Result Information

Deliverable Title: Pilot Learning Materials combined pt.2
Work Package: WP 4
Type of Result: learning materials
Level: International / Institutional
Target Groups: HE teachers, students, media professionals

Description

Pilot Learning Materials include teaching and learning resources developed and used within the WP4 pilot courses of the SUMED project. They consist of theoretical contexts, lesson plans, learning tasks, assignments, assessment tools, and supporting materials for students and teachers, focused on sustainable media practices.
The materials support topics such as sustainable media production, ethical communication, environmental impact measurement, and occupational well-being. They were applied in real pilot learning environments and are linked to curriculum redesign (WP2), teacher training (WP3), and open educational resources developed in WP5.

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The aim is to offer a better understanding of creativity (and creative freedom) and sustainability in story development, story design, story world, and character development in eco-screenwriting.

The way climate change and ecology can be woven into any genre, storyline, or even better a theme (a bit hidden.) to empower our students and our audiences with Eco-critical thinking and sustainability issues in creating exciting screen narratives. *Chinatown, Interstellar, Game of Thrones, Luzzu, Mother!, The Revenant, Happy Feet* and *Avatar* with a conscious intention to *s*tay away from:

1. The disaster movie genre. We have to capture and appeal to different audiences. A better understanding of creativity and sustainability in script development, story design, story world, and character development in green filmmaking.

2. The ability to navigate between green marketing and greenwashing.

It is advisable for screenwriters to write narratives that incorporate sustainable behaviours by characters keeping in mind a carbon calculator, but it is best when films do not directly address conservation issues can also have a positive impact on viewers through Planet Placement where climate conversations are woven into the food we eat, the homes we sleep in, the holidays we go on and the parks we play in, fashion and furniture. "Maybe it's your character borrowing an outfit from a friend rather than buying a new one," the guide for writers explains. "… It doesn't have to take centre stage or be an entire story about climate change. The important thing is just to reference the environment in a way that doesn't disrupt your story." Climate catastrophe, air or water pollution and all issues related to ecology can be incorporated in a subtle way and certainly can empower our student's creative freedom.

We need to set examples of green behaviour and sustainable lifestyle through the ecological actions of the characters, such as segregating rubbish, using reusable bags or turning off the water while brushing teeth, and recycling clothes.

Examples:

***Chinatown* 1974**
Film noir/crime – forefront murder investigation with the main theme being a commentary on human' greed and corruption BUT in green terms, the movie reveals environmental politics and disruption and even destruction of the eco-system.

Interstellar 2014
Which is a parable and the film is about the total collapse of the ecosystem because of the blight fungus.

Game of Thrones 2011-2019
With the storyline is a metaphor for modern-day global warming - a dangerous force descending from the north to wipe out humanity while key political leaders are too busy fighting to heed the warnings.

Luzzu 2021
Neo-realist drama and while at the forefront of the story is theme is the social class difference with a young couple's struggles, in the background a very important theme floats- the black market decimating the Mediterranean fish population leading to overfishing and death of the fishing traditions.

*Mother***!** I2017
An allegory. Thriller/horror Aronofsky exposes greed, selfishness and our bad habits with some of us turning a blind eye to the way others are destroying our Earth.
The Revenant historical, unspoilt wilderness that is being ravaged and raped by human exploitation of nature.

Happy Feet 2006 overfishing. The film's depiction of the consequences of human actions on wildlife serves as a call to action, urging viewers to consider more sustainable practices to protect our planet for future generations.

Avatar 2009 Sustainability and interconnectedness of humanity to nature. By contrasting the exploitative practices of the human corporation with the harmonious existence of the Na'vi, the film advocates for a more respectful and sustainable relationship with the environment. It encourages viewers to recognize the intrinsic value of all life forms and the importance of maintaining ecological balance for the health and survival of our planet.

 At the same time, avoid scenes in which characters adopt non-ecological behaviours and attitudes.

The screenwriters write in different geographical locations and – cultural locations, but their works engage with the ways ecological considerations extend and flow across the border,
I admit that as screenwriters we do not have a lot of power. Even though our script would be ecology and environment conscious – our stories are still dependable on the vision of the director and interpreted by the producer. Discussions are needed with the director to write a balanced script that will minimise its impact on the artistic vision.

Avoid scenes with lots of **special effects** (fire, water, snow, explosions) or many extras.

1. Be knowledgeable about which effects <u>can be</u> <u>realized</u> in post-production, in other words, be aware of VFX's **capabilities** and **limitations**.

   o Identify the types of effects (e.g., fire, water, explosions) that can be realistically and cost-effectively added in post.
   o Understand any limitations in terms of realism, budget, and time constraints.

   Use pre-visualization tools to map out scenes and determine which elements are best left to post-production. This can help you in planning shots to make sure VFX can actually deliver.

   While planning, aim at **simplification** and **backdrop adjustments.**

   o Opt for simpler scenes that do not rely heavily on physical special effects. For instance, instead of a large-scale explosion, consider a more contained, character-driven moment that can be enhanced with subtle VFX.
   o Use green screens or blue screens to shoot scenes with minimal practical effects, allowing for backgrounds and environments to be added digitally.

2. With AI- would it be more plausible to create virtual worlds: **efficiency, cost-effectiveness,** and **flexibility**.

   o AI can significantly speed up the process of creating complex virtual environments, reducing the need for extensive physical sets or location shoots, or crowds, reducing the need for numerous extras.
   o Building virtual worlds using AI can be more cost-effective than constructing physical sets or traveling to multiple locations.
   o AI-generated environments can be easily modified and adapted to fit the evolving needs of the story.
   o AI-generated enhanced realism can create the realism of visual effects, making AI-generated fire, water, or weather effects more convincing.

3. Pre-production planning: **storyboarding** and **budgeting**

   o Create detailed storyboards to map out scenes, highlighting which elements will be practical and which will be digital. This helps in visualizing the final product and planning accordingly.
   o Allocate the budget to prioritize key scenes where practical effects are essential, while leveraging AI and VFX for the rest. This ensures efficient use of resources.

Benefits for screenwriters

Understanding the tools of AI and VFX can improve your ability to write scenes that are both creatively ambitious and practically achievable. Here's why:

1. Can help you set realistic expectations for what can be achieved visually within budget and time constraints (**realistic expectations**)
2. Be aware that these technologies allow you think outside traditional limits, incorporating innovative visuals and effects that improve the narrative **(enhanced creativity)**.
3. Understanding AI and VFX enables screenwriters to communicate more effectively with directors, VFX coordinators, and production teams, ensuring a smoother production process.
4. Writing with an awareness of what can be done in post-production can lead to more cost-effective scripts, avoiding unnecessary or overly expensive practical effects (**cost efficiency**).
5. Knowledge of AI and VFX opens up new storytelling possibilities, allowing for the creation of unique settings, characters, and scenarios that might be impossible to achieve practically (**storytelling opportunities**).

Key take-aways:

- a better understanding of creativity and sustainability in script development, story design, story world, and character development in green filmmaking.
- climate change and ecology that can be woven into any genre or storyline.
- eco-critical thinking and sustainability issues in creating screen narratives.
- the creative sustainability process from the point of view of the screenwriter training and integration.
- research collaborations that allow students/scriptwriters from the humanities to team up, through projects, with students from the science and social science disciplines.
- the ability to navigate between green marketing and greenwashing.
- the screenwriters write in different geographical locations and – cultural locations, but their works engage with the ways ecological considerations extend and flow across the borders.

Exercises

Integrate sustainability naturally rather than overtly preach about it so incorporate sustainability as a seamless part of their storytelling:

1. Character-driven Stories:

Students are asked to create characters with diverse backgrounds, goals, and motivations. Then, challenge them to incorporate sustainability practices or concerns into the characters' lives in a way that feels authentic and integral to their personalities and story arcs. For example, a character might be an avid hiker who volunteers for trail conservation projects, or a single parent who gardens to save money on groceries and reduce their environmental impact.

2. Setting Exploration:

Students are encouraged to choose a specific setting (e.g., a small town, a university campus, a corporate office) and explore how sustainability is woven into the fabric of daily life in that environment. Instead of focusing solely on sustainability initiatives, they can incorporate subtle details such as reusable water bottles on desks, community gardens in public spaces, or solar panels on rooftops to create a sense of realism and immersion.

3. Subtle Themes and Metaphors:

Students are asked to use symbolism, metaphor, and subtext to convey themes of sustainability without explicitly addressing them. For example, a story set in a deteriorating urban neighbourhood undergoing revitalization could symbolize the importance of environmental stewardship and community resilience 4. without overtly discussing sustainability practices.

4. Plot-driven Narratives:

Students are encouraged to develop plots that naturally intersect with sustainability themes without becoming didactic. For instance, a mystery story might revolve around the investigation of illegal dumping in a wildlife refuge, or a romantic comedy could feature a love triangle involving characters with conflicting attitudes toward eco-friendly living.

5. Genre-specific Challenges:

Students are asked to write stories in specific genres (e.g., horror, comedy, historical drama) and challenge them to incorporate sustainability elements in a way that complements the genre conventions without overpowering the narrative. This exercise encourages creativity and flexibility in storytelling while promoting subtlety in addressing sustainability themes.

6. Backstory Integration:

Students are tasked to develop rich backstories for their characters, including details about their upbringing, values, and life experiences. Encourage them to incorporate elements of sustainability into these backstories in a way that informs the characters' present-day actions and decisions without overtly stating their beliefs or motivations.

7. Dialogue Practice:

Students are challenged to create dialogue prompts or scenarios that naturally lend themselves to discussions about sustainability (e.g., a family dinner conversation, a workplace debate). They are asked to write dialogue that reflects characters' differing perspectives on sustainability in a nuanced and realistic manner, avoiding clichés or overt moralizing.

SUMED Learning Environment for Magazine and Digital Publishing

1. Purpose and scope

This learning environment sets out how Magazine and Digital Publishing is delivered so the revised syllabus learning outcomes are achieved. The unit is practical and process based. Sustainability principles and student responsibilities are explained at the start.

Students develop visual communication skills and apply them towards the production of a printed publication, while also understanding sustainability in print and digital publishing. Sustainability is treated as a guiding principle from concept development to final output. The unit is hands-on and project based. A strong emphasis is placed on student wellbeing and mental health, with psychological sustainability treated as part of responsible practice.

2. Delivery model

This study unit runs across two semesters.

Semester 1, foundations
Students learn theory and core concepts, including visual theory, typography, layout, image based storytelling, history and processes of print, editorial design, and sustainability in publishing. Teams are formed and roles are assigned across Editorial, Communication, Design, and Production. Students begin regular journal keeping and task logging.

Semester 2, production
Teams create a magazine from concept to final output. Sustainability is applied throughout the workflow, with students documenting key decisions and trade offs across editorial planning, design choices, production methods, and distribution.

3. Sustainability across four core practice areas

Sustainability is incorporated across these areas in lessons, activities, and the magazine project.

Editorial
Content planning with ethical judgement and environmental impact awareness, including sourcing, representation, and responsible decision making.

Communication
Responsible messaging and outreach, platform choices, and wellbeing considerations.

Design
Visual communication choices with material impact awareness, including typography, layout, and the relationship between word and image, plus accessibility and digital efficiency.

Production

Low impact workflows for print and digital outputs, including paper and material choices, proofing approaches, version control, file management, and distribution planning.

4. Student wellbeing and mental health

Mental health is treated as a core sustainability consideration. The learning environment supports wellbeing through:

• realistic scheduling and milestone planning across both semesters
• clear roles, expectations, and accountability within teams
• structured critique focused on work and decisions, not individuals
• regular check ins during intensive production periods
• respectful collaboration standards and safe feedback practices

5. Learning outcomes in practice
The learning environment ensures each outcome is taught, practised, and assessed.

Knowledge and understanding

 By the end of the unit, students can:
• comprehend the principles and elements of visual theory
• demonstrate knowledge and understanding of the history and basic processes of print
• intelligently critique and reflect on contemporary visual art and visual communication
• experiment with and understand the relationship between word and image in design
• understand key terminology related to print, visual theory, and editorial design
• explain how sustainability applies to print and digital publishing contexts
• identify environmentally responsible approaches across the full publishing workflow
• recognise how visual communication choices influence material impact
• understand how sustainability frameworks such as EMAS and the United Nations
   Sustainable Development Goals connect to classroom and workshop settings

Skills

By the end of the unit, students can:
• work in a team towards a final practical project, producing a magazine
• understand and operate within team dynamics across editorial, communications,
   advertising, and design functions
• keep a journal that records background theory, reflections, and tasks performed
• appreciate the dynamics and workflow of a publishing house and apply these to the project
   process
• work to tight deadlines and be accountable to a coordinator

- plan, design, and produce work using low impact methods across editorial, design, communication, and production decisions
- support sustainable approaches to visual communication and publishing practice within team work
- evaluate work with attention to creative quality, environmental responsibility, and responsible collaboration

Sustainability competencies assessed across the unit:

Principles: explain core sustainability principles in design, publishing, and digital media
Application: implement sustainable practices, including eco friendly material choices, digital optimisation, and waste reduction
Critical thinking: assess sustainability issues in publishing and propose feasible improvements
Ethical judgement: balance environmental, social, and economic considerations in decision making

6. Learning process and lesson structure

Each lesson includes:
- theory input linked to visual communication and sustainability in publishing
- practical insight and examples connected to publishing workflows
- an activity aligned to Editorial, Communication, Design, or Production
- an application task that builds directly into the magazine project
- a short quiz for consolidation
- journal reflection focused on learning, sustainability decisions, and wellbeing

7. Learning environment components

Teaching and learning resources include:
- lesson inputs and supporting readings
- assignment and project briefs

Learning culture includes:
- collaborative team work with defined roles
- workload planning that supports student wellbeing
- clear expectations and deadlines to support self management

8. Assessment includes:
- understanding and application of visual theory, print history, and editorial design fundamentals

- effective use of word and image in publication design
- team contribution, journal keeping, and accountability to deadlines
- sustainability informed decisions across materials, design, production, and distribution

The Eco-Management and Audit Scheme (EMAS) developed by the European Commission is an environmental management system designed to help organizations improve their environmental performance and demonstrate their commitment to sustainability. When using EMAS as a framework to derive relevant indicators for courses, key takeaways include:

Environmental Responsibility: EMAS emphasises the importance of environmental responsibility and sustainability. Courses incorporating EMAS indicators should promote a sense of responsibility among students toward the environment and encourage sustainable practices.

Compliance with Regulations: EMAS requires organizations to comply with relevant environmental laws and regulations. Courses should educate students about the importance of legal compliance and help them understand the environmental impact of non-compliance.

Continuous Improvement: EMAS promotes a culture of continuous improvement in environmental performance. Courses should encourage students to continually seek ways to minimise their environmental impact and contribute to sustainability.

Environmental Management Systems: EMAS provides a structured framework for environmental management systems. Courses can introduce students to the concepts of environmental management systems and their application in various contexts.

Monitoring and Reporting: EMAS requires organizations to monitor and report their environmental performance transparently. Courses should teach students how to collect and analyse environmental data, as well as how to communicate their findings effectively.

Resource Efficiency: EMAS emphasises resource efficiency and waste reduction. Courses should highlight the importance of resource conservation, energy efficiency, and waste minimisation in achieving sustainability goals.

Stakeholder Engagement: EMAS encourages organizations to engage with stakeholders, including employees, customers, and the public, on environmental matters. Courses can teach students the value of stakeholder engagement and how to effectively communicate environmental initiatives.

Environmental Indicators: EMAS defines key environmental indicators for measuring and reporting environmental performance. Courses can incorporate these indicators into their curriculum to help students understand how to assess and track sustainability metrics.

Auditing and Verification: EMAS requires independent third-party verification of environmental reports. Courses can introduce students to auditing and verification processes, helping them understand the importance of credibility and transparency in environmental reporting.

Life Cycle Thinking: EMAS encourages organizations to consider the entire life cycle of products and services. Courses can teach students about life cycle assessment and how to apply life cycle thinking to assess environmental impacts comprehensively.

Sustainable Practices: EMAS promotes sustainable practices, including the reduction of greenhouse gas emissions and the use of environmentally friendly materials. Courses should introduce students to sustainable practices applicable to their field of study or industry.

International Relevance: EMAS aligns with international environmental standards and best practices. Courses incorporating EMAS principles can prepare students to work in a global context and adhere to international sustainability standards.

By incorporating these key takeaways from EMAS, courses can effectively integrate environmental responsibility and sustainability principles into their curriculum, preparing students to be environmentally conscious and responsible professionals.

SUMED Learning Environment for Video Production

1. Purpose and scope

This learning environment governs how Video Production is delivered so that the revised syllabus learning outcomes are achieved. It prioritises hands on production practice while incorporating environmental responsibility, compliance, continuous improvement, resource efficiency.

2. Learning outcomes mapped into the environment

The learning environment ensures each outcome is taught, practised, evidenced, and assessed.

Knowledge and understanding

K1. Environmental responsibility and compliance
Students identify, critically assess, and compare video genres through environmental impact and regulatory compliance.
Environment implication: genre analysis is not only aesthetic or cultural, it includes sustainability and compliance constraints.

K2. Storytelling fundamentals and continuous improvement
Students learn audio visual editing language and fundamentals, then apply eco friendly editing techniques to reduce resource use.
Students learn lighting techniques and why they are used, with emphasis on sustainable lighting decisions.
Environment implication: continuous improvement is built into the workflow through iteration, reflection, and measurable reductions in waste.

Skills

S1. Environmental management systems, monitoring, reporting
Students draft production proposals integrating sustainability considerations and report on environmental aspects.
Environment implication: proposals must include indicators, monitoring plan, and reporting evidence.

S2. Self awareness and reflectivity in editing
Students do basic video editing (framing and continuity) and actively reflect on resource efficient choices and impacts.
Environment implication: reflection is not optional journaling. It is assessed evidence tied to sustainability indicators.

S3. Resource efficiency and life cycle thinking
Students plan and manage filming sessions with resource efficiency and life cycle thinking across

pre production, production, post, and delivery. Students operate cameras using resource efficient techniques.
Environment implication: planning documents must show decisions that reduce waste, re takes, energy use, and travel load.

S4. Stakeholder engagement and environmental indicators
Students develop interpersonal skills via peer critique and stakeholder discussions focused on sustainability indicators.
Environment implication: discussions are structured and evidence based, not opinion based.

S5. International relevance and sustainable collaboration
Students plan and collaborate during filming, aligning practice with global sustainability standards and norms.
Students demonstrate basic audio recording and editing, using sustainable practices.
Environment implication: students learn transferable sustainable practice, not tool specific hacks.

3. Learning environment components

Health and safety for Video Production

Physical safety

Mandatory kit induction for cameras, audio gear, lighting, tripods, cables, batteries.
Location risk assessment and permissions process for each shoot.
On set roles include a named safety lead and data lead, even for small crews.

Psychological safety

Critique rules emphasise behaviours and deliverables, with structured peer feedback.
Clear escalation route for unsafe or inappropriate behaviour.

Digital, legal, and compliance safety

Consent, release, and data handling workflow for recorded subjects and locations.
Copyright and licensing rules for audio, footage, and graphics.

Sustainability addition

The planning stage explicitly includes travel, power, and data decisions as part of responsible practice, not as an afterthought.

Phase 2. Curriculum development through practical cycles

Existing syllabus structure is retained. Each project cycle is reworked through small sustainability additions aligned to the outcomes.

5. Assessment alignment (what is assessed, not just what is taught)

To match the new syllabus promises, assessment covers:

Environmental responsibility and planning decisions.
Resource efficient filming management and camera operation.
Sustainable lighting rationale.
Audio recording and editing basics with sustainable workflow choices.
Interpersonal engagement in peer and stakeholder sustainability discussions.

Quality Assurance and Evaluation

This result was developed and validated within the SUMED project and **evaluated by an external evaluator**. The external evaluation confirmed: high quality and relevance of the result, alignment with project objectives, strong potential for sustainability and wider use.

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