i-CSI Hackathon Educators' Guide

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1. Welcome & Purpose of the Guide

Welcome to the CSI Hackathon Educators' Guide

Thank you for joining the **Cosmos & Sustainability Influencers (CSI) Hackathon**—a transformative learning experience designed to empower students as creative problem-solvers, ethical digital communicators, and sustainability advocates.
This programme blends **STEAM education, digital storytelling, environmental literacy, and space sustainability**, offering young people the opportunity to engage with real-world challenges through innovation and collaboration.

Educators like you are essential to bringing this experience to life. Whether you teach science, technology, languages, civic education, or any other subject, your guidance helps students make meaningful connections between knowledge, creativity, and global responsibility.

What Educators Will Gain from This Guide

This guide provides everything you need to confidently support your students throughout the CSI Hackathon. Inside, you will find:

✓ A clear overview of the programme structure
Understand the flow of the 10 modules, the hybrid learning model, and the expectations for student participation.

✓ Practical strategies for effective implementation
Flexible approaches—including whole-class teaching, interdisciplinary delivery, and the Jigsaw method—allow you to adapt the programme to your school's needs.

✓ Guidance on facilitating student learning and collaboration
Tips for leading discussions, supporting digital creation, encouraging teamwork, and promoting ethical online behaviour.

✓ Tools to support assessment and student reflection

Rubrics, feedback strategies, e-portfolio guidance, and examples of student artefacts.

✓ Inclusion and differentiation strategies

Adaptations for multilingual learners, mixed-ability classrooms, and students with varying levels of digital experience.

Whether you want to lead the entire hackathon yourself or collaborate with colleagues across STEAM disciplines, this guide ensures you have the resources and confidence to do so.

How to Use This Guide in Your School Context

The CSI Hackathon is intentionally flexible. You can use this guide to implement the programme in the way that best fits your school's structure, timetable, and teaching team.

Use it as a:

- **Step-by-step teaching guide** to follow the modules exactly as designed
- **Toolkit** from which you select the strategies most relevant to your students
- **Collaboration framework** for interdisciplinary or team-taught delivery
- **Planning resource** for integrating modules into lessons, enrichment periods, or project weeks
- **Professional reference** when supporting students in digital literacy, sustainability thinking, or advocacy

Consider your local context:

- Available technology
- Class schedules and time constraints
- Whether you expect students to complete pre-session work independently
- Opportunities for collaboration (language teachers, ICT teachers, science teachers, etc.)
- Whether you prefer synchronous engagement, asynchronous work, or a blended approach

The guide is designed to meet you where you are.
Whether you're teaching in a large urban school, a rural environment, or a small community classroom, you can adopt the CSI Hackathon at a pace and depth that works for you.

2. Programme Overview

2.1 What Is the CSI Hackathon?

The **Cosmos & Sustainability Influencers (CSI) Hackathon** is an innovative, hybrid learning programme designed to engage students in environmental challenges, digital storytelling, and space sustainability through a hands-on, project-based approach.
Over a structured sequence of 10 modules, students explore how science, technology, creativity, and civic engagement intersect—developing advocacy skills that empower them to influence positive change in their communities and beyond.

Goals of the Programme

The CSI Hackathon aims to:

- **Promote sustainability literacy** by helping students understand environmental challenges on Earth and in space.
- **Develop responsible digital influencers**, equipped to communicate ethically and effectively on social media and digital platforms.
- **Strengthen STEAM identity and interest**, especially for underrepresented groups such as girls and non-traditional learners.
- **Encourage creativity and innovation** through multimedia content creation (videos, podcasts, infographics, campaigns, policy briefs).
- **Build global citizenship skills** through reflection, collaboration, and scenario-based learning.
- **Support youth leadership** by guiding students to design, produce, and showcase original sustainability advocacy projects.

Key Competencies Students Develop

The programme is aligned with modern educational frameworks including STEAM, DigComp 2.2, media literacy, and 21st-century skills. Students will develop:

Digital Literacy

- Video editing
- Podcasting and audio production
- Infographic and visual communication design
- Ethical online behaviour and authenticity
- AI-assisted content creation

Sustainability Competencies

- Systems thinking
- Environmental awareness
- Space sustainability concepts
- Climate science fundamentals
- Policy and advocacy skills

STEAM Skills

- Inquiry and evidence-based reasoning
- Creative problem-solving
- Integration of science, technology, engineering, arts, and mathematics
- Use of digital tools to model and communicate scientific concepts

Advocacy & Communication

- Storytelling for impact
- Influencer strategies rooted in ethics
- Public speaking and scriptwriting
- Collaborative digital campaigns
- Global citizenship and civic engagement

These competencies prepare students both academically and personally to participate in a fast-evolving digital and sustainability-driven world.

2.2 Target Audience

Age Range

The programme is designed for **lower-secondary and upper-secondary students** (approx. ages **12–18**), though it can be adapted for older or younger learners depending on local needs. The flexible structure allows teachers to scale complexity up or down based on grade level.

Inclusive Design Principles

The CSI Hackathon is built to support **diverse learners** through:

- **Multiple modes of engagement** (visual, auditory, written, hands-on)
- **Choice-based creation tasks**, allowing students to express ideas in the format that suits them best
- **Universal Design for Learning (UDL)** elements, promoting accessibility and student agency
- **Support for multilingual contexts**, with content suitable for English and Greek language classrooms
- **Encouragement of participation by girls, neurodiverse learners, and students outside traditional science tracks**
- **Flexible pacing**, ensuring no student is left behind due to technology or time constraints
- **Collaborative learning**, where students support peers through teamwork

The programme intentionally removes barriers and promotes equity, creativity, and belonging.

2.3 Delivery Format

Hybrid Learning Model

The CSI Hackathon follows an adaptable **hybrid model**, combining:

- **Synchronous sessions**: live workshops, peer sharing, and collaborative hackathon work
- **Asynchronous activities**: pre-recorded videos, case studies, short articles, reflection tasks, and digital creation activities

This model ensures both structure and flexibility, accommodating different school schedules and teaching contexts.

10-Module Structure

The programme consists of **10 modular sessions**, each aligned with a sustainability or digital-media theme, including:

- Digital identity & personal branding
- Ethical influence
- Video advocacy
- Podcasting
- Infographics & visual storytelling
- Space sustainability
- Light pollution
- Green technologies
- Policy, ethics, and planetary stewardship
- Collaboration and advocacy strategy

Each module follows a consistent pattern:

1. **Pre-session learning** (asynchronous)
2. **Live interactive workshop** (synchronous)
3. **Post-session creation task** (digital artefact)

Educators may teach modules sequentially or integrate individual modules within their curriculum.

Microcredential Requirements

Students who complete the programme earn the **CSI Microcredential in Digital Influence & Sustainability Advocacy**, based on a portfolio of **five digital artefacts** such as:

- Short advocacy video

- Podcast episode
- Infographic or visual campaign
- Blog or article
- Social media strategy
- Policy brief
- Sustainability innovation concept

Students submit their e-portfolio within one month after completing the programme. Educators may guide students in selecting and refining their strongest work.

2.4 Communicating the Programme Delivery to Students

Educators play an important role in helping students understand *how* the CSI Hackathon will run and what is expected of them. The programme uses a dedicated online platform where each student receives a **personal login account**, giving them direct access to all learning materials and tools for submitting their work.

How to Explain the Delivery Process to Students

Educators can introduce the programme with a simple overview:

1. **Each student receives an individual login**
   - Students will be given an email/password or access code.
   - Their login provides a personalised learning space.
2. **All learning materials are stored on the platform**
   Students can access:
   - pre-recorded videos
   - case studies
   - short articles
   - project instructions
   - templates and resources

   This means no printed handouts are required. Everything is available digitally, anytime.

3. **The platform supports both synchronous and asynchronous learning**
   - Students complete the **pre-session modules** independently (or in class using the Jigsaw method).
   - They join **live sessions** with mentors, facilitators, and peers.
   - They then complete their **post-session digital artefact** on the platform.
4. **Students upload their projects directly to the platform**
   - Videos, podcasts, infographics, blog drafts, and social media plans can all be uploaded securely.
   - Each artefact becomes part of the student's **e-portfolio**, which is required for the microcredential.
   - Educators can review submissions and provide feedback through the same interface.
5. **Real-time progress tracking**
   - Students can see completed modules and upcoming deadlines.

   - Educators can monitor participation and support students who fall behind.
6. **Full accessibility beyond school hours**
   - Students may work from home, school, or any device.
   - This flexibility supports different schedules, learning paces, and levels of digital access.

Key Messages for Educators to Share With Students
"Every student has a personal account—your space, your progress, your creativity."
"All materials are waiting for you online—you don't need to search anywhere else."
"You will upload all your creations to the platform: videos, podcasts, infographics, articles."
"This is your professional digital portfolio—something you can use beyond school."
"The platform is here to make things easier: learn at your pace, prepare for live workshops, and track your success."

Supporting Students Through the Platform

Educators can guide students by:

- hosting a short walkthrough of the platform during the first session
- modelling how to access materials or upload content
- checking that all students can log in successfully
- reminding them to complete pre-session work
- providing tips for digital file organisation

This ensures students are confident, organised, and ready to engage with each module.

3. Educators' Roles & Modes of Participation

3.1 Role of the Educator

In the CSI Hackathon, educators act primarily as **facilitators**, **coaches**, and **mentors**, guiding students through a creative and exploratory learning journey rather than delivering traditional lectures.

Facilitator, Coach, Mentor — Not a Content Lecturer

Educators do not need to be experts in space science, sustainability, or digital media. Instead, their role is to:

- **Guide learning** by helping students navigate the platform and complete the pre- and post-session activities.
- **Encourage curiosity** and help students connect sustainability concepts to real-world issues.
- **Support discussions** by prompting reflection, ethical thinking, and responsible digital citizenship.
- **Foster teamwork** by encouraging collaboration, active listening, and sharing ideas.
- **Motivate students** to experiment with digital creation tools and express their voice confidently.

Supporting Digital Work, Ethical Communication, and Team Collaboration

Educators help students:

- Organize their ideas into compelling digital artefacts (videos, podcasts, infographics, articles).
- Apply principles of **ethical communication**—accuracy, attribution, respectful engagement, and authenticity.
- Use teamwork strategies to divide tasks, manage time, and support peers.
- Reflect on their learning, consider diverse viewpoints, and build responsible advocacy skills.

Educators are guides on the side—not experts delivering lectures, but catalysts helping students grow as creators and advocates.

3.2 Flexible Participation Models

The CSI Hackathon is designed to fit a wide range of school environments. Educators may choose the model that best matches their context, schedule, and available staff.

Single-Teacher Delivery

One teacher can lead the entire programme by:

- guiding pre-session and in-class discussions
- supporting the digital creation process
- helping students understand sustainability concepts
- coordinating the final presentations and e-portfolios

This model works well for teachers experienced in project-based learning or digital literacy.

Co-Teaching Teams (STEAM Team)

Schools may choose to deliver the programme through a **multidisciplinary team**, where each educator contributes expertise:

- Science teacher → sustainability, climate, space exploration
- ICT teacher → digital tools, editing, uploading, troubleshooting
- Language teacher → writing scripts, articles, captions, storytelling
- Arts/media teacher → visual design, storytelling aesthetics

This approach enriches the student experience and ensures distributed support.

English/Greek Language Teacher Involvement

Language teachers play a crucial role by supporting:

- scriptwriting for videos and podcasts
- persuasive and reflective writing
- blog posts and advocacy articles
- storytelling approaches and message organisation
- grammar, clarity, tone, and style

This programme offers an authentic, real-world way to strengthen multilingual communication skills.

Science Teacher Involvement

Science educators help students understand:

- environmental systems and sustainability
- space science concepts (satellites, debris, light pollution, green technologies)
- scientific accuracy in student-created content
- basic data interpretation in case studies

Their role ensures students' advocacy work is informed by sound scientific reasoning.

ICT / Technology Teacher Collaboration

ICT/technology teachers support:

- video and audio editing
- infographic design
- AI-based content creation tools
- platform navigation
- file management and project organisation

This collaboration builds students' digital confidence and reduces the technical burden on other teachers.

3.3 AI + Digital Tools Training for Educators

Educators are supported with a dedicated training component focusing on the digital and AI tools used throughout the programme.

Overview of Tools

Educators receive guidance on tools such as:

- **Video editing platforms** (Canva, CapCut, Adobe Express)
- **AI-powered video narration and avatars**
- **Podcast recording apps** (Audacity, Anchor, online voice recorders)
- **Infographic and design tools** (Canva, Pixlr, Google Slides)
- **AI assistants** for ideation, scriptwriting, storyboarding, research assistance
- **Platform navigation tools** for uploading, tracking progress, and messaging

All tools are beginner-friendly and chosen for accessibility.

How Teachers Can Support Students' Digital Content Creation

Even educators without strong technical backgrounds can support students by:

- encouraging experimentation and creative risk-taking
- helping students break tasks into manageable steps (script → storyboard → recording → editing)
- modelling ethical use of AI (transparency, accuracy, avoiding plagiarism)
- reviewing drafts and offering feedback on clarity, relevance, and impact
- helping students organise their files and upload them to the platform
- guiding reflection on audience, message, and purpose

Teachers are not required to produce digital content themselves—only to guide and mentor student creators.

4. Implementation Models for Classrooms

The CSI Hackathon is intentionally designed to be flexible and adaptable to diverse school contexts. Educators may choose the implementation model that best fits their timetable, student needs, level of digital readiness, and school resources. Below are several recommended approaches.

4.1 Full-Class Integration

In this model, the CSI Hackathon becomes part of regular class time or an enrichment block. Educators deliver each module during the school day, following the programme structure:

- **Pre-session preparation** completed at the beginning of class or assigned as light homework
- **Synchronous live session** attended as a whole class
- **Post-session digital creation** completed in class with teacher support

This approach ensures:

- all students stay on track
- equitable access to technology
- structured time for collaboration
- maximum educator oversight

Full-class integration works particularly well in subjects such as science, ICT, digital media, civic education, or language arts, and can also be adopted during a themed project week.

4.2 Jigsaw Classroom Method (If Pre-Work Is Not Completed)

If educators anticipate that students may arrive unprepared for live sessions, or if homework completion is inconsistent, the **Jigsaw Method** offers a highly effective in-class solution.

Structure of Jigsaw Learning

1. **Divide the class into "expert groups."**
   Each group receives *different* pre-session materials—scenario, case study, short article, or reading.
2. **Expert groups study their materials.**
   Students discuss the key ideas, identify important points, and prepare to teach others.
3. **Reform into "mixed groups."**
   Each new group includes one member from each expert group.
4. **Students teach one another.**
   Every student presents their material, ensuring the full group gains a complete understanding of the module's content.
5. **Whole-class synthesis.**
   The educator facilitates a summary discussion, linking concepts and preparing students for the live session.

Benefits

- Ensures equity when homework completion varies
- Encourages teamwork and active learning
- Builds communication and presentation skills
- Reduces teacher workload
- Engages students through peer teaching

Jigsaw learning is especially effective for modules rich in scenario-based case studies.

4.3 Homework + In-Class Mixed Approach

This hybrid model spreads responsibility between home and classroom:

At home

- Students complete the asynchronous components (videos, readings, reflections).
- Educators may provide guiding questions or short quizzes to support accountability.

In class

- Teachers revisit key concepts and answer questions.
- Students participate in discussions, ethical debates, and live workshops.
- Post-session digital creation begins in class, ensuring students receive support.

This approach offers flexibility while reinforcing structure.

4.4 Project-Based Learning (PBL) Pathway

For schools that follow a PBL approach, the CSI Hackathon integrates naturally as a **10-lesson project arc** culminating in a digital advocacy portfolio.

Educators guide students through:

- identifying sustainability challenges
- researching science-based solutions
- designing digital content (videos, podcasts, infographics)
- collaborating in small groups
- presenting their work in a final showcase

The PBL pathway emphasizes:

- inquiry
- creativity
- peer collaboration
- real-world relevance
- iterative improvement and reflection

This model is ideal for interdisciplinary teaching teams or schools with a strong innovation culture.

4.5 Supporting Remote or Hybrid Learning

The CSI platform is built to fully support **remote**, **hybrid**, or **blended** learning environments.

Remote Delivery

- Students access all materials online using their personal login.
- Live sessions are conducted through video conferencing.
- Students upload all projects to the platform.
- Educators can provide feedback directly through messaging.

Hybrid Delivery

- Some modules run in class, others at home.
- Students may collaborate online or in person.
- Educators track progress and engagement through the platform dashboard.

Additional supports

- A dedicated **System Manager** is available to assist with technical issues.
- Schools may identify a **student or teacher digital champion** to help peers navigate the technology.
- The platform's communication features allow real-time messaging between educators, students, and the CSI team.

This model is ideal for schools with varied schedules, multiple teachers, or mixed access to devices.

5. The Learning Journey: Module-by-Module Guide

The CSI Hackathon consists of ten carefully designed modules that blend **digital literacy**, **STEAM thinking**, **sustainability education**, and **ethical advocacy**.
Each module follows a predictable learning flow that supports students of all levels and promotes confidence, creativity, and engagement.

Educators may use the following **module template** to navigate each session and guide students effectively.
This section can be presented as **one page per module** for easy reference.

Module Template (Used for All 10 Modules)

Module Snapshot

Theme

A short description summarising the core focus of the module (e.g., *Digital Identity & Personal Branding*, *Space Debris Awareness*, *Light Pollution and Ecosystems*, *Podcasting for Advocacy*).

Learning Goals

Students will:

- Develop specific digital, sustainability, or STEAM competencies
- Understand key concepts introduced in the module
- Engage in reflective or ethical thinking
- Produce an authentic digital artefact that demonstrates learning
  (List 3–5 goals per module)

Pre-Session Content (Asynchronous Preparation)

Students complete this work before the live session, either at home or using the Jigsaw method in class:

- **Pre-recorded videos** introducing core ideas
- **Scenario-based case studies** that build context
- **Short articles** that present best practices, ethical guidelines, or scientific insights
- **Reflection prompts or short questions** to activate thinking

Educators may review or discuss these briefly before the live session.

Live Session Structure (Synchronous Workshop)

The live session is an interactive learning experience led by a facilitator or educator. It typically includes:

1. **Welcome & Recap**
   - Checking understanding of the pre-session material

   - Clarifying misconceptions
2. **Mini-Lesson or Demonstration**
   - Demonstration of a digital tool, scientific concept, or communication strategy
3. **Collaborative Activity or Ethical Discussion**
   - Small-group tasks
   - Role-play or scenario debates
   - Analysis of examples or case studies
4. **Hands-On Creation Time**
   - Students begin drafting or designing their digital artefact
5. **Sharing & Feedback**
   - Optional peer feedback or group reflection
   - Educator guidance for improvement

Post-Session Student Artefact (Digital Output)

Each module concludes with the production of a digital product that becomes part of the student's **e-portfolio**. Examples include:

- Short advocacy video
- Podcast episode or audio reflection
- Visual infographic or awareness poster
- Blog article or written advocacy piece
- Social media campaign concept
- Policy brief
- Sustainability innovation proposal

The goal is not perfection, but authentic student expression, creativity, and ethical communication.

Educators may support students by providing:

- templates
- checklists
- sentence starters
- storyboard frames
- audio/video tips

Tips for Supporting Weaker or Less Confident Learners

Differentiate the pre-session material

- Offer simplified videos or summaries
- Allow students to choose between reading, audio, or visual formats

Provide structured support during creation

- Use templates and guided frameworks
- Break tasks into smaller steps
- Allow students to work in pairs or teams

Encourage use of AI as an assistive tool

- AI can assist with brainstorming, drafting scripts, translating, or simplifying text
- Always reinforce ethical and responsible AI use

Focus on voice rather than technical perfection

- Encourage students to prioritise message clarity over advanced editing
- Support students in articulating their ideas with confidence

Offer additional check-ins

- Circulate frequently during work time
- Provide targeted feedback
- Celebrate progress, not just outcomes

Section Formatting Suggestion

For clarity and readability, each module should appear as **a standalone page** following this structure:

- **Module Title & Theme**
- **Learning Goals**
- **Pre-Session Work**
- **Live Session Breakdown**
- **Post-Session Artefact**
- **Support Tips for Educators**

This allows educators to quickly reference the module before teaching, without needing to navigate long paragraphs.

6. Student Projects & E-Portfolio Development

A central outcome of the CSI Hackathon is a curated **digital e-portfolio** showcasing each student's learning journey, creativity, advocacy skills, and digital competencies.
Student projects are authentic, meaningful artefacts that demonstrate their ability to

communicate complex sustainability and space-related ideas in accessible and impactful ways.

This section guides educators in supporting students as they create, refine, and submit their final e-portfolios.

6.1 Types of Digital Artefacts

Throughout the 10 modules, students create a variety of digital outputs. These artefacts highlight different skills—from storytelling and design to scientific reasoning and ethical communication.

Videos

- Advocacy videos
- Mini-documentaries
- Animated explainers
- Avatar-narrated educational clips

Podcasts

- Short interviews
- Audio reflections
- Sustainability-focused episodes
- Storytelling pieces combining narration and sound design

Infographics

- Visual summaries of scientific concepts
- Awareness posters
- Data-driven graphics related to climate, space debris, or light pollution

Blog Posts / Articles

- Opinion pieces
- Research-based articles
- Reflective writing
- Case-study responses

Social Media Campaigns

- Instagram/Facebook/TikTok plans
- Post templates, captions, and hashtags
- Campaign calendars
- Ethical influencer strategies

Policy Briefs

- One-page recommendations
- Problem/solution frameworks
- Youth perspective proposals on sustainability challenges

Sustainability or Space Innovation Concepts

- Concept sketches
- Prototype ideas
- Written descriptions or pitch decks
- Solutions integrating STEAM reasoning

Students choose their strongest five artefacts for the final microcredential submission.

6.2 Supporting Students in Content Creation

Not all students begin with the same digital confidence. Educators play a key role in guiding the process.

Provide Step-by-Step Frameworks

Offer templates for:

- video scripts
- podcast outlines
- infographic layouts
- blog structures
- policy brief frameworks

Encourage Iterative Creation

Students learn best when they:

- draft
- improve
- refine
- publish

Help them embrace feedback and revision.

Offer Technical Guidance (Without Doing It for Them)

Model how to:

- record clean audio
- organise files
- storyboard a video
- choose accessible colour palettes

- cite sources properly

Encourage students to experiment and learn through practice.

Support Teamwork and Peer Roles

Some students excel in:

- writing
- editing
- design
- research
- narration

Let teams distribute tasks in a way that values everyone's strengths.

Promote Ethical Use of AI Tools

AI can assist with:

- brainstorming ideas
- rewriting unclear text
- generating visuals
- translating captions

But students must always:

- credit sources
- avoid copying
- use AI responsibly and transparently

6.3 Ethical Storytelling & Digital Safety

Students are communicating to real audiences, so ethical guidelines are essential.

Ethical Storytelling

- Encourage accuracy and fact-checking
- Avoid sensationalism, misinformation, or harmful stereotypes
- Respect privacy when sharing stories or images
- Promote positive, solution-oriented messaging
- Credit all sources and inspiration

Digital Safety

- No sharing of personal information (addresses, phone numbers, etc.)
- Use secure platforms for uploading work

- Ensure students understand copyright & permissions
- Encourage respectful online behaviour
- Help students recognise and avoid harmful online interactions

These principles build digital citizenship and responsible advocacy.

6.4 How to Guide Students in Reflection & Self-Assessment

Reflection deepens learning and strengthens the value of each digital artefact.

Reflection Prompts You Can Use

- *What sustainability problem am I trying to address, and why does it matter?*
- *Which digital techniques helped me communicate my message effectively?*
- *How did teamwork influence my creative choices?*
- *What did I learn about ethical communication?*
- *How would I improve this artefact if I had more time?*

Self-Assessment Tools

- Checklists aligned with module goals
- Rubrics for clarity, creativity, accuracy, and ethical communication
- Peer feedback sessions
- Short reflection videos or audio notes

Reflection turns digital tasks into meaningful learning experiences.

6.5 Final E-Portfolio Submission

At the end of the programme, each student submits a curated e-portfolio of **five digital artefacts** via the CSI platform.

What the E-Portfolio Must Include

- Five selected artefacts produced across the modules
- A short reflection for each artefact
- Optional final reflection summarising the student's growth

Submission Process

1. Students upload their artefacts to their personal platform account.
2. Educators can preview, support, and provide comments.
3. The system verifies completion and readiness for assessment.

4. Students receive their **CSI Microcredential in Digital Influence & Sustainability Advocacy**.

Educator Role in Submission

- Ensure students understand deadlines
- Support students who need help with uploads
- Encourage high-quality, ethically produced content
- Validate that all module work is complete before final submission

The e-portfolio remains a valuable showcase for future academic or extracurricular opportunities.

7. Assessment & Feedback Framework

Assessment within the CSI Hackathon is designed to be **supportive, developmental, and growth-oriented**. Rather than grading students in a traditional way, the programme emphasises **iterative improvement**, **creative expression**, and **ethical communication**. Formal assessment is conducted by the **CSI Consortium's expert evaluation team**, while educators support learning through monitoring, encouragement, and in-class guidance.

7.1 Suggested Rubrics

The CSI Consortium uses a set of shared, transparent criteria to evaluate each student's digital artefacts. Educators may also use these rubrics informally to guide feedback and classroom support.

Creativity

- Original and engaging ideas
- Innovative visual, audio, or narrative techniques
- Effective use of digital tools to enhance storytelling

Accuracy

- Scientifically correct information
- Credible data and sources
- Clear and responsible interpretation of sustainability or space concepts

Ethical Communication

- Respectful, inclusive messaging
- Responsible and transparent use of AI
- Copyright awareness and proper attribution

- Avoidance of misinformation or harmful stereotypes

STEAM Integration

- Connection between science, technology, engineering, arts, and mathematics
- Evidence-based reasoning supporting the advocacy message
- Clear demonstration of how STEAM concepts shape the solution or narrative

Teamwork & Collaboration (for group artefacts)

- Balanced roles and contributions
- Active listening, peer support, shared ownership
- Effective communication and problem-solving as a team

These criteria ensure consistent evaluation across all participating schools.

7.2 Peer and Self-Evaluation

Although the Consortium handles formal assessment, **peer and self-evaluation** remain essential parts of the learning process.

Peer Evaluation

Students provide feedback to classmates by:

- identifying strengths
- offering constructive suggestions
- asking questions that prompt deeper thinking

This develops critical thinking, empathy, and collaborative refinement skills.

Self-Evaluation

Students reflect on their own work using prompts such as:

- *What was my key message and was it communicated clearly?*
- *How did I use digital tools creatively or effectively?*
- *What sustainability or STEAM concepts did I apply?*
- *How might I improve this artefact in the future?*

Self-assessment strengthens metacognition and ownership of learning.

7.3 Formative Assessment Using Digital Tools

While the CSI Consortium provides the official evaluation, educators and students benefit from ongoing **formative assessment** features built into the platform.

Examples of Formative Digital Assessment

- **Platform progress tracking**
  Educators can see which modules students have completed and whether artefacts have been uploaded.
- **Commenting features**
  Teachers may leave informal comments on drafts, videos, podcasts, infographics, and written pieces.
- **AI-assisted feedback (student-led)**
  Students may use AI tools to improve clarity, restructure ideas, or brainstorm creative approaches—always with ethical guidance.
- **Interactive polls or micro-quizzes**
  Used to check student understanding of sustainability, space ethics, or digital citizenship concepts.
- **Short reflection videos or audio notes**
  Students summarise takeaways after each module, supporting deeper learning.
- **Digital rubrics**
  Educators may attach rubric-based comments to help students self-evaluate before submitting to the Consortium.

Assessment Conducted by the CSI Consortium

All formal assessment and official feedback are conducted **internally by the CSI Consortium evaluation team**, ensuring consistent standards across schools.

How It Works

1. Students upload their artefacts to the CSI platform.
2. The Consortium's evaluators review submissions using the shared rubrics.
3. Each student receives individual feedback directly through their platform account.
4. Educators can view all feedback for their students to support reflection or further development.

This model:

- reduces educator workload
- provides expert sustainability and STEAM evaluation
- ensures fairness and consistency
- supports high-quality microcredential certification

Why This Assessment Model Works

- **Supports individual learning pathways**
- **Reduces pressure and anxiety for students**
- **Encourages iterative improvement rather than one-time grading**
- **Allows educators to identify needs and intervene early**
- **Promotes ethical, reflective, creativity-driven learning**

This approach aligns fully with the CSI Hackathon's philosophy:
students learn best through practice, feedback, creativity, and purposeful reflection.

8. Inclusion & Differentiation Strategies

Universal Design for Learning (UDL): Our Core Pedagogical Framework

All learning materials, activities, and project requirements in the STEAM Innovation Hackathon are designed following the principles of **Universal Design for Learning (UDL)**.

UDL is an evidence-based educational framework that ensures *every* learner—regardless of background, language, ability, or learning style—can meaningfully participate and succeed.
UDL is built on three core principles:

1. **Multiple Means of Engagement**
   Offer different ways for students to become motivated and stay engaged.
   (e.g., choice of project topic, flexible grouping, gamified tasks)
2. **Multiple Means of Representation**
   Present information in different formats so students can access content in the way that suits them best.
   (e.g., videos, text summaries, images, diagrams, step-by-step guides)
3. **Multiple Means of Action and Expression**
   Allow students to express their understanding in different ways.
   (e.g., video pitches, posters, models, digital prototypes, narratives)

By integrating UDL across the hackathon, we aim to **remove barriers**, increase participation, and support **equity and access** for all students.

How UDL Principles Inform Our Inclusion & Differentiation Strategies

1. Supporting Multilingual Learners

- All materials are available in **Greek and English**.
- Students may submit projects **in any language**.
- Visuals, icons, diagrams, and examples reduce reliance on text.
- Templates include **sentence starters**, structured prompts, and simplified explanations.
- Students may express understanding through **visual**, **audio**, or **bilingual** formats.

UDL link: Multiple Means of Representation + Expression.

---

2. Accessibility Considerations

We design learning activities for diverse learners, including students with:

- dyslexia or reading difficulties
- attention or processing challenges
- visual/hearing sensitivities
- motor limitations
- anxiety around public speaking

Strategies include:

- High-contrast templates and readable fonts
- Audio versions of key instructions
- Captioned videos
- Chunked activities with clear steps
- Option for recorded presentations instead of live
- Flexible deadlines when needed

UDL link: Remove unnecessary barriers so all students can succeed.

---

3. Supporting Students With Limited Digital Skills

To ensure equitable participation:

- Students receive **guided tutorials** for all tools used.
- Optional **low-tech** paths are provided for each activity.
  (e.g., hand-drawn prototypes instead of digital design)
- Educators receive step-by-step teacher-facing instructions.
- The LMS includes **basic digital literacy mini-modules**.

UDL link: Provide scaffolds and alternative paths so digital skills are not a limiting factor.

---

4. Offering Alternative Formats for Artefacts

To reflect diverse strengths and abilities, students may choose to submit:

- Video pitch OR audio recording OR live presentation
- Digital prototype OR physical model OR conceptual diagram
- Research summary in text OR infographic OR narrated slides
- Reflection in writing OR video OR voice recording

This respects **student choice**, reducing anxiety and increasing authenticity.

UDL link: Multiple Means of Action and Expression.

---

5. Empowering Underrepresented Groups in STEAM

We intentionally support the participation of:

- Girls and young women
- Students from rural communities
- Migrant and multilingual students
- Students with fewer opportunities
- Learners with disabilities or special learning needs

Approaches include:

- Encouraging diverse team composition
- Highlighting role models in STEAM
- Providing gentler entry points into complex concepts
- Designing challenges connected to real-life community issues
- Avoiding tasks that depend on advanced coding unless optional

UDL link: Engagement through relevance, representation, and empowerment.

Summary Statement for Your Materials

All hackathon resources follow the **Universal Design for Learning** framework, ensuring that every student—regardless of linguistic background, digital skill level, or learning profile—can meaningfully engage, contribute, and succeed. The programme is intentionally designed to promote **equity, inclusion, and diverse forms of expression**, aligning with modern educational standards and European values for inclusive education.

9. Teacher Tips for Maximizing Success

These strategies will help educators guide their teams effectively throughout the STEAM Innovation Hackathon.

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1. Encouraging Creativity

Creativity thrives when students feel safe to experiment and make mistakes.
To support this:

- Emphasize that **there is no single "right" solution**.
- Use quick brainstorming activities with no evaluation at first.
- Offer multiple examples of creative prototypes (simple or advanced).
- Encourage students to explore ideas inspired by **their own experiences** and communities.
- Celebrate originality over technical complexity.

👉 Remind teams that *creativity is a process*, not a talent.

---

2. Fostering Confidence in Hesitant Students

Some students may hesitate to share ideas, speak in groups, or try new tools.
Ways to empower them:

- Assign rotating, low-pressure roles (e.g., "Timekeeper," "Research Assistant").
- Allow shy students to contribute through written notes, sketches, or digital messages.
- Use **think–pair–share** structures to ease them into team discussions.
- Provide specific, positive feedback that focuses on effort and progress.
- Reassure them that prototypes can be **simple and meaningful**—not perfect.

👉 A supportive environment often transforms hesitant students into active contributors.

---

3. Time Management Strategies

Balancing school schedules with the hackathon workload is key.

- Break tasks into **small, manageable weekly goals**.
- Use the LMS timeline as a guide for pacing.
- Have each team create a **simple work plan** or checklist.
- Encourage short, focused team meetings during school hours or breaks.
- Remind students to upload drafts early to receive feedback on time.

👉 Steady weekly progress prevents stress and improves final project quality.

---

4. Partnering With Technology Teachers

Collaboration strengthens the learning experience and reduces educator workload.

- Invite ICT or technology teachers to support prototyping or digital tools.
- Co-teach mini-sessions (e.g., using slides, AI tools, coding basics).
- Share project milestones so the tech teacher can offer targeted support.
- Integrate the hackathon into ICT class time when possible.
- Encourage students to ask specialist teachers for help with specific technical challenges.

👉 Cross-department collaboration reflects real-world teamwork and enriches outcomes.

---

5. Using Real-World Examples to Increase Relevance

Students become more motivated when they see the **real impact** of their ideas.

- Present case studies from local community challenges (environment, energy, inclusion).
- Show examples of **youth-led innovations** to spark inspiration.
- Relate projects to SDGs (Sustainable Development Goals).
- Use examples from space science, environmental monitoring, or AI ethics to show the bigger picture.
- Encourage students to connect their project to **a real user or scenario**.

👉 Relevance increases engagement, depth of thought, and ownership of learning.

Summary

By promoting creativity, supporting diverse learners, managing time strategically, collaborating with colleagues, and grounding projects in real-world contexts, educators can greatly enhance both student participation and project quality throughout the hackathon.

10. Communication with Parents & School Leadership

Transparent and supportive communication helps create a strong partnership between educators, families, and school leaders. This section outlines how to clearly explain the programme, involve parents meaningfully, and highlight the value of microcredentials.

10.1 Sharing Programme Goals

When communicating with parents and school leadership, it is important to present the hackathon as:

A structured STEAM learning experience, not just a competition

Emphasise that the programme develops essential skills such as innovation, teamwork, digital literacy, creativity, problem-solving, and critical thinking.

Aligned with international educational standards

Explain that all materials are based on methodologies such as:

- **Universal Design for Learning (UDL)**
- **Project-Based Learning (PBL)**
- **DigComp 2.2 Digital Competence Framework**
- **STEAM Ambassador Certification Framework**

A safe and supportive environment for students to explore ideas

Parents should understand that:

- Every student can succeed, regardless of prior STEAM experience.
- Mistakes are part of the creative process.
- Students have full flexibility in selecting topics meaningful to them.

An opportunity for the school to strengthen its innovation culture

School leadership benefits from:

- Engaging students in real-world challenges
- Encouraging interdisciplinary collaboration
- Participating in national-level educational initiatives
- Showcasing the school's commitment to 21st-century skills

10.2 Recommendations for Supporting Students at Home

Parents play an important role in helping students stay motivated and organised. Share the following practical tips with families:

Encourage curiosity and conversation

Ask students to explain their idea, their problem area, or what they are researching. This reinforces understanding and confidence.

Provide a calm, supportive space for short weekly work sessions

Students may need 30–60 minutes per week to complete activities or revise their project.

Normalise experimentation

Parents should reassure students that:

- It's okay to try different ideas
- Prototypes do not need to be perfect
- Creativity is more important than technical complexity

Help with simple practical tasks

Such as:

- Printing templates
- Taking photos of prototypes
- Recording the pitch video if needed

Celebrate small milestones

Acknowledging effort boosts motivation, especially for hesitant learners.

10.3 Explaining the Value of Microcredentials

Microcredentials are an important part of the programme's educational impact. Parents and school leaders should clearly understand what they represent.

What is a microcredential?

A microcredential is a **verified digital or printed certificate** that shows a student has developed specific skills through structured learning and project work.

Why are microcredentials valuable?

They:

- Provide **evidence of real competencies**, not just participation
- Strengthen student portfolios for school, university, and future opportunities
- Encourage students to take ownership of their learning
- Recognize creativity, teamwork and problem-solving
- Offer a format widely used in Europe, aligning with modern assessment practices

How are they earned?

Students receive microcredentials only if they:

- Complete the learning modules
- Develop a prototype
- Submit a full project portfolio
- Present a final pitch
- Respond to feedback and improve their work

This ensures that the certificate reflects **authentic achievement** and **meaningful engagement**.

Microcredentials for educators and schools

- Educators receive recognition for mentorship, guidance, and leadership.
- Schools receive certification for supporting innovative learning initiatives.

11. FAQs for Educators

1. What if students don't have digital tools?

No student is excluded if they cannot personally access digital tools.

Students can initially work **with low-tech or no-tech materials**, for example:

- Sketching their prototype on paper
- Writing their research and reflections by hand
- Creating posters or physical models

However, **all project outputs must eventually be submitted in digital form**.

To support this, each school is encouraged to create a **small "Digital Team"** (educators + students with stronger digital skills) who will:

- Transform hand-written or analogue work into **digital slides, PDFs, or simple videos**
- Help with scanning, typing, basic editing, or simple filming
- Support teams that have limited digital access

👉 Students who support the **digitalisation** of projects may be recognised as contributors and can be formally linked to **more than one project**, provided their role is clearly described (e.g. "Digital Support / Editor / Designer").

In this way:

- No student is left out due to lack of equipment
- All final submissions respect the **digital portfolio requirement**
- Collaboration and peer support are actively encouraged.

2. What if students don't complete pre-session work?

Pre-session work is recommended but **not mandatory** for participation.
Educators may:

- Provide a short summary at the start of the session
- Pair students to help each other catch up
- Encourage reviewing materials later on the LMS

The goal is steady progress, not penalisation.

3. Can the programme be shortened or extended?

The official schedule (February–May) must be followed for **microcredential eligibility**, as each phase builds on the previous one.
However, educators may:

- Allow teams to extend project-revision time

- Add extra school-based mentoring sessions
- Enrich student projects where possible

The core phases cannot be skipped or compressed.

4. How does this connect to curriculum standards?

The hackathon aligns with:

- **STEAM curriculum elements**
- **DigComp 2.2 digital skills framework**
- **Project-Based Learning (PBL)**
- **UDL accessibility standards**
- **21st-century skills** (creativity, collaboration, communication, critical thinking)
- Cross-curricular links in Science, Technology, Engineering, Art, and Social Sciences

It can easily be integrated into subject or project work.

5. Will there be LMS support or an introductory video?

Yes. All educators and students receive:

- A **step-by-step introductory video** explaining how to use the LMS
- A **tour of where to find materials, deadlines, tutorials, and submission points**
- Clear weekly instructions and reminders inside the LMS

The goal is to make the LMS experience simple and accessible for everyone.

6. What if students or educators have limited digital skills?

We will provide full support, including:

🌐 **Digital Tools Training**

Short training videos and guides on:

- How to use templates
- How to create slides, posters, prototypes
- How to record pitches
- Basic AI-assisted tools (optional)

🎥 **On-demand tutorial videos**

All tool demonstrations will be uploaded in the LMS to be watched anytime.

🙋 **Personalised assistance**

Participants may request:

- 1:1 guidance via video call
- Clarifications through email or chat
- Additional support sessions for students with limited experience

No participant should feel left behind—support is built into the programme.

12. Appendices

ANNEX 1: Programme Phases & Timeline (February–May 2026)

Including Individual or Team Participation Options

The STEAM Innovation Hackathon follows a structured 4-phase model from **February to May 2026**.
Participants may complete the programme **individually** or **as part of a team**, depending on school preference and learner needs.

All participants—individuals or team members—must submit a **5-project digital portfolio** to be eligible for microcredential certification.

🔹 Phase 1 — Learning Activities

Week 1 of February → Week 4 of March 2026

During this foundational phase, participants complete:

- ✓ Asynchronous digital learning modules
- ✓ Weekly live synchronous mentoring sessions
- ✓ Early exploration of thematic topics (Modules 6–10)
- ✓ Selection of **one thematic topic** for the 5-project portfolio

Individual / Team Options

- **Individuals:** Complete all learning tasks independently.
- **Teams:** Collaborate on research and ideation, but *each student must still submit their own portfolio*, even if project elements are shared.

👉 **Completion of Phase 1 is required for microcredential eligibility.**

🔹 Phase 2 — Project Development & Portfolio Creation

Week 4 of March → End of April 2026

Each student or team develops **five (5) required projects**, each exploring a different angle or perspective of *one selected thematic topic*.

Five Required Portfolio Components

1. **Problem Definition**
2. **Research Summary & Evidence**
3. **Prototype** (physical or digital; must be digitised for submission)
4. **Design Process & Roles**
    - *Individuals:* Describe personal workflow
    - *Teams:* Describe personal contribution + team process
5. **Final Pitch**
    - 3-minute recorded video or narrated presentation

Recommended Weekly Milestones

- **Week 4 of March:** Draft Projects 1–2
- **Week 1 of April:** Develop Projects 3–4
- **Weeks 2–3 of April:** Build prototype & prepare pitch
- **End of April:** Submit full draft portfolio for review

Accepted Formats

- Google Slides
- PDF Portfolio
- E-Portfolio page (template provided)

🔹 Phase 3 — Feedback & Improvements

Ongoing in March–April

Formal Review: Week 1 of May 2026

Participants receive:

- ✓ Written feedback
- ✓ Suggestions for refinement
- ✓ Technical and pedagogical guidance
- ✓ Optional digital skills assistance

Students revise and improve their portfolios following mentor comments.

👉 **This improvement cycle is mandatory for microcredential eligibility.**

🔹 Phase 4 — Final Submission & Certification

Entire Month of May 2026

- **Week 1:** Submission of final revised portfolios
- **Week 2:** Verification of participation and module completion
- **Week 3:** Portfolio evaluation and microcredential review
- **Week 4:** Issuance of certificates and announcement of award recipients

Certificates Awarded

- **Student Microcredential Certificates**
- **Educator Contribution Certificates**
- **School Participation Certificates**
- **Awards for Top 3 Projects**

Eligibility Requirements

To receive a certificate, each student (individual or team member) must:

- ✓ Complete all Phase 1 learning tasks
- ✓ Submit all 5 required projects
- ✓ Engage in the improvement cycle (Phase 3)
- ✓ Submit final portfolio by the deadline

🔹 Summary Timeline (At a Glance)

Month	Activities
February	Start of Learning Modules + Topic Selection
March	Final Learning Weeks → Begin Project Development
April	Full Project Development → Draft Portfolio Complete
May	Final Submission → Review → Certification

Appendix B: Technical Requirements & Platforms

This appendix outlines the minimum technical requirements, recommended tools, and supported platforms for successful participation in the **2025–26 STEAM Innovation Hackathon**. All tools and instructions follow **Universal Design for Learning (UDL)** principles to ensure inclusive access for all students.

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1. Minimum Technical Requirements

For Students

- A device **(computer, laptop, tablet, or shared school workstation)**
- Basic internet access for downloading/uploading materials
- Ability to view:
  - PDF files
  - Google Slides or PowerPoint
  - Video tutorials

👉 *Students without personal devices can work offline and have their work digitised through the school's Digital Support Team.*

For Educators

- A computer or laptop with internet connection
- Access to the LMS platform
- Ability to join online meetings (Zoom / Teams / Webex)
- Headset or built-in microphone for communication (optional)

---

2. Supported Platforms

Learning Management System (LMS)

All learning materials, tutorials, deadlines, templates, and submission links are hosted on the LMS.

The LMS provides:

- Introductory video walkthrough
- Weekly modules
- Assignment upload points
- Feedback and revision tools
- Video tutorials for digital skills

👉 Access instructions will be emailed to educators before 1 February.

---

3. Digital Tools Used in the Programme

Students may use **any tools they feel comfortable with**, but we provide tutorials for:

Basic Tools

- Google Slides / PowerPoint
- Cap-cut
- AI-assisted image or design tools (age-appropriate and optional)
- Canva (free version)
- Smartphone camera for taking photos or recording simple videos

Optional Digital Tools for Prototyping

- Tinkercad (3D modelling)
- Scratch or simple coding tools (optional)
- Simple animation tools

Video Pitch Tools

- Smartphone video recording
- Loom / Canva video recorder
- PowerPoint with narration

👉 None of the advanced tools are required. Creativity is valued over complexity.

---

4. Digital Submission Formats

E-Portfolio Page / Google Slides (Template Provided)

Each team must submit a complete **digital portfolio** using the E-Portfolio page or the provided Google Slides template. Every portfolio must contain **five (5) projects**, all connected to **one thematic topic** chosen from **Modules 6–10**.

Instead of prescribing specific formats, students may **select the type of project they want to create**, ensuring they cover **five different angles, perspectives, or content formats** on the chosen theme.

THE THEMATIC TOPICS (Modules 6–10)

Projects must relate to **one** of the following thematic sustainability topics:

- **Module 6:** Space Debris & Responsible Space Activity
- **Module 7:** Light Pollution & Environmental Impact
- **Module 8:** Green Technologies & Ethical Innovation
- **Module 9:** Climate Change, Biodiversity & Planetary Sustainability
- **Module 10:** Youth Advocacy, Policy Engagement & Civic Action

Each team selects **one theme**, and all five submitted projects must explore different **dimensions, perspectives, or forms of communication** related to that theme.

THE 5 REQUIRED PROJECTS (Flexible Format)

Each portfolio must include **five different projects**, but students may choose **any combination of formats**, such as:

- Short video or animation
- Audio podcast or soundscape
- Infographic or data visualisation
- Blog article or written reflection
- Visual comic or illustrated explanation
- Social media post series or mini-campaign
- Poster, storyboard, or conceptual design
- Photography-based narrative
- AI-assisted visual explanation (ethical use)

This flexibility allows every team to work according to their strengths while still demonstrating a rich, multi-angle exploration of their chosen theme.

Example:

A team choosing *"Light Pollution"* may produce:

1. A video explaining the problem
2. An infographic showing affected areas
3. A written advocacy blog
4. A poster about solutions for cities
5. A podcast interviewing a fictional or real expert

Any valid combination is acceptable, as long as there are **five distinct projects** exploring the topic.

Digitisation Requirements

All analogue or low-tech work must be **digitised** before submission.
Digitisation may include:

- Taking photos of posters or sketches
- Scanning handwritten notes
- Recording simple audio/video with a phone
- Converting documents into PDF

Schools may use a designated **Digital Support Team**, and students who help digitise work may be acknowledged as contributors across multiple projects.

Submission Format Options

Portfolios may be submitted as:

- **E-Portfolio page (template provided)**
- **Google Slides deck**
- **PDF export of the complete portfolio**
- **Slide deck + links to media files (video/podcast/etc.)**

5. School Digital Support Team (New Requirement)

Each school is encouraged to form a **Digital Support Team**, consisting of:

- 1–2 educators (ICT, STEM, or interested teachers)
- 2–5 students with stronger digital skills

Their role is to:

- Convert low-tech student work into digital format
- Assist in editing slides, scanning documents, recording audio/video
- Help teams that lack access to devices
- Support the final compilation of the digital portfolio

👉 Students who contribute to digitalisation may be listed as **official project contributors**, even to multiple project teams.

---

6. Online Meetings & Webinars

Synchronous mentoring sessions will be held via Zoom or Teams.
Educators and students simply need:

- A stable connection
- Microphone or chat access
- Camera optional

Sessions are recorded for those unable to join live.

---

7. Support Channels

LMS Support

- Introductory LMS video
- “How to navigate the platform” PDF
- Troubleshooting guide

Digital Skills Support

We offer:

- Short video tutorials for all required tools
- Step-by-step instructions inside the LMS

- Optional live digital skills clinics

Personalised Support

Participants may request:

- 1:1 assistance
- Extra guidance from the technical team
- School visits (based on availability)

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8. Data & Safety

- Students **do not** need to create accounts on external platforms unless approved by their school.
- Videos may be uploaded unlisted on YouTube or shared via Google Drive.
- All student data will be handled according to school and GDPR guidelines.

Appendix C: Templates

This appendix provides **ready-to-use templates** that support students in creating clear, well-structured project components. These templates follow **Universal Design for Learning (UDL)** principles, offering multiple ways for students to express their ideas while maintaining consistency across all submissions.

Educators may print, share, or adapt these templates as needed.

---

1. Script Templates (for Video Pitch or Guided Explanations)

A. 3-Minute Video Pitch Script Template

Slide / Section 1 – Introduction

- Team name: _____
- Project title: _____
- One-sentence summary of the idea

Slide / Section 2 – The Problem

- What issue are you addressing?
- Who is affected?
- Why does this problem matter?

Slide / Section 3 – Your Solution

- Description of your idea or prototype
- Key features (bullet points)
- What makes it unique or innovative?

Slide / Section 4 – Prototype Demonstration

- Show physical model / digital prototype
- Explain how it works
- What tools or methods did you use?

Slide / Section 5 – Impact & Future Plans

- Who benefits?
- Expected outcomes
- What improvements would you make next?

Slide / Section 6 – Conclusion

- Final message
- Thank you note

---

2. Storyboard Template (for videos, animations, or visual explanations)

Frame	Drawing / Image	Action Description	Narration / Text	Notes
1		What appears in the frame?	What will be said or shown?	Camera, timing, transitions
2				
3				
4				
5				
6				

Suggested length: 6–10 frames
Purpose: Organise visuals before recording or creating digital media.

---

3. Podcast / Audio Recording Outline

Podcast Title: _____

1. Introduction (30 seconds)
- Introduce the team
- State the project title
- Short teaser of the topic

2. Problem Description (1 minute)
- What is the issue?
- Why is it important?
- Key facts or insights from research

3. Proposed Solution (1 minute)
- What is your idea or prototype?
- How does it address the problem?
- What makes it innovative?

4. Behind the Scenes (45 seconds)
- What challenges did you face?
- How did the team work together?
- Any interesting discoveries?

5. Closing (30 seconds)
- Summary of key points
- Why your idea matters
- Thank you & call to action

---

4. Infographic Frame Template

Students can use this template to create a **one-page infographic** summarising their entire project.

Infographic Title: _____

Section 1: The Problem

- 1–2 sentences
- Visual icon or small illustration

Section 2: Key Research Insights

- Three bullet points or statistics
- Simple graph or image (optional)

Section 3: Our Solution

- 2–3 bullet points explaining the idea
- Simple diagram or sketch

Section 4: Prototype

- Photo of model or screenshot of digital prototype
- Short caption

Section 5: Impact

- Who benefits?
- What changes does the solution create?

Section 6: Our Team

- Team name + roles
- School name (optional)

---

5. Educator Notes

These templates:

- Ensure **consistency** across teams
- Support students with different strengths (visual, verbal, creative, technical)
- Reduce cognitive load by offering clear structure
- Can be adapted for **UDL**, multilingual teams, and differentiated instruction
- Align with **microcredential requirements** for portfolio submissions

Appendix D: Safety & Ethics Guidelines

The STEAM Innovation Hackathon promotes creativity, collaboration, and digital advocacy. To ensure a safe, respectful, and ethically responsible learning environment, all participants must follow the guidelines below when producing and sharing content.

These guidelines apply to **all five required portfolio projects**, all online interactions, team collaborations, and any digital tool used during the programme.

---

1. Online Safety & Digital Responsibility

1.1 Protecting Personal Information

Students must never include:

- Full names
- Home addresses
- Phone numbers
- School ID numbers
- Personal photos without permission

Only **first names, team names, or avatars** should be used in public-facing content.

1.2 Secure Sharing of Media

- Videos must be uploaded as **Unlisted** (YouTube) or **Restricted** (Google Drive).
- Password-protected links may be used when required by school policy.
- Students must not share links outside their team and instructor group.

1.3 Safe Communication Practices

- Use school-approved communication platforms.
- Be respectful, kind, and constructive in all messages.
- Report any inappropriate behaviour to educators immediately.

---

2. Ethical Use of Images, Data & AI Tools

2.1 Copyright & Licensing

Students may only use:

- Free-to-use images
- Their own photos
- Open-source or Creative Commons resources
- AI-generated images that comply with platform rules

All sources should be **credited** in the portfolio.

2.2 Ethical Data Use

When using statistics, maps, or datasets:

- Cite the source
- Avoid altering data in misleading ways
- Present information accurately and fairly

2.3 Responsible Use of AI

AI tools may be used for:

- Brainstorming
- Drafting text
- Generating graphics
- Translation support

However, students must:

- Ensure content is **factual and not misleading**
- Submit **original ideas** (AI helps but does not replace creativity)
- Acknowledge AI use in their reflection section
- Avoid generating harmful, biased, or inappropriate material

Educators must monitor AI use to prevent academic dishonesty.

---

3. Respectful Collaboration & Team Ethics

3.1 Inclusive Teamwork

Teams must:

- Listen to all voices
- Assign roles fairly
- Allow hesitant students to contribute in diverse ways
- Avoid exclusion based on skill level, gender, language, or background

3.2 Credit & Acknowledgement

All contributors must be listed, including:

- Digital Support Team members
- Learners who helped digitise materials
- Mentors or educators who provided guidance

3.3 Conflict Resolution

If disagreements arise:

- Discuss calmly
- Use problem-solving steps
- Consult the educator when needed

Respectful collaboration is part of the microcredential evaluation.

---

4. Content Ethics: Accuracy, Sensitivity & Impact

4.1 Avoid Harmful or Sensitive Content

Projects must **not** include:

- Violence
- Discrimination
- Offensive humour
- Stereotypes
- Fear-based messaging targeting specific groups
- Graphic or disturbing imagery

4.2 Balanced & Fact-Based Sustainability Messaging

Students must ensure that:

- Claims are supported by research
- Images and statistics are accurate
- Narratives promote **constructive action**, not fear or misinformation

4.3 Cultural Sensitivity

Be mindful of:

- Different backgrounds
- Local community perspectives
- Ethical representation of cultures, identities, and environments

---

5. Environmental & Ethical Responsibility in Prototyping

5.1 Use of Materials

Prototypes should use:

- Recycled materials when possible
- Low-cost or safe household items
- Non-toxic, non-dangerous components

Forbidden materials:

- Sharp objects
- Chemicals
- Flammable substances
- High-voltage electronics (unless supervised by certified staff)

5.2 Safety in Recording Videos

When filming:

- Choose safe locations
- Avoid showing private homes if possible
- Ensure proper lighting and stable recording
- Use only age-appropriate themes

---

6. Reporting, Support & Safeguarding

6.1 Reporting Concerns

Participants should report concerns about:

- Cyberbullying
- Disrespectful behaviour
- Safety risks
- Disturbing content
- Unethical AI use

Educators will escalate issues to programme coordinators when needed.

6.2 Safeguarding Policy

All organisers follow basic safeguarding principles:

- Protect student privacy
- Ensure safe learning environments
- Address incidents promptly
- Follow school and Ministry guidelines

6.3 Access to Support

Participants may request:

- Additional guidance on ethical issues
- Help with copyright rules
- Support with safe digital tool use

Support is available via LMS helpdesk, email, and scheduled office hours.

Final Reminder

The goal of these guidelines is not to limit creativity but to ensure that **every participant creates meaningful, responsible, and safe digital advocacy content** aligned with the values of the CSI Hackathon.