ECOLINGUA

EcoLingua Curriculum: Digitally Enhanced Pedagogy for Integrating Environmental Issues into Language Teaching" (ECOLINGUA)

Activity Plan 1– C2 Level

General Information

- **Partner Institution:** BAUN
- **Country:** Turkey
- **CEFR Level:** C2
- **Activity Number:** Act1
- **Title of Activity:** *Technology and Sustainability: A Double-Edged Sword*

2. Strategy Statement

This activity asks C2 learners to critically evaluate whether **technological innovation is a solution or a risk to sustainability**. Students analyze opposing perspectives — e.g., *AI, biotechnology, and renewable energy as saviors* vs. *overconsumption, rebound effects, and e-waste as hidden risks*. They will engage in **academic reading, structured panel debate, and extended research writing**, practicing **nuanced argumentation, synthesis of evidence, and advanced academic register**.

3. Activity Details

3.1. Learning Objectives

- *Language:* Students will critically analyze complex arguments, practice high-level persuasive speaking, and produce extended research-based writing.
- *Environmental:* Students will evaluate the promises and dangers of emerging technologies in relation to sustainability.

3.2. Target Skills & Competences

- *Language Skills:* Academic reading, synthesis, structured debate, academic essay writing
- *Linguistic Focus:* Advanced concessive markers (*while, although, despite the fact that*), evaluative expressions (*arguably, it is questionable whether*), speculative conditionals (*if humanity continues to rely solely on…*)

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- *Environmental Competences:* Systems thinking, critical assessment of technology, ethical foresight

3.3. Resources, Materials & Media

- *Printed/Handouts:* Articles on renewable energy, AI in climate monitoring, and technology-driven overconsumption
- *Digital Resources:* Video excerpt on “green tech” startups
- *Audio-Visual Materials:* Charts of global e-waste and renewable growth
- *Realia:* Old gadgets vs. eco-innovative devices

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4. Detailed Activity Procedure

Stage	Time	Teacher Actions	Student Actions	Method/Approach	Materials
Warm-up / Lead-in	5 min	Show chart: renewable energy growth vs. rising e-waste. Ask: "Progress or paradox?"	Quick reactions	Inquiry	Chart
Pre-Task / Input	15 min	Provide pro/contra readings. Pre-teach key evaluative markers and academic vocabulary.	Read critically, annotate	CLIL, academic reading	Handouts
Main Task (Part 1)	20 min	Organize panel debate: Panel A = Technology as a solution, Panel B = Technology as a risk.	Prepare, present, rebut	Debate pedagogy	Placards
Main Task (Part 2)	15 min	Students synthesize both sides into a short consensus statement.	Negotiate balanced conclusions	Cooperative learning	Class
Post-Task / Reflection	10 min	Whole-class reflection: "What tech policy would you recommend for our country?"	Share proposals	Critical discussion	Class
Wrap-up & Homework	5 min	Homework: Write a 500–600 word research paper *"Technology: Savior or Saboteur of Sustainability?"*	Submit next class	Writing	Paper

5. Differentiation & Inclusion

- Provide weaker learners with argument banks and sentence frames (*"It could be argued that…"*).
- Encourage stronger learners to integrate data, statistics, and ethical perspectives.

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- Debate roles allow varying participation (speakers, researchers, summarizers).

6. Assessment & Evaluation

- Teacher evaluates debate contributions: depth, persuasiveness, and academic register.
- Peer feedback on clarity of arguments.
- Research paper assessed for synthesis, originality, and language sophistication.

7. Sustainability & Follow-Up

- Students design a "Tech for Sustainability Charter" summarizing key principles.
- Link activity to **SDG 9: Industry, Innovation, and Infrastructure** and **SDG 12: Responsible Consumption**.

8. Suggested Vocabulary

- **Key terms:** innovation, e-waste, rebound effect, renewable transition, overconsumption, sustainability paradox
- **Structures:**
  - *"Although renewable energy is growing, it does not guarantee reduced emissions."*
  - *"Arguably, technology could exacerbate the very problems it seeks to solve."*
  - *"If humanity had acted earlier, reliance on risky technologies might not be necessary."*

9. Games & Links

- **Game:** *Tech Timeline Challenge* – Groups place innovations (solar, AI, plastics, nuclear) on a sustainability timeline.
- **Game:** *Debate Bingo* – Tick advanced discourse markers during the panel.
- **Links:**
  - o UNESCO – Technology and Sustainability
  - o World Economic Forum – Tech for Climate

10. Strategy and Suggested Methodology

At **C2 level**, pedagogy must integrate **interdisciplinary synthesis, critical evaluation, and advanced discourse mastery**. This activity draws on:

- **Critical Literacy (Luke, 2000):** Learners deconstruct narratives about technology as either inherently "good" or "bad," analyzing underlying assumptions.
- **Debate Pedagogy (Bygate, 1987):** Structured panels force learners to defend and rebut complex positions with academic register.
- **Task-Based Learning (Ellis, 2003):** Debate, synthesis, and research writing simulate real-world academic/professional practices.

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- **CLIL (Coyle, Hood, & Marsh, 2010):** Complex content (sustainability and technology) is integrated with advanced English use.
- **Critical Pedagogy (Freire, 1970):** Encourages learners to question who benefits from technological progress and who pays the cost.
- **Sustainability Education (Sterling, 2001; UNESCO, 2017):** Promotes foresight, systemic awareness, and ethical responsibility.

Methodological Strategies Applied:

1. **Scaffolding:** Vocabulary banks, pro/contra readings, and debate frames guide learners into advanced discussions.
2. **Dialogic Learning:** Panel debates encourage dialogic, peer-driven knowledge building (Mercer, 2000).
3. **Multimodal Input:** Charts, case studies, and real devices enhance engagement and retention (Paivio, 1991).
4. **Higher-Order Thinking:** Learners analyze, evaluate, and synthesize — upper levels of Bloom's taxonomy.
5. **Role Differentiation:** Roles in debate and consensus-building ensure inclusivity.
6. **Gamification:** Timeline and bingo activities sustain motivation while practicing academic discourse (Dörnyei, 2001).

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