. They also became more comfortable using technical language in discussions. This skill is transferable to academic writing, oral presentations, and even job interviews.
- **Increased Environmental Awareness:** Learners often became more interested in the environment after being exposed to eco-terms. They were more motivated to learn and take part in discussions about ecological issues (Clayton & Myers, 2009). Some even started making changes in their own habits, such as reducing plastic use. Others joined environmental clubs or started sharing posts about sustainability.
- **More Motivation and Autonomy:** Learners who created their own vocabulary sets or published blog posts felt more responsible and excited about learning. They took more control over their learning. This independence made them feel more prepared for future learning challenges. Motivation increased when learners connected what they learned to personal values or community issues.

- **Digital Skills:** Learners who built apps or edited online content improved both their language and their tech abilities. This is especially helpful in today's digital world where combining skills is a big advantage. Learners gained experience in using digital tools for research, writing, and publishing.

These results show that learning environmental vocabulary independently is useful not only for language improvement but also for personal growth and real-world awareness. Learners benefit in multiple areas—language, knowledge, confidence, and engagement. These benefits also support academic success, career development, and civic participation.

4. Discussion

The results support the idea that learning eco-terminology on your own is both possible and valuable. It offers benefits for thinking, communication, and understanding global problems.

4.1 Learning and Ethics

Learning environmental vocabulary helps people understand the science, but also the values behind the issues. Words like "climate justice" or "eco-anxiety" describe feelings and ethical debates. Learners become more aware of these aspects and more ready to talk about them. These discussions are important for building empathy and responsibility. Ethical vocabulary can lead to deeper conversations about policy, justice, and the future of the planet.

4.2 Different Learning Modes

Environmental topics often include ideas from many subjects, like biology, politics, and economics. When learners use videos, podcasts, or apps, they connect these subjects and improve their ability to think across topics. This kind of learning is not just about memorizing words—it's about making connections. It also supports critical thinking, creativity, and curiosity.

4.3 Personalized Learning

Self-study allows learners to choose what they want to focus on. Someone who loves the ocean might study marine vocabulary, while someone else might prefer energy-related words. This makes learning more enjoyable and meaningful. Learners can also adapt the pace and style to their own needs. Personalized learning helps reduce frustration and supports mental well-being.

4.4 Common Challenges

Of course, there are some difficulties:

- It's not always easy to check if a source is correct.
- Some vocabulary is very technical and hard to understand.
- Without a teacher, learners may not know if they're using a word properly.

These challenges can be solved by using trusted resources, asking questions in online forums, or practicing with native speakers through apps like HelloTalk or Tandem. Joining online communities focused on sustainability or language exchange can also provide support and motivation. Learners should also be encouraged to stay open to feedback and continuous improvement.

5. Conclusion

Learning environmental and ecological vocabulary on your own can help you become both more fluent in a language and more aware of global issues. With the right tools—like apps, online content, and personal projects—learners can connect language learning to real-life environmental topics.

In a world facing complex ecological challenges, being able to understand and talk about these issues is a valuable skill. Independent learning makes this possible for anyone with access to digital resources. It also supports long-term learning and encourages learners to make a difference. Future studies could look at how this kind of learning affects behavior or could be used in more languages and cultures. Teachers, too, might benefit from these strategies when helping students become more engaged and

globally minded. As more people commit to both language learning and environmental action, the connection between words and the world becomes more powerful and essential.

References:

1. Clayton, S., & Myers, G. (2009). *Conservation Psychology: Understanding and Promoting Human Care for Nature*. Wiley-Blackwell.
2. Godwin-Jones, R. (2018). Using mobile technology to develop language skills and cultural understanding. *Language Learning & Technology*, 22(3), 1–17.
3. Modern Language Association (MLA). (2007). *Foreign Languages and Higher Education: New Structures for a Changed World*. www.mla.org
4. Nation, I.S.P. (2001). *Learning Vocabulary in Another Language*. Cambridge University Press.
5. Sapir, E., & Whorf, B. L. (1956). *Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf*. MIT Press.
6. Stibbe, A. (2015). *Ecolinguistics: Language, Ecology and the Stories We Live By*. Routledge.
7. Ter Horst, E. E., & Pearce, J. M. (2008). Foreign Languages and the Environment: A Collaborative Instructional Project. *The Language Educator*, October Issue.
8. UNESCO. (2017). *Education for Sustainable Development Goals: Learning Objectives*. United Nations Educational, Scientific and Cultural Organization.