

INTEGRATION OF SUSTAINABLE DEVELOPMENT CONCEPTS INTO UNIVERSITY SERVICE SPECIALTY CURRICULUM: AN ENGLISH LANGUAGE TEACHING PERSPECTIVE

Nalbandyan Nelly,

*PhD in Pedagogy, Lecturer
of the Chair of Foreign Languages and Literature
at M. Nalbandian State University of Shirak,
Republic of Armenia,
nelly.nalbandyan1@gmail.com
<https://orcid.org/0009-0008-4674-6381>*

Summary

The integration of sustainability literacy into English for Specific purposes (ESP) instruction represents a vital pedagogical shift, moving beyond traditional language acquisition to foster a sense of global citizenship and environmental responsibility. While some educators may hesitate to broach controversial environmental topics, the necessity of equipping students with the knowledge to address real-world challenges like climate change is paramount. This approach, often termed green or sustainability education, enriches the learning process by making it more meaningful and engaging. By using environmental themes as the foundation for language practice, students not only enhance their linguistic competencies but also develop critical thinking and problem-solving skills. The article advocates for a Content-Based Instruction (CBI) model, which organizes language teaching around substantive environmental content. This method allows learners to use English for functional, real-world purposes, thereby transforming them into more informed and environmentally conscious individuals prepared for the demands of the modern service sector. The proposed lesson plan on the climate crisis exemplifies how to bridge theoretical knowledge with practical, discipline-specific application.

Keywords: *global citizenship, environmental stewardship, critical thinking skill, EFL/ESL students, problem-solving simulation.*

The aim of the article is to embed sustainability literacy within English for Specific Purposes (ESP) courses designed for university students in the service sector. The Content-Based Instruction (CBI) model is put forward as a highly effective pedagogical framework for this purpose. This approach reorients instruction away from traditional language drills and toward applying English to understand and resolve real-world environmental challenges. The intended outcome is to simultaneously develop students' linguistic competencies alongside their critical thinking skills, environmental awareness, and sense of global citizenship, thereby equipping them for the demands of the contemporary service industry.

The scientific novelty of this article lies in its practical application and synthesis of established theories in a new context. While "green education" and Content-Based Instruction (CBI) are not new concepts, the innovation is applying them specifically to an English for Specific Purposes (ESP) curriculum for university students in the service sector. The article's primary contribution is bridging the common gap between academic theory and classroom practice by providing a detailed, replicable lesson plan. This tangible model offers a scholarly yet practical blueprint for integrating sustainability into a specialized area of language education, providing a valuable resource where few exist.

Description of the main material. Sustainable development is a principle that emphasizes meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. In the context of the twenty-first century, sustainability is the capacity for human society to endure over time in a way that maintains a healthy natural environment. This concept applies across various aspects of life and refers to the ability to maintain consistent and responsible actions for long-term viability.

Sustainable awareness is crucial for EFL students because it promotes a sense of global citizenship and responsibility. Gaining insight into ecological challenges helps students actively engage with worldwide issues like global warming, deforestation, and climate change, encouraging a stronger connection to their environment and the planet as a whole.

Many of today's educators understand the importance of protecting our planet; others, however, might be skeptical about introducing environmental awareness in the classroom because of its political overtones and controversies. Moreover, language professionals generally do not see themselves as science teachers, nor do they, like the general public, always completely understand the environmental issues plaguing the planet [3] [4].

Additionally, many educators wish to remain neutral about environmental topics and withhold their personal opinions from their students.

However, Brown argues that one of our goals as teachers should be helping our students "become informed about as many issues as possible that intrinsically affect their lives" [3].

Green education, also referred to as **environmental education** or **sustainability education**, is a teaching approach centered on increasing awareness and understanding of environmental challenges, ecological principles, and sustainable living practices. Its primary objective is to educate individuals about the importance of environmental stewardship, encourage responsible behaviors, and inspire proactive efforts toward conservation and sustainability.

This form of education extends beyond conventional classroom instruction by integrating environmental themes into diverse learning environments—including school curricula, community-based programs, and public outreach initiatives. Green education seeks to equip learners with the essential knowledge, competencies, and values needed to make informed, environmentally conscious choices that support the well-being of the planet and future generations.

Tang suggests that the objective of embracing environmental education in language teaching is to emphasize global environmental issues amongst EFL/ESL students. Global issues such as deforestation, climate change mitigation and adaptation, energy transition and renewables, pollution problems and their effect on health, intensive food production and biodiversity loss can be the primary components of each lesson in ELT. It should be incorporated at the primary, secondary, and university levels giving the target learners an opportunity to help improve the environment [10].

Paterson describes three levels of environmental education in the ESP classroom:

- 1) environmental awareness—that is, general familiarity with key environmental issues;
- 2) personal conduct knowledge, which translates awareness into action to preserve the environment;
- 3) environmental literacy, which enables students to learn underlying principles and gain skills for carrying out their own hands-on projects [7].

Moreover, Dogan mentioned that learning about environmental issues in the language classroom creates a more engaging and relevant learning experience. It augments motivation and interest and makes language learning more meaningful [5].

Integrating environmental themes into language learning improves language skills and enhances critical thinking and problem-solving abilities. Discussing environmental topics encourages students to reflect on the impact of human actions on the planet, promoting sustainable behaviors and advocacy for environmental protection [1].

Bhusal comments that the integration of environmental education into language teaching is crucial as language learning not only demands the students to use a language but to use it for functional purposes. Thus, the incorporation of environmental concerns in English language teaching, in theory, and practice, can produce not only better language users but also informed critical thinkers [2].

Therefore, incorporating environmental education into English language teaching offers significant advantages for learners by enhancing both their language skills and content understanding, while also fostering greater environmental awareness through the process of learning English.

Content-Based Instruction (CBI) is another comprehensive, international method of teaching languages that empowers students to become more independent and engaged learners. It is related to the ecological theory of language which views language learning as a dynamic system where learners interact with their environment to make meaning.

The term CBI has been defined by Richards and Rodgers as an approach to second language teaching in which teaching is organized around the content or information that students will acquire, rather than around a linguistic or other type of syllabus [8].

According to Garner and Borg, CBI is a language ecology approach that demands thorough articulation of the message in a comprehensive way [6].

Relatedly, Snow defined CBI as the approach which uses the subject matter to teach second/ foreign language teaching. Snow further asserts that the subject matter can take up different topics like the themes that the students are studying in their school or some themes which will suit an adult learner [9].

Brown further suggests incorporating basic environmental facts into grammar exercises that concentrate on imperatives (“Use environmentally friendly detergents.”), verb tenses (“I have used reusable bags more often this year.”), and Wh -questions (“What kind of pollution is worst for our health?”). In addition, students can practice numbers by using statistics and numerical data about ‘green’ topics in their dictations, for example: “Question: What percentage of batteries are recycled every year? Answer: Less than 5 percent”. Similar to this, writing instructors can help students analyze paragraph structures, essay types, and writing styles by using “green” texts [3].

Furthermore, environmental themes can be the focus of error identification exercises that concentrate on capitalization, punctuation, or sentence structure, among other topics.

In order to effectively enhance learners’ understanding of environmental topics, language educators must first develop a solid grasp of the environmental issues addressed in their classrooms. Additionally, they should critically evaluate the instructional materials available to ensure these resources support the achievement of language-learning objectives.

To support language educators in finding information and materials on environmental topics, we’ve put together a collection of “green” resources which include environmental

activities. Some of the resources are ready to use as they are, while others may need to be adapted to suit specific student needs.

This article presents a content-based instructional approach to enhance English language proficiency among second-year university students in the Service department. Given the increasing demand for sustainable practices in the service sector, a lesson on “Climate Crisis” was developed to bridge the gap between theoretical knowledge and practical application. This lesson plan, designed for an 80-minute session. The primary objective is to equip students with the ability to critically analyze the climate crisis and to propose a viable, evidence-based solution. The methodology integrates interactive activities to foster critical thinking skills. The inclusion of this lesson plan aims to demonstrate a pedagogical model that not only imparts crucial knowledge about the climate crisis but also promotes the active use of discipline-specific English in a meaningful, problem-solving context.

Climate Crisis Lesson Plan

Content-Based Instructional Approach for Second-Year Service Students

Course Information

- **Duration:** 80 minutes
- **Target Audience:** Second-year service students
- **Methodology:** Content-Based Language Teaching (CBLT)
- **Learning Objectives:** Develop critical thinking and analytical skills regarding climate change.

Learning Outcomes

By the end of this lesson, students will be able to:

1. Analyze the multifaceted causes and consequences of the climate crisis
2. Evaluate different perspectives on climate change solutions
3. Synthesize information from multiple sources to form evidence-based conclusions
4. Apply critical thinking frameworks to assess climate-related policies
5. Demonstrate enhanced academic vocabulary related to environmental science.

Lesson Structure Phase 1: Pre-Activity Engagement (15 minutes)

Activity 1: Climate Crisis Word Association Web (7 minutes)

- Students work in pairs to create visual word maps connecting climate-related terminology
- Interactive brainstorming using digital collaboration tools (Padlet/Miro)
- Focus on activating prior knowledge and introducing academic vocabulary.

Activity 2: Diagnostic Assessment (8 minutes)

- Quick-write prompt: "What do you consider the most pressing aspect of climate change and why?"
- Students share responses in small groups
- Instructor notes knowledge gaps and misconceptions for targeted instruction.

Phase 2: Content Input and Analysis (25 minutes)

Activity 3: Multi-Source Information Processing (15 minutes)

- Students receive differentiated reading materials:
 - Scientific data charts on global temperature trends
 - Policy brief excerpts on international climate agreements
 - Economic impact reports from climate-related disasters
- Jigsaw reading strategy: Groups become "experts" on one source
- Students use analytical frameworks (cause-effect, compare-contrast) to process information.

Activity 4: Video Analysis with Critical Viewing Guide (10 minutes)

- Documentary segment: "Climate Change: The Science and the Solutions" (8-10 minutes)
- Students complete a structured viewing guide with analytical questions:
 - What evidence supports the presenter's claims?
 - Which stakeholder perspectives are represented/missing?
 - What assumptions underlie proposed solutions?

Phase 3: Interactive Synthesis and Application (25 minutes)

Activity 5: Collaborative Problem-Solving Simulation (15 minutes)

- Role-playing exercise: "International Climate Summit"
- Student teams represent different stakeholders (developing nations, industrial countries, environmental NGOs, corporations)
- Each group develops position statements using evidence from Phase 2 materials
- Focus on negotiation, compromise, and evidence-based argumentation.

Activity 6: Digital Debate Platform (10 minutes)

- Using interactive polling software (Mentimeter/Poll Everywhere)
- Students vote on proposed climate solutions and justify their choices
- Real-time discussion of results promotes critical evaluation of alternatives
- Instructor facilitates Socratic questioning to deepen analysis.

Phase 4: Reflection and Assessment (15 minutes)

Activity 7: Analytical Writing Task (10 minutes)

- Prompt: "Based on today's materials and discussions, identify one climate solution that shows promise and one significant challenge. Support your analysis with specific evidence."
 - Students write structured paragraphs using academic discourse markers
 - Emphasis on evidence-based reasoning and critical evaluation.

Activity 8: Exit Ticket and Peer Feedback (5 minutes)

- Students complete digital exit tickets identifying:
 - One new insight gained
 - One question for further investigation
 - Self-assessment of critical thinking development
- Brief peer sharing of key takeaways.

Interactive Materials and Resources

Digital Tools

- **Padlet/Miro:** Collaborative mind mapping and brainstorming
- **Mentimeter/Poll Everywhere:** Real-time polling and audience response
- **Google Jamboard:** Interactive whiteboard for group work
- **Flipgrid:** Video response platform for reflection sharing.

Multimedia Resources

- **Primary Video:** Documentary segment on climate science and solutions (8-10 minutes)
- **Infographics:** Visual data representations of climate trends
- **Interactive Maps:** Global climate impact visualizations
- **Podcast Excerpts:** Expert interviews on climate policy (background listening).

Print Materials

- Scientific journal article excerpts (adapted for accessibility)
- Policy document summaries from IPCC reports
- Economic impact case studies from recent climate events
- Critical thinking framework handouts.

Assessment Strategies

Formative Assessment

- Observation of collaborative discussions and problem-solving processes
- Analysis of digital participation in polling and mind-mapping activities
- Review of critical viewing guide responses and analytical notes.

Summative Assessment

- Evaluation of analytical writing task using a rubric focusing on:
 - o Evidence-based reasoning
 - o Critical evaluation of sources
 - o Academic language usage
 - o Synthesis of multiple perspectives.

Self-Assessment

- Reflection journals documenting learning progression
- Peer evaluation of collaborative contributions
- Goal-setting for continued critical thinking development.

Differentiation and Accommodation

For Advanced Learners

- Additional primary source materials for deeper analysis
- Leadership roles in collaborative activities
- Extended writing tasks with higher-order thinking prompts.

For Struggling Learners

- Graphic organizers for information processing

- Vocabulary support with visual aids
- Modified reading materials with guided questions
- Partner support during complex analytical tasks.

For English Language Learners

- Academic vocabulary pre-teaching with visual supports
- Sentence frames for structured discussions
- Multilingual resources when available
- Extended processing time for written tasks.

Extension Activities

- Research project on local climate impacts and community solutions
- Creation of multimedia presentations on specific climate topics
- Participation in campus sustainability initiatives
- Interview projects with environmental professionals.

Materials Checklist

- Laptops/tablets for digital activities
- Video projection equipment
- Printed reading materials and handouts
- Whiteboard markers and flip chart paper
- Access to interactive software platforms
- Timer for activity management
- Assessment rubrics and feedback forms.

Thus, integrating sustainability literacy into English for Specific Purposes (ESP) instruction is a crucial pedagogical shift that moves beyond traditional language acquisition. It advocates for Content-Based Instruction (CBI) as an effective methodology, where teaching is organized around substantive environmental content. This approach enables students to develop critical thinking and problem-solving skills alongside their linguistic competencies. By using the language for functional, real-world purposes, learners are transformed into more informed and environmentally conscious individuals prepared for the modern service sector.

ԿԱՅՈՒՆ ԶԱՐԳԱՑՄԱՆ ՀԱՅԵՑԱԿԱՐԳԻ ԻՆՏԵԳՐՈՒՄԸ ՀԱՄԱԼՍԱՐԱՆԱԿԱՆ ՍԵՐՎԻՍ ՄԱՍՆԱԳԻՏՈՒԹՅԱՆ ԿՐԹԱԿԱՆ ԾՐԱԳՐՈՒՄ (ԱՆԳԼԵՐԵՆԻ ԴԱՄԱՎԱՆԴՄԱՆ ՕՐԻՆԱԿՈՎ)

Նալբանդյան Նելլի,

մանկավարժական գիտությունների թեկնածու,

Շիրակի պետական համալսարան,

Օտար լեզուների և գրականության ամբիոնի դասախոս,

Հայաստանի Հանրապետություն

nelly.nalbandyan1@gmail.com

Ամփոփում

Կայուն զարգացման հայեցակարգի ինտեգրումը «Անգլերենը մասնագիտական նպատակների համար» (ESP) առարկայի դասավանդման գործընթացում կրթական նշանակալի բարեփոխում է, որ միտված է խթանելու ուսանողների գլոբալ քաղաքացիության ու բնա-

պահպանական պատասխանատվության գիտակցումը: Թեև որոշ մանկավարժներ կարող են խուսափել բնապահպանական վիճահարույց թեմաների քննարկումից, սովորողներին կլիմայի փոփոխության և ժամանակակից այլ մարտահրավերների հաղթահարմանն ուղղված անհրաժեշտ գիտելիքներով զինելը դարձել է ժամանակի հրամայական: Այս մոտեցումը, որը հայտնի է նաև որպես «կանաչ մանկավարժություն» կամ «կրթություն հանուն կայուն զարգացման», էապես բարձրացնում է ուսումնառության արդյունավետությունը:

Հողվածում հիմնավորվում է Բովանդակության վրա հիմնված ուսուցման մոդելի կիրառման նպատակահարմարությունը, որի շրջանակում լեզվի ուսուցումը կազմակերպվում է բնապահպանական բովանդակության հիման վրա: Այս մեթոդաբանությունը հնարավորություն է ընձեռում սովորողներին զարգացնելու լեզվական կարողությունները, ինչպես նաև կիրառելու անգլերենը՝ որպես իրական խնդիրների լուծման գործիք: Սա նպաստում է նաև բարձր իրազեկվածությամբ ու էկոլոգիական գիտակցությամբ օժտված մասնագետների պատրաստմանը, որոնք կհամապատասխանեն ժամանակակից աշխատաշուկայի, մասնավորապես սպասարկման ոլորտի պահանջներին: Կլիմայական ճգնաժամի թեմայով մշակված դասի պլանը լավագույն օրինակ է ներկայացնելու տեսական գիտելիքի ու դրա գործնական, առարկայական-մասնագիտական կիրառության արդյունավետ համադրման հնարավորությունները:

***Քանայի բառեր՝** զլորալ քաղաքացիություն, բնապահպանական պատասխանատվություն, քննադատական մտածողության հմտություն, անգլերենը՝ որպես օտար/երկրորդ լեզու, խնդիրների լուծման սխեմայացիա:*

ИНТЕГРАЦИЯ КОНЦЕПЦИИ УСТОЙЧИВОГО РАЗВИТИЯ В ОБРАЗОВАТЕЛЬНУЮ ПРОГРАММУ УНИВЕРСИТЕТСКОЙ СПЕЦИАЛЬНОСТИ «СЕРВИС» (НА ПРИМЕРЕ ПРЕПОДАВАНИЯ АНГЛИЙСКОГО ЯЗЫКА)

Налбандян Нелли,

Кандидат педагогических наук,

Ширакский государственный университет,

Преподаватель кафедры иностранных языков и литературы,

Республика Армения

nelly.nalbandyan1@gmail.com

Аннотация

Интеграция грамотности в области устойчивого развития в преподавание английского языка для специальных целей (ESP) представляет собой важнейший педагогический сдвиг, выходящий за рамки традиционного овладения языком и направленный на формирование глобальной гражданственности и экологической ответственности. Хотя некоторые преподаватели могут избегать спорных экологических тем, необходимость вооружить студентов знаниями для решения реальных проблем, таких как климатический кризис, имеет первостепенное значение. Этот подход, часто называемый «зелёным образованием» или образованием в интересах устойчивого развития, обогащает учебный процесс, делая его более содержательным и вовлекающим. Используя экологическую тематику в качестве основы для языковой практики, студенты не только совершенствуют свои языковые компетенции, но и развивают навыки критического мышления и решения проблем.

В статье отстаивается модель обучения на основе содержания (Content-Based Instruction, CBI), которая организует преподавание языка вокруг значимого экологического контента. Этот метод позволяет учащимся использовать английский язык для решения функциональных, реальных задач, тем самым трансформируя их в более информированных и экологически сознательных личностей, подготовленных к требованиям современного сектора услуг. Предлагаемый

план урока, посвящённый климатическому кризису, служит примером того, как можно соединить теоретические знания с их практическим, узкопрофильным применением.

Ключевые слова: глобальная гражданственность, экологическая ответственность, навык критического мышления, английский как иностранный/второй язык, симуляция решения проблем.

References:

1. Ali S., Green pedagogies in EFL: Promoting environmental literacy through language teaching. *Journal of Language and Ecology*, 4(1), 2022, 56-72.
2. Bhusal D.R., English language teachers' perceptions on integrating environmental education. *i-manager's Journal on English Language Teaching*, 11(3), 2021, p.11-19. DOI:10.26634/jelt.11.3.17696
3. Brown H.D., 50 simple things you can do to teach environmental awareness and action in your English language classroom. *The Language Teacher*, 15 (8), 1991, 4–5.
4. Cotton D.R.E., Teaching controversial environmental issues: Neutrality and balance in the reality of the classroom. *Educational Research*, 48 (2), 2006, 223–41.
5. Dogan S., Sustainability and language education: Enhancing motivation through environmental themes, *Language Learning Journal*, 51(2), 2023, 189-203.
6. Garner M. & Borg E., An ecological perspective on content-based instruction, *Journal of English for Academic Purposes*, 4(2), 2005, 119–134.
7. Paterson J., Integrating environmental education. *Education Digest*, 75 (7), 2010, 38–42.
8. Richards C.J. & Rodgers T., *Approaches and Methods in Language Teaching* (2nd ed.). Cambridge University Press, United Kingdom, 2001.
9. Snow M., «Content Based and Immersion Models for Second and Foreign Language Teaching», in M. Celce-Murcia, (Ed.), *Teaching English as a Second or Foreign Language*, (3rd ed.). Heinle & Heinle, Boston, 2001, pp. 303–318.
10. Tang Y.C., *The preliminary study for incorporating environmental education into English curriculum and teaching*. Dahan, Taiwan: Dahan Institute of Technology, 2009.

Получено: 27.08.2025

Received: 27.08.2025

Рассмотрено: 18.09.2025

Reviewed: 18.09.2025

Принято: 23.10.2025

Accepted: 23.10.2025



© The Author(s) 2025

This work is licensed under a Creative Commons Attribution-Non Commercial 4.0 International License