# Ecomedia Literacy. A Quickstart Guide

# ecomedia literacy

## Quickstart Guide

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# Introduction

Global environmental challenges and the climate emergency demand urgent action in education. For students the climate crisis is not abstract; it is a tangible reality that impacts their mental health, shapes their future prospects, and aligns with their values of social justice and active societal engagement. As students increasingly engage with environmental issues, it is crucial for educational programs to incorporate sustainability into curricula.

Students are at the forefront of climate activism, demanding action and inspiring hope for a more sustainable future. They are also acutely aware that climate change will shape their careers, with a growing demand for jobs in climate-related fields. By integrating the climate crisis into the curricula, educators can not only enrich academic learning but also address the interests and concerns of their students, supporting a generation of informed, engaged, and proactive climate citizens ready to tackle the challenges of our changing world.

Ecomedia literacy investigates the nexus between media, information, and communication technology (ICT), and environmental sustainability. Ecomedia literacy engages the ecological consequences of media systems and technologies (their "ecomedia footprint"), alongside the role of media in shaping environmental awareness, beliefs, narratives, and actions (their "ecomedia mindprint").

This quick start guide supports educators to become catalysts for social and environmental change through innovative learning activities that integrate media literacy and environmental awareness.

# Ecomedia Literacy

**Picture students using social media to debunk greenwashing tactics, creating documentaries that illuminate local sustainability initiatives, or even designing video games that gamify environmentally responsible choices. Going beyond likes and shares, ecomedia literacy equips students to become responsible media users and creators. They learn to advocate for ecojustice - environmental fairness for all - by challenging harmful narratives and crafting their own media messages that champion a healthy planet.**

Most people are unaware that media and ICT have a significant environmental impact. This includes energy consumption by data centers, electronic waste (e-waste), and the mining of minerals for electronic components. These processes contribute to carbon emissions, resource depletion, water scarcity, and toxic pollution. Media also shape our understanding of environmental issues, influencing our perceptions of the climate crisis, and how to take action.

While traditional media education focuses on analyzing messages, ecomedia literacy delves deeper. It examines the environmental costs of media production and disposal, revealing how these practices disproportionately affect lower-income regions. Students confront the reality of extractive “sacrifice zones” and “disposable people” within global production chains, and consider the increasing environmental burden posed by emerging technologies like artificial intelligence (AI) and cryptocurrencies.

Ecomedia literacy not only highlights problems but also empowers students with solutions. They learn about responsible electronics recycling, sustainable data centers, and how media can promote eco-friendly practices and climate citizenship. It encourages students to question how media shapes their perception of the environment and understand the impact of their media habits. Ecomedia literacy helps unravel the ecological biases and ideologies embedded within media narratives, empowering students to become agents for positive environmental change.

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In the following sections, the essential concepts and methods of ecomedia analysis are detailed. The discussion begins by defining key concepts and outlining the main learning objectives of ecomedia literacy. Analytical tools are then introduced, such as "ecomedia objects," the primary unit of analysis, followed by the "four zone" methodology. These foundational approaches establish the basis for the examples of ecomedia literacy activities described in the subsequent sections.

# Ecomedia Literacy: A Holistic Educational Paradigm

Ecomedia literacy serves as a bridge connecting different disciplines across education, promoting an interdisciplinary approach that highlights the ties between media, technology, and environmental issues. This framework encourages students of all ages to explore the scientific dimensions of ecological challenges while delving into cultural, social, and ethical aspects from multiple perspectives.

By promoting critical thinking and problem-solving, ecomedia literacy equips students with essential skills to scrutinize media representations of environmental issues, benefiting learning across subject areas. In science classes, it aids in evaluating research findings and their effective communication. In language arts and social studies, it facilitates the analysis of how environmental narratives are constructed in literature, film, and other media forms. Additionally, ecomedia literacy's engagement with climate disinformation advances science, information, and news literacy across the curriculum.

Ecomedia literacy enhances students' media production and communication capabilities, prompting them to create content related to environmental topics. This improves their digital media skills and hones their ability to convey complex concepts accessibly - valuable for science communication and persuasive writing in various subjects. This cultivation of environmental awareness and active citizenship empowers students to become more informed and environmentally conscious global citizens.

Ecomedia literacy emphasizes experiential learning by incorporating real-world examples and case studies across grade levels. These case studies help students examine how media influences public perceptions of environmental issues and policies. They also offer insight into the ecological impacts of media technologies. In promoting global citizenship, ecomedia literacy provides learners with a comprehensive understanding of global environmental challenges, encouraging them to think beyond local contexts and embrace global responsibility.

This approach aligns with inclusive education values, acknowledging that environmental issues impact people from all walks of life. It promotes diverse voices and perspectives, particularly from underrepresented communities. This inclusivity resonates with education's commitment to diversity and equitable learning opportunities for all students.

# What is Ecomedia?

Ecomedia is an emerging interdisciplinary field that explores the complex relationships between media and the environment. This area of study recognizes that media are both embedded in and reflective of ecological systems, while environments are increasingly mediated through various forms of communication.

At its core, ecomedia studies examines two primary domains: the cultural representations of environmental issues in media, and the material environmental impacts of media production, distribution, and consumption. The field encompasses a wide range of media forms, including film, television, photography, video games, digital platforms, and more.

Ecomedia scholars investigate how media texts frame ecological narratives, shape public perceptions of environmental issues, and influence cultural attitudes towards nature. They also scrutinize the material realities of media technologies, analyzing the environmental footprints of digital infrastructures, e-waste, and energy consumption associated with media use.

Key areas of focus within ecomedia studies include:

- Examining the physical and ecological dimensions of media technologies and infrastructures.
- Investigating the intersections of media, environment, and power structures.
- Analyzing how media shape and reflect cultural understandings of nature and environmental issues.
- Studying the emotional and sensorial dimensions of mediated environmental experiences.

As an interdisciplinary field, ecomedia studies draws from diverse academic traditions, including media studies, environmental humanities, cultural studies, and science and technology studies. It seeks to bridge the gap between humanities-based approaches to media analysis and scientific understandings of ecological systems.

## Essential Questions

- How do various forms of media, such as film, television, and digital platforms, shape and reflect cultural understandings and public perceptions of environmental issues?
- What are the material environmental impacts associated with the production, distribution, and consumption of media technologies, and how do these impacts contribute to ecological crises?
- In what ways do ecomedia scholars analyze the intersections of media, environment, and power structures to understand the influence of media on environmental discourse and practices?

# The Ecomedia Commons

The ecomedia commons represents a vital intersection between media, ecology, and the public good. It builds on the concept of the commons - shared resources that belong to all members of a society - and applies it specifically to the realm of media and its relationship with the environment.

At its core, the ecomedia commons recognizes that our media systems and environmental systems are deeply intertwined. Just as we share common natural resources like air, water, and public lands, we also share a common media ecosystem that shapes our understanding of and relationship to the environment. This includes everything from news coverage of climate change to nature documentaries to social media discussions about sustainability.

However, the ecomedia commons faces significant challenges in the current media landscape. Extractive media practices prioritize profit and exploitation over the public good, often at great environmental cost. This can manifest as greenwashing, climate disinformation, fossil fuel propaganda, or simply a lack of coverage on pressing ecological issues. There is also frequently a "symbolic annihilation" of environmental concerns in discussions of media production and technology. Additionally, advertising that drives the media industry promotes overconsumption and needless waste.

Protecting and nurturing the ecomedia commons requires recognizing its existence and importance. It means advocating for media systems that serve the public interest, provide diverse perspectives on environmental issues, and inspire ecological awareness and action. It also involves critically examining the material impacts of our media infrastructure on planetary ecosystems.

Ultimately, a healthy ecomedia commons is crucial for addressing the urgent environmental challenges we face. By treating our media resources as a public good intrinsically linked to our shared environment, we can work towards more sustainable, just, and ecologically-minded media systems that benefit both people and planet.

## Essential Questions

- How can media educators effectively introduce and explore the concept of the ecomedia commons with students?
- What inquiry-based approaches can engage students in critically examining and analyzing examples of ecomedia commons in their lives and communities?
- How can educators design learning experiences that empower students to actively participate in building and protecting ecomedia commons?

# Extractive Media & Ecojustice

Extractive media practices and environmental justice are deeply intertwined issues that highlight the complex relationship between media systems, ecological sustainability, and social equity. At its core, extractive media refers to practices that prioritize the extraction of value from communities, environments, and individuals, often at the expense of long-term sustainability and social well-being. This approach is characterized by the "5Es" framework: enclosure, extraction, expendability, exploitation, and externalization. These practices contribute to what Rob Nixon terms "slow violence" - a form of gradual, often invisible harm that disproportionately affects marginalized communities and ecosystems over extended periods.

The concept of slow violence is particularly relevant when examining the environmental and social impacts of media technologies. From the mining of rare earth minerals for electronic devices to the energy-intensive operations of data centers, the media industry's ecological footprint often manifests in ways that are geographically and temporally displaced from the point of consumption. This displacement makes it challenging to recognize and address the full scope of environmental degradation and social inequities perpetuated by our media systems.

Ecojustice, in this context, calls for a more holistic understanding of media's role in shaping both our digital and physical commons. It demands that we consider not only the content and representation of environmental issues in media but also the material infrastructure and social systems that underpin our media landscape. This approach recognizes the interconnectedness of media practices, ecological well-being, and social equity, challenging us to reimagine our relationship with technology and information in ways that prioritize sustainability and justice.

The tension between the democratizing potential of digital media and the commercialization of online spaces further complicates these issues. As we navigate this complex terrain, it becomes crucial to critically examine our media practices and their broader implications for both human and more-than-human communities.

## Essential Questions

- How can we redesign media systems to minimize ecological harm and promote environmental justice?
- What role does media literacy play in addressing the slow violence perpetuated by extractive media practices?
- How can the concept of the ecomedia commons be leveraged to create more sustainable and equitable media ecosystems?

# Nature, Environment & Ecosystem

Nature, environment, and ecosystem are complex terms historically rooted in Eurocentric and colonial assumptions. Traditionally, "nature" has been viewed as separate from culture, with sciences studying it objectively and humanities focusing on subjective aspects. However, environmental humanities scholars have highlighted the cultural construction of these concepts, revealing their support for colonial, patriarchal, ableist, and heteronormative discourses.

The nature-culture dualism has been criticized for promoting a logic of domination. Postcolonial and decolonial theorists have extended this critique to encompass ongoing colonial histories in various power relations. In response, alternative understandings of ecology, cosmology, and ontology have emerged, drawing from Indigenous traditions, postmodern science, and other philosophies.

As metaphors, "environment," "ecology," and "ecosystem" have illuminated and obscured ecological conditions shaping media. "Environment" is often associated with enclosed surroundings and used to justify economic expansion. Media ecology, as proposed by Neil Postman, focuses on how new media dominate established environments, achieving a "cybernetic balance" with society. However, this approach is anthropocentric, viewing "media health" in terms of human benefit or harm. An alternative rhizomatic approach describes information flow as complex networks with humans as just one node.

Scholars have proposed alternative understandings to challenge these dualisms when applying these metaphors to media. The ecosystem metaphor has been used to support both organic and market-competition perspectives of media, but it's important to recognize that technological and political processes differ from natural ecosystems.

For clarity, this guide uses "natural world" or "environment" to describe the physical world without reinforcing the human/other-than-human duality.

## Essential Questions

- How have colonial and Eurocentric assumptions shaped our understanding of concepts like "nature," "environment," and "ecosystem," and what alternative perspectives challenge these traditional views?
- In what ways does the nature-culture dualism reinforce systems of domination and power imbalances, and how do postcolonial and decolonial theories address these issues?
- How can metaphors like "ecology" and "ecosystem" be applied to the study of media in ways that avoid anthropocentric biases and better reflect the complexity of information networks and human-environment relationships?

# Ecomedia Objects

**An ecomedia object refers to any media text or artifact that reflects, represents, or engages with environmental issues, themes, or the relationship between humans and the environment. There are four types of ecomedia objects.**

## Representational media texts

Advertisements, greenwashing, news articles, films, TV commercials, websites, food packaging, NFTs, etc.

## Platforms

Streaming services, social networks, apps, or media organizations.

## Gadgets

Smart phones, tablets, computers, wearable technology, servers, etc.

## Hyperobjects

An amorphous disbursed phenomenon that behaves like a system, such as the data cloud, cryptocurrency, climate disinformation, aritificial intelligence, or the media industry.

**Ecomedia literacy encourages a critical analysis of ecomedia objects using questions like:**

- How is the environment represented? Is it idealized, endangered, or presented in a more complex way? Does it help or harm the environment?
- What values or ideologies are embedded in the ecomedia object? Does it promote consumerism, environmentalism, or some other perspective?
- How does the ecomedia object make us feel about the environment? Does it inspire hope, fear, guilt, or action?
- What is the material impact of the object itself? Consider the energy used to create and distribute digital media, or the environmental impact of physical media production.

# The Four Zones of Ecomedia Literacy

**Ecomedia literacy uses four zones of analysis—ecoculture, political ecology, ecomateriality, and lifeworld—to provide a holistic framework for understanding the complex interplay between media and ecology. It develops systems thinking and a deeper contemplation of the interconnectedness of media, culture, society, and the environment. This methodology encourages students and educators to critically analyze the ecological mind/footprint of ecomedia objects, such as personal gadgets and other forms of media.**

## Ecoculture

Shared environmental beliefs, eco-ethics, and environmental ideologies that are communicated through discourses, representations, symbols, and language. This zone helps in studying the cultural narratives and stories associated with ecomedia objects. It is essential for understanding the ideological and cultural dimensions of ecomedia objects and their environmental implications.

## Political ecology

The study of how economic and power structures influence the design of ecomedia objects and their environmental impacts. This zone is crucial for analyzing the social and political factors that influence the production, consumption, and distribution of ecomedia objects and their environmental costs.

## Ecomateriality

The environmental impacts that result from extraction, manufacturing, and consumption, as well as the physical properties of the media and their infrastructures. It corresponds with how the gadget is made and what materials it's composed of, including the physical footprint of ICTs. This zone is vital for assessing the direct environmental impacts of media technologies, from resource extraction to waste generation.

## Lifeworld

The ecology of perception: our cognitive and sensory experience of space, place, and time. It explores how the gadget generates sensory, cognitive, and emotional experiences, such as feelings of addiction, alienation, or connection with the living planet. This zone is important for understanding the phenomenological experience of media technologies and their effects on human perception and behavior.

# Mind/footprint

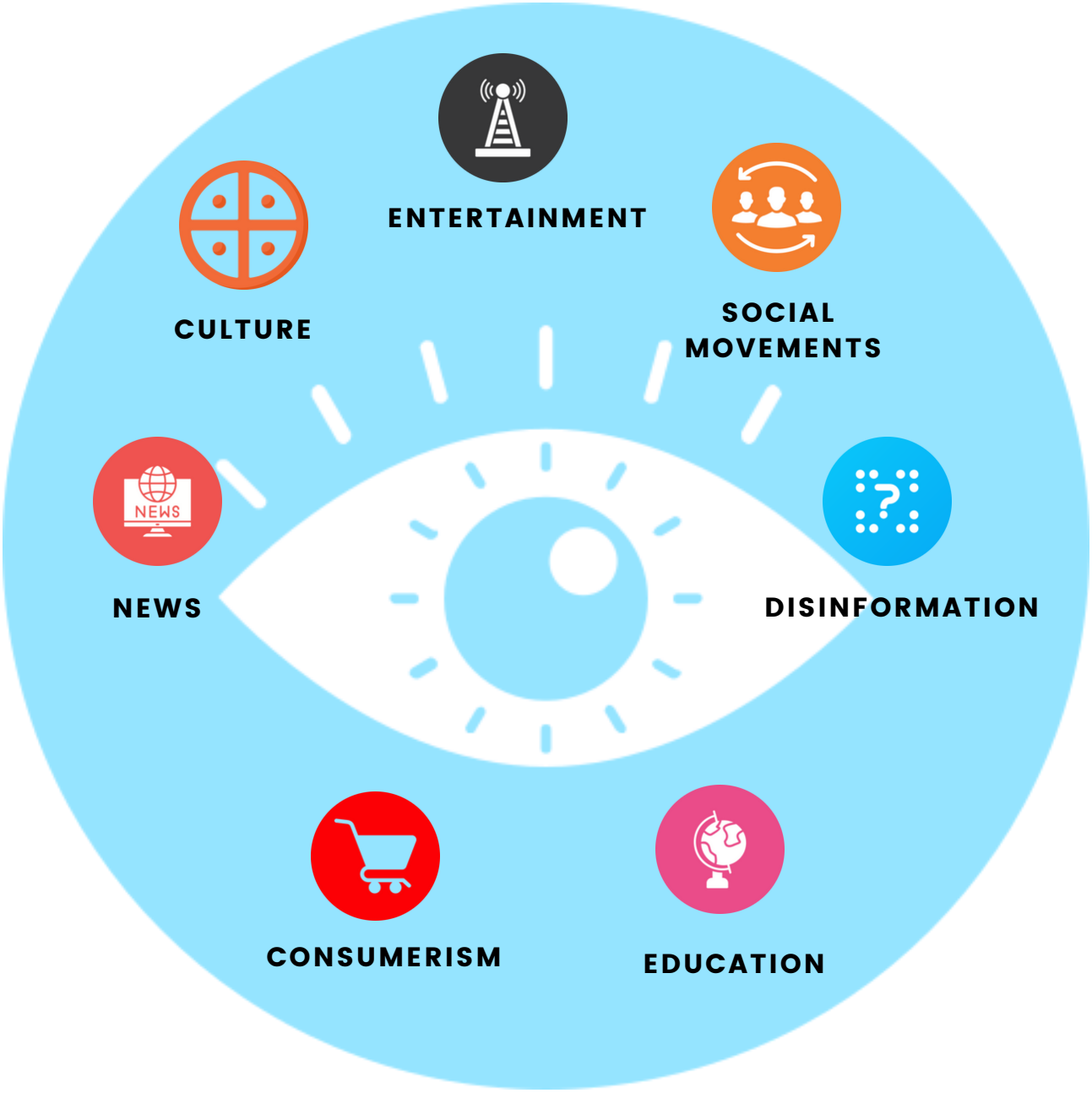
## ECOMEDIA FOOTPRINT

This realm of study examines the environmental footprint of media and communication technologies, encompassing the energy use, resource extraction, manufacturing, transportation, and disposal of devices, as well as the impact of data centers and infrastructure involved in content creation and distribution.

# Mind/footprint

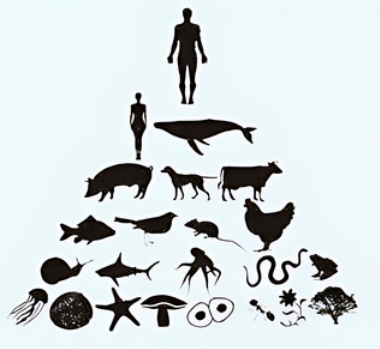
## ECOMEDIA MINDPRINT

This area of inquiry concerns the way the media shape our perceptions, values, and behaviors related to the environment. It encompasses how media representations of nature, environmental issues, and consumerism influence our understanding of the relationship between humans and the environment.



# Environmental Ideology

**Environmental ideology is a spectrum of beliefs about the natural world that shapes how people understand their relationship with the environment and guides their actions towards it. It encompasses views on topics like conservation, resource use, and the balance between human needs and ecological well-being.**

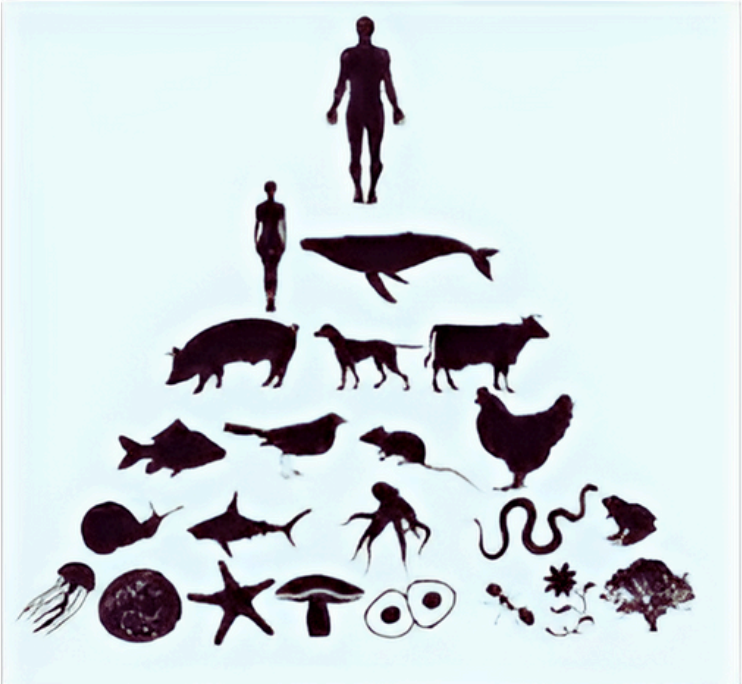


Anthropocentrism: A worldview that considers humans as the central and most important beings in the universe. It often views nature as a resource existing primarily for human benefit and exploitation. This supports a logic of domination, in which men are at the top and nature is placed in a hierarchical order of value.

Ecocentrism: A worldview that places intrinsic value on the whole ecosystem, rather than just humans. It emphasizes the interconnectedness of all living beings and promotes a more holistic view of the natural world, where humans are seen as part of nature rather than separate from or superior to it.

Environmental ideologies are explored in ecomedia literacy's concept of the ecological footprint by analyzing how environmental beliefs, eco-ethics, and ideologies influence the tangible impacts of media technologies on the environment, which includes the extraction, manufacture, and disposal processes that affect people and ecological systems.

Environmental ideologies are explored in ecomedia literacy's concept of the ecological mindprint by examining how digital technologies and media representations shape our understanding, beliefs, and ideologies about the environment, thereby influencing our perceptions and interactions with the natural world.



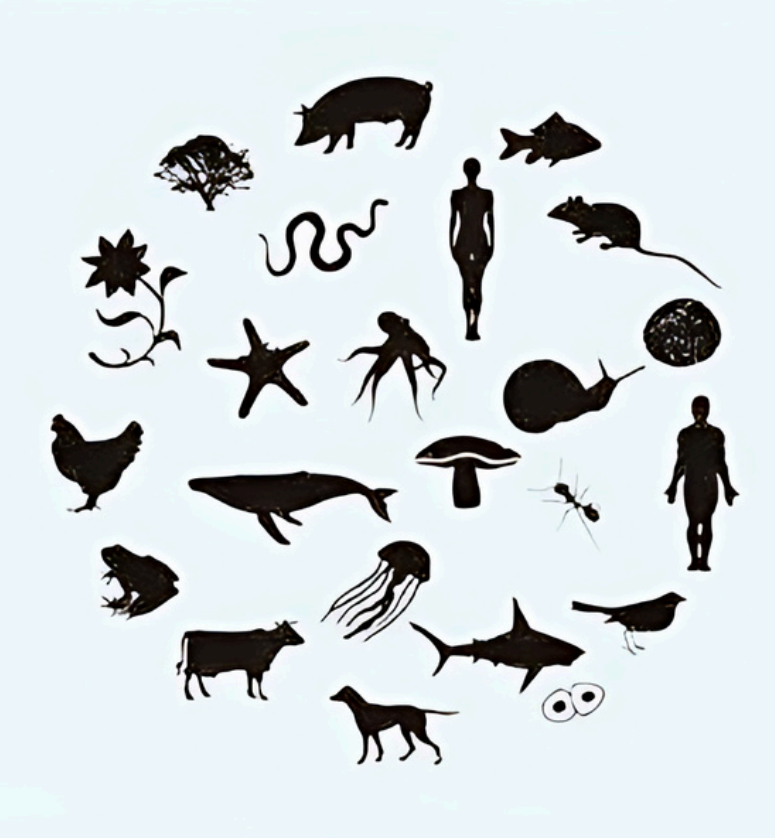
## ENVIRONMENTAL IDEOLOGIES OF ANTHROPOCENTRISM IN MEDIA

Ecoculture: Anthropocentrism can be examined through the narratives and symbols in media that prioritize human convenience, progress, domination, and economic growth over environmental sustainability. Ecomedia literacy can reveal how media representations often center human experiences and needs, potentially at the expense of ecological systems.

Political Ecology: This ideology's impact on social structures and political systems can be analyzed to show how anthropocentric views influence policies and practices that prioritize human development, often leading to environmental degradation. Ecomedia literacy can help uncover the political and economic systems that support and perpetuate anthropocentric values.

Ecomateriality: By focusing on the material aspects of media, ecomedia literacy can highlight how anthropocentrism manifests in the unsustainable extraction of resources, production processes, and disposal of digital technologies, disregarding their ecological costs.

Lifeworld: This zone of analysis encourages reflection on how anthropocentric ideologies shape our sensory, cognitive, and emotional experiences with technology, potentially leading to alienation from the natural world and an underappreciation of the intrinsic value of other-than-human entities.



## ENVIRONMENTAL IDEOLOGIES OF ECOCENTRISM IN MEDIA

Ecoculture: Ecocentrism, which recognizes the inherent value of all living beings and the interconnectedness of ecosystems, can be explored through media that challenge anthropocentric narratives and promote a more holistic understanding of human-environment relationships. Ecomedia literacy can identify and analyze ecocentric discourses and representations in media.

Political Ecology: This approach examines how ecocentric ideologies might influence or challenge existing social and political structures, advocating for policies and practices that prioritize ecological balance and sustainability over human-centered development.

Ecomateriality: Ecomedia literacy can reveal how ecocentric values could influence the design and production of media technologies, promoting sustainable practices, minimal environmental impact, and a consideration of the full lifecycle of gadgets.

Lifeworld: This zone of analysis encourages individuals to consider how ecocentric ideologies can transform our experiences with media, cultivating a sense of connection with the natural world and a deeper understanding of our place within ecosystems.

# Learning Objectives

**Ecomedia literacy emerged as a response to standard media education practices that don't take into account media's environmental impacts. In doing so, it engages with the relationship between media, ICTs, and the environment, serving as an analytical framework and methodology based on systems thinking. As a source for learning activities and lesson plans, it can also promote the United Nations Sustainable Development Goals in the liberal arts and sciences.**

## Examples of Learning Objectives and Activities

Imagine learning about the environment not just through textbooks, but through the media we consume every day. This is the power of ecomedia literacy. The following examples demonstrate how students can meaningfully explore and learn about the world they are directly participating in.

**Understand the material impacts of media technologies through their full lifecycle from production to disposal (e-waste, mining of minerals, energy use, etc.)**

- Describe the lifecycle of media technologies from production to disposal.
- Explain the environmental impacts associated with each stage of the lifecycle.

**Analyze how different media frame environmental issues and spread environmental discourses and ideologies**

- Compare and contrast the framing of environmental issues across different media platforms.
- Identify the underlying discourses and ideologies in media representations of environmental issues.

**Evaluate media organizations and tech companies based on their environmental policies and practices**

- Assess the environmental policies of various media organizations and tech companies.
- Critique the effectiveness and sincerity of these policies in promoting sustainability.

**Produce counter-narratives and alternative media that challenge anthropocentric worldviews and promote more ecocentric perspectives**

- Create media content that offers alternative narratives to mainstream anthropocentric views.
- Design campaigns that advocate for ecocentric perspectives and sustainable living.

**Cultivate self-reflexivity about one's own media use habits and how they connect with sustainability concerns**

- Reflect on personal media consumption habits and their environmental impacts.
- Develop a plan to modify media use habits to reduce ecological footprints.

**Apply systems thinking to map out and re-design media infrastructures to align with ecological principles**

- Map the current state of media and identify areas for improvement.
- Propose redesigns of media infrastructures that adhere to ecological principles.

**Imagine alternative sustainable futures mediated through different technologies**

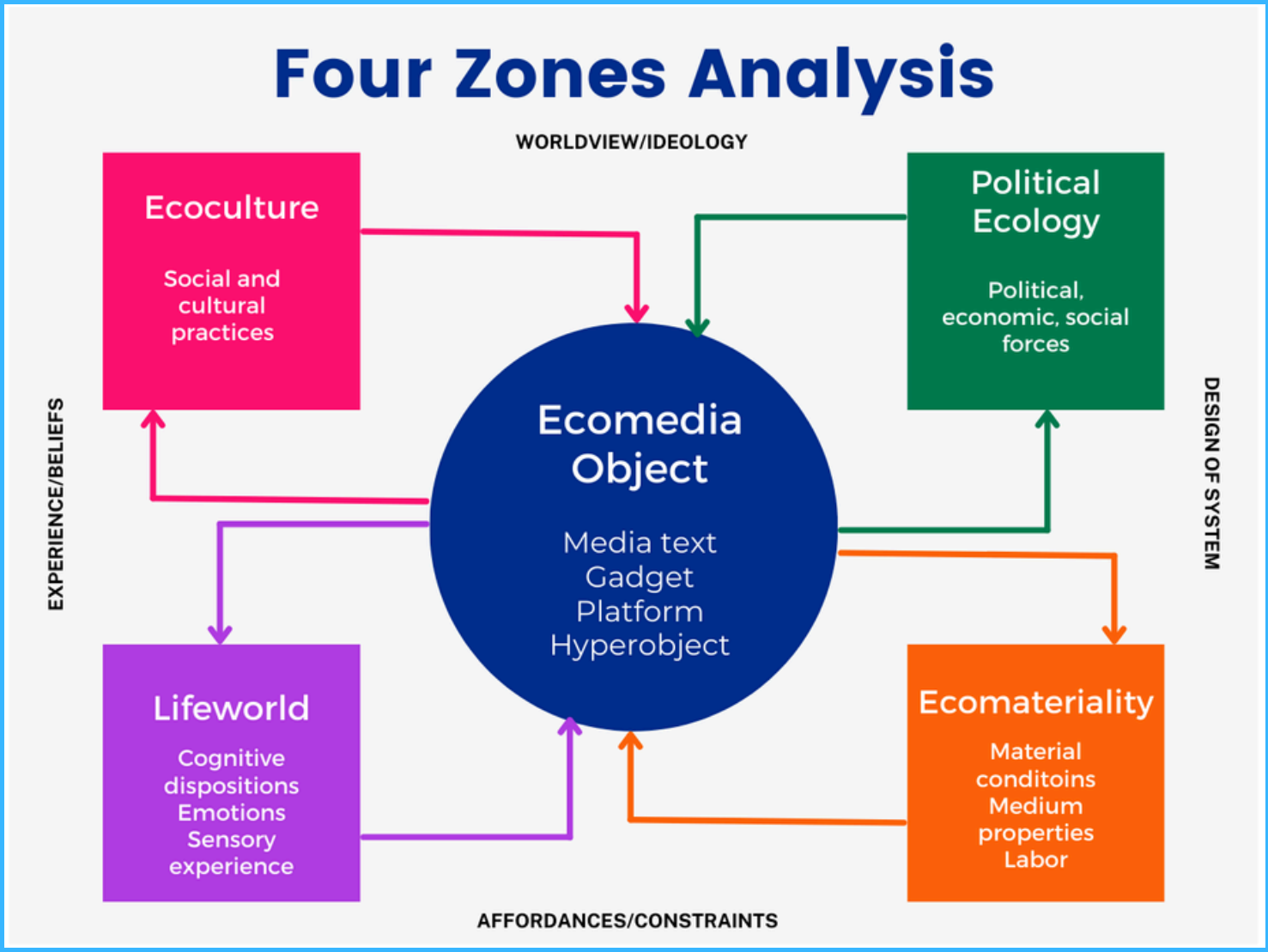
- Envision future scenarios where media and technology contribute to sustainability.
- Speculate on the role of emerging technologies in promoting environmental stewardship.

## HOW UNIVERSITY COURSES ARE USING ECOMEDIA LITERACY

- The University of Oregon: Launched a project analyzing the environmental impact of streaming services.
- Denison University: In a course called "Ecomedia Literacy," students examine the symbolic and material relationships between media, people, and the planet.
- The University of California, Los Angeles: Offers a course on Environmental Justice through the lens of media and education.
- Linnaeus University: Developed a transdisciplinary platform for research, education and action related to the mediation of climate and ecological emergency.
- The University of Münster: Offers courses focusing on the potential of ecomedia literacy in the English language classroom.
- University of Amsterdam: Teaches a course on digital media sustainability.
- Appalachian State University: Appalachian State University's First Year Seminar Program includes a course called "Media Literacy and the Environment" that combines media literacy education with ecomedia literacy principles and an emphasis on creative climate communication. Their campus Media, Technology, and Learning Design (MTL) Program features undergraduate media courses– one in media literacy and a second in documentary film– that address university goals in climate literacy, integrating attention to the climate crisis through ecomedia literacy.

# Applying the Four Zones of Ecomedia Literacy

**Ecomedia literacy employs a holistic framework consisting of four analytical zones: ecoculture, political ecology, ecomateriality, and lifeworld. This approach helps students understand the complex relationships between media and the environment. Many learning activities are designed to cover multiple zones, promoting systems thinking and a deeper appreciation of how media, culture, society, and the environment interconnect. However, to achieve a truly comprehensive analysis, it's often necessary to combine several different lessons or activities. This is because most individual activities, while covering multiple zones, rarely address all four. By using a variety of learning experiences, educators can ensure that students explore all aspects of the ecomedia literacy framework. Explore the "Curriculum Materials" page on ecomedialiteracy.org to see a variety of activities.**

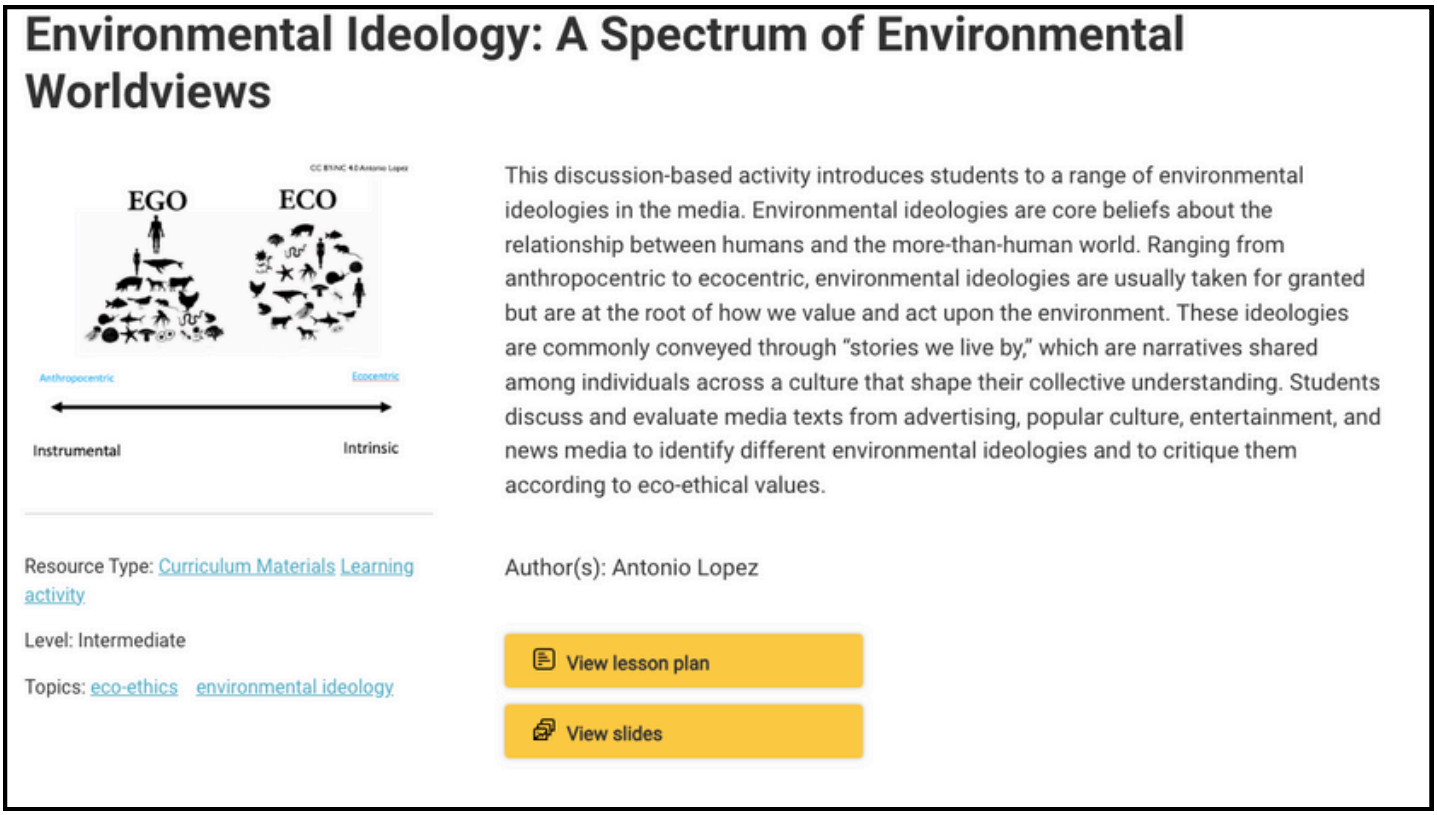


# Learning Activity Example #1

Click or scan for detailed instructions, slides, and handouts

## ENVIRONMENTAL IDEOLOGY: A SPECTRUM OF ENVIRONMENTAL WORLDVIEWS

This discussion-based activity introduces students to a range of environmental ideologies in the media. Environmental ideologies are core beliefs about the relationship between humans and the more-than-human world. Ranging from anthropocentric to ecocentric, environmental ideologies are usually taken for granted but are at the root of how we value and act upon the environment. These ideologies are commonly conveyed through "stories we live by," which are narratives shared among individuals across a culture that shape their collective understanding. Students discuss and evaluate media texts from advertising, popular culture, entertainment, and news media to identify different environmental ideologies and to critique them according to eco-ethical values.




Screen shot of learning activity page

# ACROSS DISCIPLINES: ENVIRONMENTAL IDEOLOGY

## Sciences

- **Environmental Sociology**: Investigate the influence of environmental ideologies on social movements, environmental policy, and public opinion. Examine how these ideologies shape conflicts surrounding resource use and climate change.
- **Political Science**: Analyze how political actors frame environmental positions using specific ideologies. Deconstruct campaign materials and speeches to identify underlying ideologies and their impact on environmental policy debates.
- **Anthropology**: Explore the diverse cultural expressions of environmental ideologies. Investigate Indigenous worldviews as examples of ecocentrism.
- **Media Studies/Communications**: Critically analyze how media narratives, advertising, and popular culture construct and promote environmental ideologies.

## Humanities

- **Philosophy/Environmental Ethics**: Explore ethical dimensions of environmental ideologies. Introduce key theories (ecocentrism, biocentrism) and discuss their alignment or conflict with ideologies found in media.
- **Literature (Environmental Literature)**: Examine how literary works embody or challenge various environmental ideologies. Analyze authors' use of literary devices to express these worldviews.
- **History**: Trace the evolution of environmental ideologies through historical movements and events. Question the role of colonialism, imperialism, and the industrial revolution.

## Natural Sciences

- **Environmental Science**: Connect environmental ideologies to scientific data on pollution, biodiversity loss, and global warming. Discuss how different ideologies might approach this data or connect to ecological tipping points and feedback loops.
- **Biology/Ecology**: Examine how environmental ideologies differentially value ecosystem function and biodiversity.

## Cross-disciplinary Dialogue

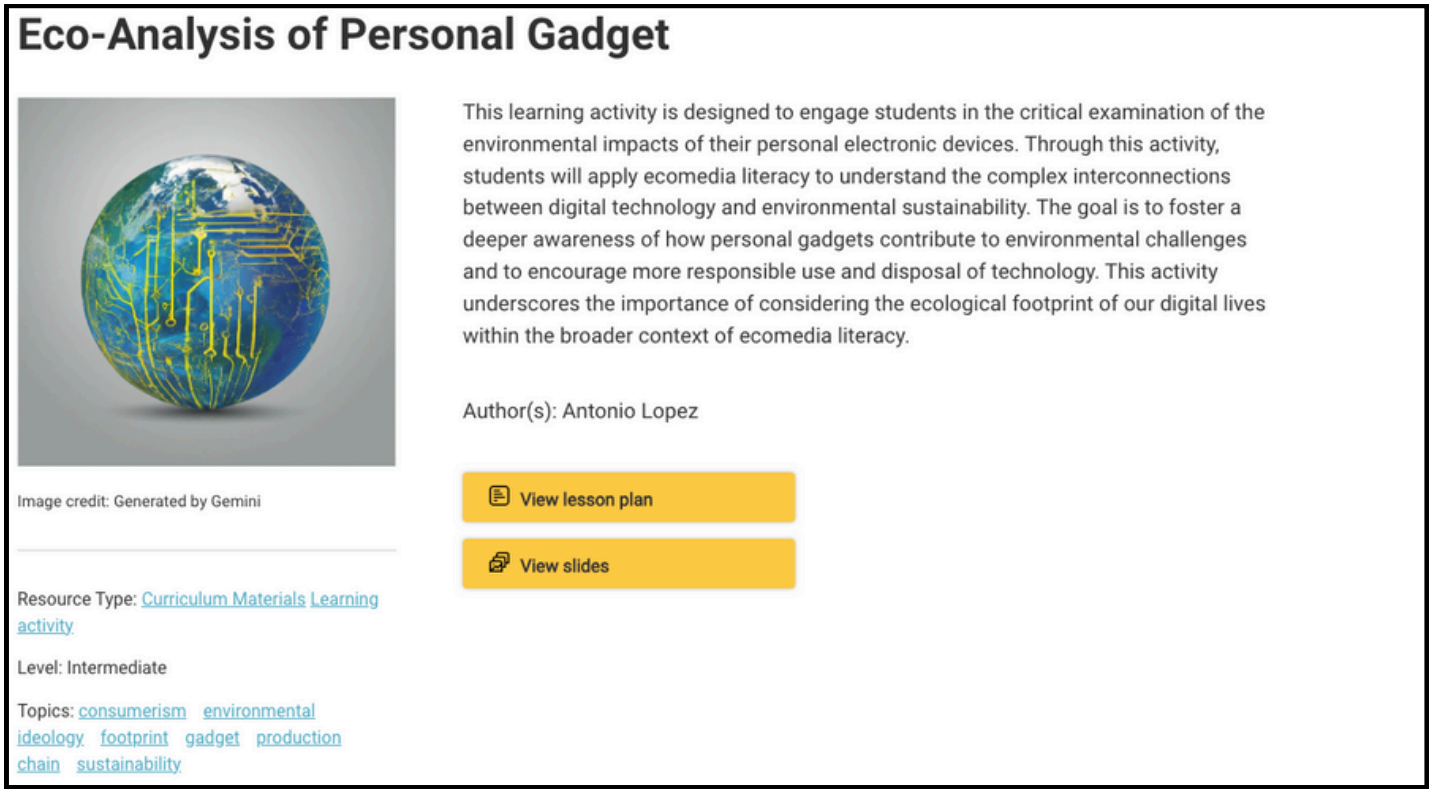
- **Joint Projects**: Collaborate across disciplines to analyze environmental issues from multiple perspectives.
- **Debate**: Have students defend positions along the ideological spectrum, grounding arguments in their field of study.
- **Reflective Writing**: Encourage students to connect their own environmental ideologies to their coursework for deeper critical thinking.

# Learning Activity Example #1

Click or scan for detailed instructions, slides, and handouts

## ECO-ANALYSIS OF PERSONAL GADGET

This learning activity is designed to engage students in the critical examination of the environmental impacts of their personal electronic devices. Through this activity, students will apply ecomedia literacy to understand the complex interconnections between digital technology and environmental sustainability. The goal is to cultivate a deeper awareness of how personal gadgets contribute to environmental challenges and to encourage more responsible use and disposal of technology. This activity underscores the importance of considering the ecological footprint of our digital lives within the broader context of ecomedia literacy.




Screen shot of learning activity page

# ACROSS DISCIPLINES: ECO-ANALYSIS OF PERSONAL GADGET

## Social Sciences

- **Environmental Sociology**: Students can investigate the social implications of personal gadget consumption and disposal, examining how societal values and norms influence environmental impact and sustainability efforts.
- **Political Science**: Analyze the role of policy and governance in regulating the production, use, and disposal of personal gadgets, and how environmental ideologies connect with neoliberalism, globalization, and transnational corporations.
- **Anthropology**: Explore the cultural significance of personal gadgets in different societies and how these cultural practices impact the environment.
- **Media Studies/Communications**: Critically examine how media narratives and advertising shape consumer behavior towards personal gadgets and their environmental consequences.

## Humanities

- **Philosophy/Environmental Ethics**: Discuss the ethical considerations of the environmental impact of personal gadgets, including the moral responsibility of consumers, producers, and policymakers.
- **Literature (Environmental Literature)**: Analyze how environmental themes related to technology and gadgets are portrayed in literature, and how authors use these narratives to reflect on human-environment interactions.
- **History**: Trace the historical development of personal gadgets and their environmental impacts, considering how past practices inform current attitudes and policies.

## Natural Sciences

- **Environmental Science**: Study the ecological footprint of personal gadgets, including resource extraction, energy use, and waste management, and their effects on ecosystems.
- **Biology/Ecology**: Investigate the impact of the materials and processes used in personal gadgets on biodiversity and ecosystem health.

## Cross-disciplinary Dialogue

- **Joint Projects**: Encourage interdisciplinary projects that bring together students from different fields to analyze the environmental impact of personal gadgets from multiple perspectives.
- **Debate**: Organize debates where students from various disciplines argue the environmental, social, and economic aspects of personal gadget use.
- **Reflective Writing**: Assign reflective writing tasks that prompt students to consider their own use of personal gadgets in relation to environmental sustainability and their field of study.

# Case Study

# Lebanese American University

A project at Lebanese American University (LAU) in Beirut aimed to advance the UN's Sustainable Development Goals (SDGs) with ecomedia literacy. Students studied localized case studies, focusing on the ecological footprint and mindprint of media in the Lebanese context. They analyzed the impact of e-waste and Bitcoin mining on the environment, examining activist campaigns and media reporting to understand and address unsustainable practices in media consumption and technology use. Pre- and post-surveys assessed students' learning and engagement, revealing that the case studies effectively enhanced ecomedia literacy skills and contributed to understanding the SDGs.

The inclusion of localized examples allowed students to relate the concepts to their own experiences, encouraging dialogue and promoting social action. Findings demonstrated that critical thinking and dialogue facilitated by the curriculum empowered students to recognize and address environmental issues, leading to tangible actions such as promoting electronic recycling and advocating for sustainable practices within the university. Overall, the project demonstrated the effectiveness of ecomedia literacy education in mobilizing students to take action towards achieving sustainability goals, in the classroom and beyond.

Project designer and lead researcher: Perla Daou
Supervisor: Dr. Gretchen King

Click or scan for a detailed overview

# Glossary

**Anthropocentrism** An environmental ideology that prioritizes human needs and interests over ecological sustainability, often leading to environmental degradation.

**Eco-citizenship** The embodiment of ecologically resilient behaviors and cultural practices that shape and promote ecocentric values within society, economy, and the environment.

**Eco-ethics** Ethical principles that extend beyond an anthropocentric view promoting empathy and care for the living planet and advocating for sustainable and responsible media practices.

**Ecocentrism** An environmental ideology that recognizes the inherent value of all living beings and the interconnectedness of ecosystems, promoting a holistic understanding of human-environment relationships.

**Ecoculture** The study of shared environmental beliefs, eco-ethics, and environmental ideologies communicated through media discourses, representations, symbols, and language.

**Ecological Footprint** The tangible environmental impacts of media technologies, including resource extraction, energy consumption, and waste generation throughout their lifecycle.

**Ecological Mindprint** The influence of media on shaping our understandings, beliefs, and ideologies about the environment, affecting how we perceive and interact with the natural world.

**Ecojustice** The recognition that environmental struggles intersect with social justice issues of gender, race, class, and inequality, advocating for equitable and sustainable environmental practices.

**Ecomateriality** The examination of the environmental impacts resulting from the extraction, manufacture, and consumerism of media technologies, including the physical properties and ecological footprints of these devices.

**Ecomedia** A conceptual framework recognizing that media have both an ecological footprint and an ecological mindprint, emphasizing the environmental impacts of media technologies and the cultural beliefs they propagate.

**Ecomedia Commons** The shared resources and environments affected by media technologies, emphasizing the need for collective responsibility and sustainable management of these commons.

**Ecomedia Literacy** An emerging area of media literacy that teaches the integrated relationship between media and living systems, focusing on the environmental impacts of media technologies and promoting eco-ethical cultural behaviors and attitudes.

**Ecomedia Object** Personal gadgets such as phones, computers, tablets, accessories, and game controllers that are analyzed through ecomedia literacy to understand their environmental and cultural impacts.

**Ecomedia Studies** An interdisciplinary field examining the materiality, representation, and communication of media from an environmental perspective, integrating insights from ecocriticism, environmental humanities, and media studies.

**Enclosure** The process of privatizing shared resources, both physical and digital, to restrict access and control by a few entities, often leading to the exclusion of local communities and the public from these resources.

**Environmental Communication** (EC) A discipline that combines ecocriticism with linguistic discourse analysis, rhetorical studies, political economy, and media studies to explore how environmental beliefs are culturally constructed and communicated.

**Environmental Ideology** A set of beliefs and values related to the natural world and human impacts on the environment, communicated through media and influencing public perception and policy.

**Expendability** The creation of sacrifice zones where certain ecosystems and communities are deemed disposable, highlighting the disproportionate impact of environmental harm on marginalized groups.

**Exploitation** The misuse and overuse of labor and land, particularly in the production of media technologies, resulting in the exploitation of both human and natural resources for profit.

**Externalization** The shifting of the true negative costs of media production and consumption onto vulnerable populations and ecosystems, often hiding the environmental and social impacts from the end consumers and broader public.

**Extraction** The removal and utilization of natural resources, data, and human attention, often without sustainable practices, contributing to environmental degradation and social inequalities.

**Lifeworld** The exploration of how media gadgets generate sensory, cognitive, and emotional experiences, impacting human perception and behavior, and fostering connections or alienation from the natural world.

**Political Ecology** An analysis of the ideological aspects of media gadgets and their production chains, facilitated by social structures, and the allocation of resources and waste, highlighting issues of environmental justice and neo-colonialism.

**Slow Violence** A concept referring to the gradual, often invisible environmental destruction dispersed across time and space, typically not recognized as violence.

**Systems Thinking** A holistic approach to analyzing the interconnectedness of global systems, emphasizing the relationships between media technologies, social structures, and environmental impacts.

# Call to Action

**The climate crisis is a media literacy crisis!**

## 01. Raise awareness and prompt critical thinking

- Expose the hidden environmental impact of media: Students analyze the production, consumption, and disposal of media technologies, understanding their carbon footprint, resource depletion, and electronic waste issues.
- Challenge greenwashing narratives: Students critically evaluate media messages about sustainability, uncovering hidden agendas and promoting responsible consumption habits.
- Examine media's influence on environmental attitudes: Students analyze how media portray environmental issues, fostering critical thinking and challenging biased narratives that hinder progress.

## 02. Empower action and advocacy

- Develop media literacy skills for environmental campaigns: Students learn to create and share impactful media content that raises awareness, promotes sustainable practices, and mobilizes action on climate change.
- Collaborate with environmental organizations: Universities can partner with NGOs and communities to develop and implement media campaigns addressing specific environmental challenges.
- Promote responsible media production: Students advocate for sustainable practices within the media industry, encouraging eco-friendly production methods and ethical sourcing of materials.

## 03. Integrate sustainability across disciplines

- Bridge the gap between media studies and environmental science: Interdisciplinary collaboration enriches existing curricula and offers new research opportunities.
- Develop future-proof graduates: Equipping students with critical thinking and communication skills about the environment and media prepares them for careers in sustainability-focused fields.
- Lead by example: Universities can implement sustainable practices in their own media operations, demonstrating commitment to environmental responsibility.

# Further Reading

## Media and the Environment

The Routledge Handbook of Ecomedia Studies, ed. by Antonio López and others (Routledge, 2024), offers a comprehensive collection that addresses the intersection of media and environmental studies, emphasizing the material and social mediation of environments. This open access and free book covers five critical areas: ecomedia theory, ecomateriality, political ecology, ecocultures, and eco-affects, providing a holistic overview of the field and its future directions. On the discussion of how we define the environment, nature, and ecosystems, see Chapter One, "When Media Become Ecomedia." On incorporating ecomedia studies into university curricula, see Chapter Nine, "Ecomedia Literacy: Bringing Ecomedia into the Classroom."

The concept of environmental ideology is discussed in Julia B. Corbett's book Communicating Nature: How We Create and Understand Environmental Messages (Island Press, 2006).

## Ecomedia Literacy

To learn more about ecomedia objects, the four zone methodology, ecomedia mind/footprint, and ecomedia literacy more generally, see Antonio López, Ecomedia Literacy: Integrating Ecology into Media Education (Routledge, 2021). Concerning how ecomedia literacy ties into ecojustice, see Antonio López, "Ecomedia Literacy: Ethics, Ecojustice, and the Climate Emergency," in Media Literacy for Justice: Lessons for Changing the World, ed. Belinha S. De Abreu (ALA Neal-Schuman, 2022). This chapter argues for incorporating ecomedia literacy, which recognizes media's material and ideological interconnections with environmental issues and social injustices, into media education to promote eco-citizenship, decolonize knowledge systems, and ethically address the climate emergency through critical analysis and media production grounded in ecojustice principles. A special issue of The Journal of Sustainability Education (JSE) and Journal of Media Literacy (JML), co-edited by Antonio Lopez, Jeff Share, and Theresa Redmond, is dedicated to ecomedia literacy.

To inspire ideas about how to integrate ecomedia literacy into the media classroom, start with these short articles: "Bringing Ecomedia Literacy into the Classroom" and "Ecomedia Literacy: Principles and Practices."

Additional recommended resources:

- ecomedialiteracy.org with the lesson plans and resources (see QR codes below)
- UCLA Critical Media Literacy Research Guide page focusing on climate change and environmental justice
- The short animated video by Aaron Kierbel about the ecomedia footprint
- Podcasts that address the climate crisis: Drilled or ClimateOne.
- Cranky Uncle combines critical thinking about communication with climate change.

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Click or scan the QR codes for comprehensive resources:

**Ecomedia Studies**

**Teaching Ecomedia**

**Research Ecomedia**

**Dr. Antonio López** has a research focus on bridging ecojustice and media literacy. He has written numerous academic articles, essays, and books. His most recent monograph is **Ecomedia Literacy: Integrating Ecology into Media Education** (Routledge) and he is a co-editor of **The Routledge Handbook of Ecomedia Studies**. He is Professor of Communication and Media Studies at John Cabot University in Rome, Italy.

**This e-book is complemented by resources and a toolkit available at ecomedialiteracy.org. QR codes throughout this guide indicate a link to relevant resources. You can scan or click them.**



Thanks to Jeff Share and Theresa Redmond for feedback. This guide is adapted from "Ecomedia Literacy & SDGs: A Handbook for Higher Ed." Click here for more info.

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