INCORPORATE
PLEASANT EMOTIONS
INTO LEARNING DESIGN

DIGITALLY EMPOWERED WONDER LEARNING

Teacher-Training Toolkit

Editors
Blanka Tacer & Zala Bricelj

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Digitally Empowered Wonder Learning: Teacher-Training Toolkit

Editors: Blanka Tacer, Zala Bricelj

Authors: Adrijana Bulevska Zarikj, Aneta Vasiljevikj Shikaleska, António Albuquerque, António Pimenta, Biljana Gjozinska, Blanka Tacer, Corina Delia Rusz, Maria Olga Grecu, Mariana Daniela Tiution, Miorița Traiana Olea, Muamer Tinjak, Raquel Lombardi, Ramune Jukneliene, Turgut Aydin, Velid Tinjak, Zala Bricelj.

Proofreading: Tom Smith

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CONTENTS

PART 1

WONDER LEARNING MINDSET

Pleasant emotions in learning, Cultivating a growth mindset

CONTENTS

PART 2

5CS OF DIGITALLY EMPOWERED WONDER LEARNING

Connect, Communicate, Curate, Collaborate, Create

CONTENTS

PART 3

DIGITALLY EMPOWERED WONDER LEARNING LESSON PLANS

Examples from different subjects

PART 4

DIGITALLY EMPOWERED WONDER LEARNING ASSESSMENT

Examples from different subjects

CONTENTS

PART 5

EVALUATION TOOLS

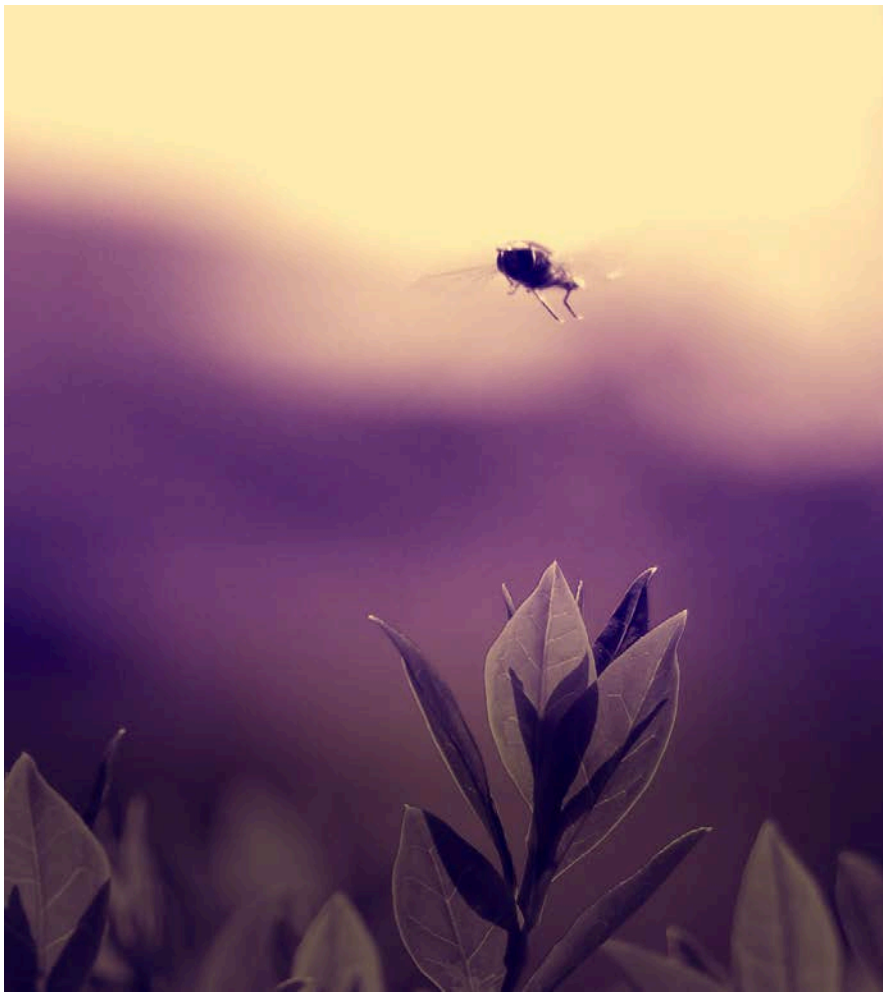
Pre-assessment, Post-assessment, Teachers' feedback

PART 6

WONDER LEARNING TEACHER TRAINING

Teacher training and partnership

INTRODUCTION



WHAT WILL YOU LEARN

In the Digitally Empowered Wonder Learning toolkit, you will learn how to **integrate pleasant emotions** such as curiosity, awe, and surprise into learning design with the help of technology. You will explore how to design emotionally engaging, inquiry-based activities that nurture students' natural desire to learn. The toolkit shows how to create classrooms where wonder and technology work hand in hand.

The toolkit targets teachers working with students aged 9 to 15. It also includes special educational needs (SEN).

PART 1

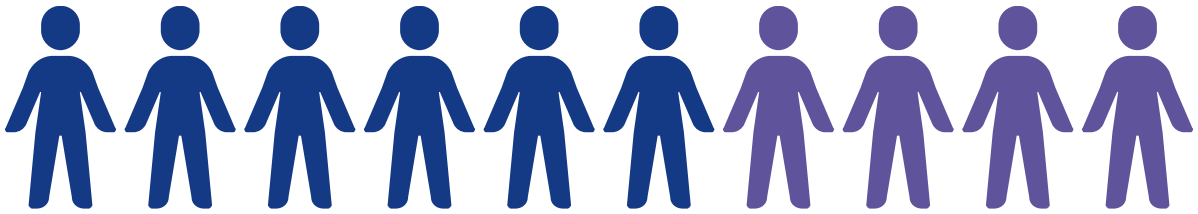
WHERE TECHNOLOGY AND WONDER WORK HAND IN HAND

WONDER LEARNING MINDSET

Wonder is the **inner desire to learn**, an ancient force with renewed urgency in today's digital age. In a world where students are immersed in fast, fragmented content and passive scroll culture, wonder reintroduces emotion, beauty, and surprise into learning. It brings students back to reality, sparking deep focus and intrinsic motivation. When something inspires awe, attention becomes effortless. Wonder also supports a growth mindset by encouraging students to ask questions, take risks, and see challenges as opportunities to learn.

PART 1

WHY IT MATTERS?



Classrooms designed to trigger wonder lead to **stronger engagement** and **deeper learning**: Interventions involving 45 seventh-grade students demonstrated that targeted strategies (aesthetic experiences, encountering mysteries, surprise, and student agency) can elicit wonder. These approaches led to qualitative changes in students' engagement, interest, and meaning-making, particularly when learning complex topics like evolution.

Sundberg & Andersson, 2023

Students who experienced a sense of wonder in science lessons showed a significant **increase in content retention**, with 87% recalling lesson details weeks later compared to only 48% in control groups.

Hadzigeorgiou, 2012

PART 1

WHAT IS IMPORTANT?

Wonder-driven teaching strategies focus on **pleasant emotions**.

Awe
Aesthetic experiences
Mysteries
Surprise
Admiration

Integrate wonder in the **whole learning cycle**.

Introduce the topic
Learn about the topic
Follow-up through self-discovery, autonomy, self-paced learning.

Wonder and a **growth mindset** are connected.

A growth mindset (Dweck, 2006) is the belief that abilities can be developed through effort, strategies, and learning from failure.

PART 1

OLD IDEA, NEW RELEVANCE

In an age of passive scrolling and digital saturation, wonder offers digital natives a powerful counterbalance by restoring deep focus, emotional richness, and meaningful engagement that fragmented screen culture often erodes.

In her book *The Wonder Approach*, Catherine L'Ecuyer explores the vital role of wonder in childhood learning and development. She draws from philosophy, neuroscience, and education to argue that wonder is the foundation of meaningful learning, not a luxury or an extra.

Old idea	New relevance
✔ All men by nature desire to know (Aristotle).	✔ Children do not need stimulation. They need meaning (L'Ecuyer, 2019).
✔ Plato saw wonder as the spark that opens the soul to truth, especially through beauty.	✔ L'Ecuyer critiques overstimulation, fast-paced teaching, and entertainment-based education.
✔ Wonder is not a childish phase, but a way of seeing the world with fresh eyes — again and again (Chesterton).	✔ L'Ecuyer highlights a model that respects the child's natural rhythms, curiosity, and need for beauty, silence, and contemplation.

NOTES:

Write your thoughts here

PART 1

OLD IDEA, NEW RELEVANCE

Technology in the classroom serves as a tool to enhance engagement, accessibility, and creativity. Not as a replacement for human connection.

With the help of technology, previously inaccessible experiences have become a reality for students. For example, they can explore real-time data from Mars or use tools like Google's Fabricius to see how machine learning helps decode ancient languages.

In this context, the teacher's role becomes that of a curator of wonder and guide of exploration, someone who selects meaningful tools, frames experiences with purpose, and helps students connect what they discover to deeper questions and real-world relevance.

From	To
✔ Passive scrolling	✔ Collaborative learning
✔ Fear of missing out (FOMO)	✔ Acknowledge multiple sources of knowledge
✔ I want it, I want it NOW	✔ Using the same channels not just for fun but to create something

NOTES:

Write your thoughts here.

PART 1

PEER-REFLECTION

WONDER

What's an example from your teaching experience when you noticed a student truly in awe or engaging with the subject matter with a sense of wonder?

PEER DISCUSSION

Pair up with a colleague and share your story. As you listen to each other, focus not only on the story, but on what caused the wonder. Together, identify strategies or conditions that triggered it (e.g., surprise, beauty, silence, complexity).

PART 1

PEER-REFLECTION

EMOTIONS

Which emotional words are connected with wonder?

PEDAGOGY

Which pedagogical words are connected with wonder?

PART 1

WONDER QUIZ

WONDERING ABOUT WONDER

1. Which environment best supports wonder in the classroom?

a. One with scheduled transitions every 10 minutes
b. A silent classroom with no movement
c. A calm, inviting space with time to observe and think
d. A reward-based setting with point systems

2. Which of these best describes the teacher's role in wonder-based learning?

a. Entertainer
b. Controller
c. Facilitator and protector of curiosity
d. Disciplinarian

3. When integrating technology in wonder-based learning, consider whether the tool (choose all that applies):

a. Encourages curiosity
b. Allows personal expression
c. Is the most popular among students
d. Adds meaningful depth to the lesson

4. You're starting a unit on the solar system. Which approach best reflects wonder-based learning?

a. Give students a chart of planet sizes to memorize
b. List all the planets according to their distance from the sun
c. Begin with a photo of Earth from space and ask, "What do you feel when you see this?

This quiz is not intended to test knowledge, but rather to serve as a conversation starter.

The right answers: 1 c; 2 c; 3 a, b, d; 4 c

PART 1

WONDER QUIZ

AWAKENING WONDER

1. Which of these lesson starters is most likely to awaken wonder?

a. Today we'll cover three learning objectives.
b. Let me tell you exactly how this works.
c. You'll be tested on this at the end.
d. Watch this and write down what you notice or wonder about.

2. Which of these lesson starters is most likely to awaken wonder?

a. Open your books to page 42. We'll begin with the learning objectives.
b. Have you ever thought about where shadows go when the lights turn off?
c. Today we'll be learning about photosynthesis and taking notes.
d. Before we begin, can someone remind us what we did yesterday?

3. You're starting a unit on ancient civilizations. Which introduction best supports a wonder-based approach?

a. Show a timeline of historical periods and key dates.
b. Read the standards aloud so students know what they'll be assessed on.
c. Tell students which chapters to read.
d. List major inventions and have students take notes on each.

4. You're teaching a science class on ecosystems. Which teacher prompt opens the door to wonder most effectively?

a. Let's define what an ecosystem is using the textbook glossary.
b. Who can name the biomes of the world?
c. What do you think the forest would say if it could speak?
d. There will be a quiz this Friday, so take notes.

The right answers: 1 d; 2 b; 3 d; 4 c

PART 1

WONDER QUIZ

STUDENT ACTIVITY

1. Which student activity is most likely to nurture wonder and curiosity?

a. Copy a diagram from the board about the water cycle.
b. Watch a high-speed video of fog rolling into a valley, then describe how it made you feel.
c. Label all parts of a river system in a worksheet.
d. Read a paragraph and answer comprehension questions.

2. Which student activity is most likely to nurture wonder and curiosity?

a. Exploring a terrarium in silence and writing down any questions that arise.
b. Completing a multiple-choice quiz on ecosystems.
c. Watching a YouTube video and summarizing the content.
d. Listing the animals of the rainforest from memory.

3. Which student activity is most likely to nurture wonder and curiosity?

a. Watching a live-stream of birds in a nest and recording observations.
b. Reading an article about bird species and answering comprehension questions.
c. Taking a quiz on bird anatomy.
d. Completing a crossword with bird-related vocabulary.

4. After showing a time-lapse of a flower blooming, a student asks, "Do flowers feel tired?" What do you do?

a. Correct them and say flowers don't feel.
b. Tell them not to ask silly questions.
c. Invite them to imagine what the flower might say if it could speak.

The right answers: 1 b; 2 a, b; 3 a; 4 c

PART 1

WONDER QUIZ

EVALUATION

1. How can a teacher design an evaluation that deepens curiosity?

a. Create a test that includes trick questions to challenge accuracy

b. Focus only on content recall from the textbook

c. Time the evaluation and reward speed over depth

d. Allow students to choose one question they want to explore more deeply

2. Which post-assessment activity is most aligned with wonder-based learning?

a. Self-assessment using emojis and a reflective prompt like "What surprised me?"

b. Just collecting the test and moving on

c. Correcting wrong answers in red pen

d. Comparing scores with classmates

3. How can evaluation be used as an extension of a student's imaginative process; not the end of it?

a. Give students a checklist of memorized facts to tick off

b. Require all students to answer the same questions in the same format

c. Let students write a reflective piece titled, "How this learning changed how I see the world?"

d. Time every task and rank results on speed

4. Which evaluation strategy best nurtures lifelong learning habits?

a. End-of-unit tests that are never reviewed

b. Open-ended questions that invite speculation and "what if" thinking

c. Weekly timed quizes with ranking

d. Standardized assessments with binary right/wrong outcomes

The right answers: 1 d; 2 a, b; 3 c; 4 b

PART 1

WONDER SELF-COACHING

Wonder learning: A **self-coaching** tool for lesson planning

The next page shows a reflective planning tool designed to help educators integrate awe, curiosity, beauty, and surprise into their teaching. It aligns lesson elements with principles from the Wonder Learning Approach to enhance focus, emotional engagement, and deep learning, especially for digital natives.

This tool is designed to help develop a wonder learning mindset. Once you begin incorporating this way of thinking into your teaching practice, it will **naturally** become an **internalized part** of how you approach education.

WONDER Learning Canva

Designed For:	Designed by:	Date:	Version:

Central theme

What is the mystery or beautiful idea behind this lesson?

Sparks of wonder

What could awaken natural curiosity before I teach anything?

Learning objective

What do you hope students will understand deeply, not just remember?

Mindful tech integration

Which digital tool or media can support curiosity or creativity, not replace it?

Creative response opportunity

How can students express what they're learning in a personal way?

Reflection

When will you pause and let students observe, wonder, or process quietly?

Open-ended discussion questions

What questions can you ask that don't have just one answer?

Real-life connection

How will this lesson connect to their lives or the real world?

Rhythm and simplicity check

Does this plan include a slow-enough pace, focus, and depth?

PART 1

STEP-BY-STEP GUIDE

You can use the tool as a self-coaching guide, in pairs, or in group work as a professional development resource to reflect on and enhance your lesson planning through the wonder learning approach.

01

CENTRAL THEME

Define the main subject or idea your lesson aims to explore (e.g. climate change, geometric patterns, poetry). Ensure the theme is open enough to allow for student inquiry and exploration.

02

LEARNING OBJECTIVE

State what deep understanding you want your students to experience. Focus on meaning and transfer, not just content recall (e.g., “Students will appreciate how symmetry shapes the natural world”).

03

SPARKS OF WONDER

List potential triggers that may evoke awe or curiosity, such as: surprising facts or paradoxes, mysterious phenomena, thought-provoking images or questions, riddles and brainteasers, optical illusions.

04

REAL-LIFE CONNECTION

Specify how the lesson relates to students’ lives, current events, or universal human questions. Ask: Why does this matter beyond the classroom?

PART 1

STEP-BY-STEP GUIDE

05

MINDFUL TECH INTEGRATION

Decide if any digital tools will support the learning process in any stage. Use tech only to enhance wonder, not as a substitute for it. Ask: Does this tool deepen curiosity, or does it distract?

06

CREATIVE RESPONSE OPPORTUNITY

Plan a space where students can express what they've learned in a personal way: drawing, storytelling, writing a metaphor, building a model, etc. This reinforces ownership and emotional engagement.

07

REFLECTION

Identify when and how students will reflect (e.g., journal prompt, partner discussion, one-word check-in). Encourage personal insights or lingering questions.

08

OPEN-ENDED DISCUSSION QUESTIONS

Include 1–3 questions that do not have a single right answer. These should foster critical thinking, exploration, and debate (e.g., "What would change if gravity were stronger?").

09

RHYTHM AND SIMPLICITY CHECK

Assess pacing: include moments of silence, slow observation, or mindful reflection. Avoid overstimulation or tech overload. Ask: Have I balanced depth with simplicity?

PART 1

EXAMPLES OF WL TRIGGERS

In the following pages, we will explore examples of cognitive triggers, phenomenon-based triggers, visual & artistic triggers, and narrative & emotional triggers of wonder. You can generate additional examples with the help of AI using the prompt provided at the end of the chapter.

The examples cover the topic areas: STEM, sustainability education, language learning, art, social studies, and SEN.

Cognitive triggers

Wonder trigger	Example
Surprising facts or statistics	Language learning: Share how many words the average 12-year-old knows vs. Shakespeare.
Paradoxes	Sustainability education: Present the paradox of green technology needing rare, unsustainable resources.
Riddles and brainteasers	SEN: Solve visual or tactile riddles using assistive apps.
Open-ended “What if…” or “Why…” questions	Sustainability education: What if no one used plastic for a month?
Contradictions or unexpected outcomes	STEM: Drop two objects of different weights and ask students to predict outcomes then reveal they fall at the same speed due to gravity.
Anomalies in patterns or data	Social studies: Have students examine COVID-19 case data across countries, and guide them to find unexpected patterns (e.g., some countries with less strict lockdowns had lower early mortality rates).

PART 1

EXAMPLES OF WL TRIGGERS

Phenomenon-based triggers

Wonder trigger	Example
Natural wonders	Language learning: Describe natural wonders like auroras in the target language. SEN: Let students explore how magnets attract and repel without touching using magnetic wands, iron filings, and visual tracing boards.
Optical illusions or sensory experiments	SEN: Use physical manipulatives to explore tactile illusions (e.g., hot-cold metal touch). Art: Draw your own illusions after studying M.C. Escher or similar artists.
Scientific demonstrations with surprising results	STEM: Drop an egg into plain water (it sinks), then into saltwater (it floats).
Rare astronomical or geological events	Social studies: Explore how different civilizations explained comets or eclipses. Sustainability: Connect geological events like earthquakes to sustainable building practices.
Hidden patterns in nature	Language learning: Describe natural wonders like auroras in the target language. Art: Create nature-inspired art using repeated forms or symmetry.
Animal behavior that defies human expectations	Social studies: Explore myths and historical interpretations of unusual animal behaviors.

PART 1

EXAMPLES OF WL TRIGGERS

Visual and artistic triggers

Wonder trigger	Example
Thought-provoking art or photography	STEM: Show students NASA's 'Pale Blue Dot' photo of Earth from space and ask: "What does this say about our place in the universe?" Art: Analyze emotion in Frida Kahlo's portraits and create self-reflective art.
Juxtaposition of scale	All subjects: Microscopic vs. cosmic images. Language learning: Compare small vs. large versions of words (e.g., 'tiny ant' vs. 'vast ocean') to build descriptive vocabulary.
Slow-motion or time-lapse videos	Use time-lapse footage of a chemical reaction (like rust forming or crystals growing) to discuss changes over time in matter.
Abstract or surreal visuals	Language learning: Students describe surreal images using metaphors in the target language. Use humor. SEN: Use simple music visualizers (e.g., Chrome Music Lab) where sound creates shapes and colors. Students explore how music "feels" through visual form.
Objects from history or different cultures	STEM: Study ancient measurement tools like astrolabes and link to modern tech.
Soundscapes or unusual music styles	Social studies: Listen to historical audio clips or protest songs and analyze context. SEN: Use calming or rhythmic soundscapes to support sensory regulation and attention.

PART 1

EXAMPLES OF WL TRIGGERS

Narrative and emotional triggers

Wonder trigger	Example
Personal stories of resilience, discovery, or transformation	Language learning: Ask students to read or listen to a story about a refugee overcoming adversity, then retell the story in their own words in the target language. SEN: Show a short animated video about a child learning to swim or speak up, then invite students to sequence the story using cards or gestures.
Historical mysteries or unsolved scientific puzzles	STEM: Explore the mystery of how the Antikythera mechanism, an ancient Greek device, was used to predict astronomical events with amazing precision. Art: Study the symbolism in Leonardo da Vinci's paintings and invite students to create their own mysterious artwork with hidden meanings.
First-person accounts from explorers, scientists, or artists	STEM: Read excerpts from astronaut Chris Hadfield's space journals to understand the emotional experience of viewing Earth from orbit.
Poetic descriptions that evoke wonder or mystery	Language learning: Introduce students to wonder-themed poems in the target language and guide them to create their own using learned vocabulary. Social studies: Use a poem describing cultural identity, migration, or homeland to spark discussion or a visual art response about belonging.
Emotional questions like "What does it mean to be alive?" or "What makes something beautiful?	STEM: Ask students to reflect on how photosynthesis sustains nearly all life on Earth and then pose the question: "Is a plant alive in the same way we are?"

PART 1

EXAMPLES OF WL TRIGGERS

AI prompt

Create your own wonder triggers using the AI prompt below:

I am a teacher designing a lesson for students aged 9 to 15. Help me create wonder-based learning triggers for the topic of [*insert subject or theme*]. I want examples in the following category: [*choose one or more: Cognitive, Phenomenon-Based, Visual & Artistic, Narrative & Emotional*]. Make the examples engaging, age-appropriate, and tied to real-world experiences or surprising insights. Include at least 5 wonder trigger ideas.

FOLLOW-UP GROUP WORK

In small groups of 4 - 6 teachers review 3 triggers and discuss:

- Which triggers feel authentic vs. forced?
- Which are age-appropriate and inclusive?
- How might you adapt weaker ones?


WONDER
LEARNING
"
To engage our students, we need to meet them where they are; not where we think they should be.
-
Rick Wormeli
DIGITALLY EMPOWERED WONDER LEARNING

PART 1

WONDER AND INCLUSION

The pedagogy of wonder in the education of students with SEN

The pedagogy of wonder, as described by Catherine L'Ecuyer (2019), focuses on the child's natural ability to be amazed by the world. This wonder is seen as an open and sensitive way of experiencing beauty, mystery, and truth. According to the author, it is the starting point for intrinsic motivation and meaningful learning.

Far from being a privilege reserved for so-called "typical" children, **wonder is a universal experience accessible to all** students, regardless of their cognitive, sensory, or motor abilities. In this sense, it is particularly relevant in the context of educating students with SEN, as it respects their **internal rhythms**, encourages active listening, and values non-conventional forms of perception, expression, and connection with the world.

Inclusive access to experience

In an educational landscape often characterised by pressure to produce results, accelerated learning rhythms, and sensory overload, the pedagogy of wonder offers an inclusive and humanising alternative. Wonder enables the creation of **emotionally safe** and **aesthetically curated** learning environments, where students with SEN can engage with knowledge through curiosity, contemplation, and sensory involvement.

Aesthetics and storytelling

Using rich materials, engaging storytelling, calm exploration of nature, and valuing silence and attentive listening helps foster sustained attention and emotional connection to learning. These strategies encourage active participation in the educational process.

PART 1

WONDER AND INCLUSION

Wonder across pedagogies

The wonder approach also finds support in other pedagogical traditions. The philosophy of **Maria Montessori**, for example, highlights the importance of a sensorially rich environment and the freedom to explore as the foundation for autonomous and harmonious child development.

Similarly, **Lev Vygotsky** emphasises the role of social and affective mediation in the construction of knowledge, which aligns with the idea that wonder can be shared and enhanced within educational relationships.

Furthermore, authors such as **Jacques Rancière** (1991) argue that all forms of intelligence are equally valid, reinforcing the need to create pedagogical contexts in which students with SEN can express their curiosity and sensitivity in an authentic manner.

Pedagogical practices for cultivating wonder in inclusive contexts

Putting the pedagogy of wonder into practice means being attentive to each student's unique way of experiencing and expressing reality. For students with SEN, it involves adapting the environment, strategies, and relationships with respect for their pace and potential.

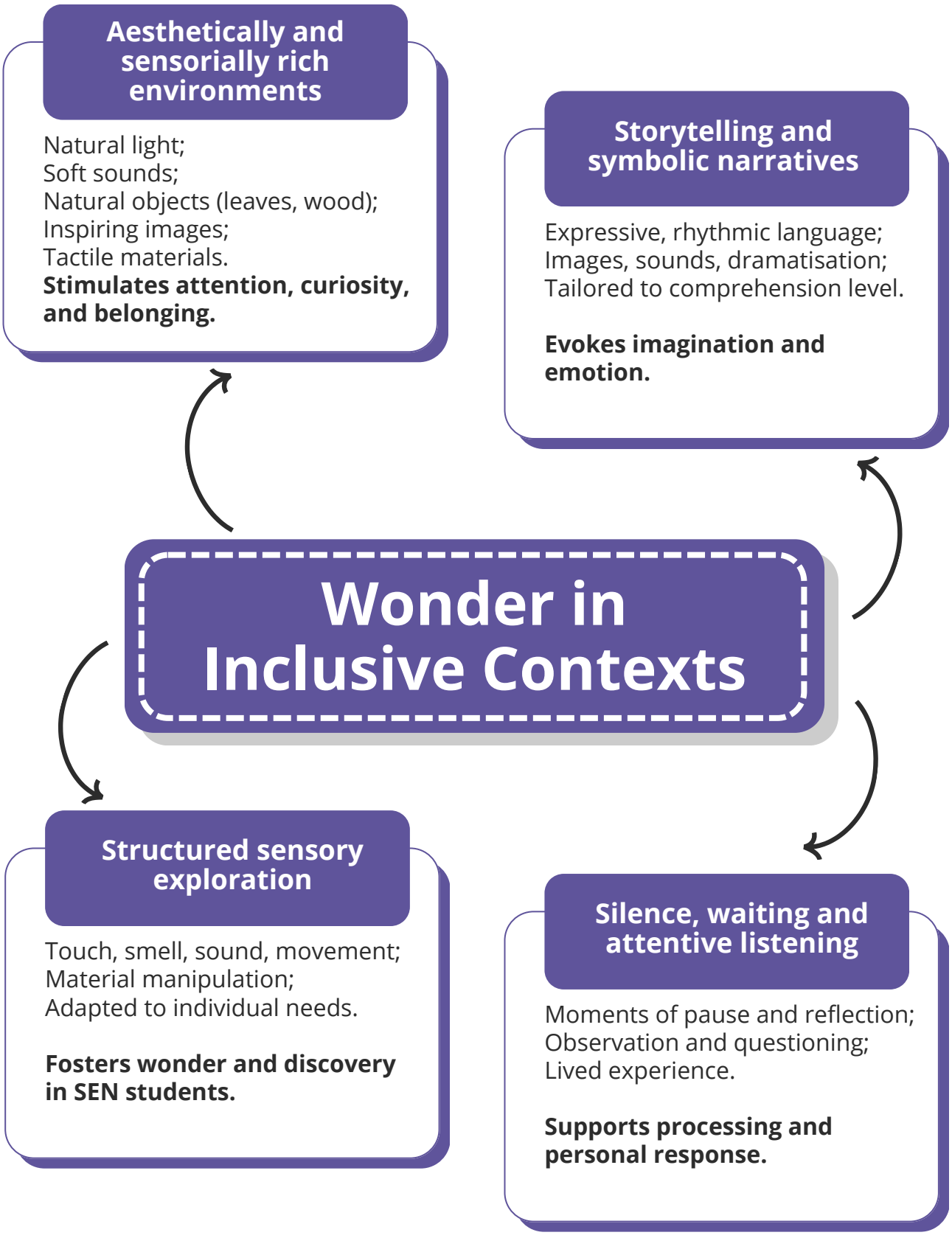
The role of the teacher

The teacher is a **mediator** of meaning and beauty in this context. They can draw attention to things like patterns in nature, soft music, gentle gestures, bright colors, or surprising questions. This kind of guidance doesn't rely on advanced technology but on the teacher's genuine, caring, and thoughtful **presence**.

The teacher is committed to a form of education that is practical and concrete, prioritizing experience, emotional connection, and the dignity of the act of knowing.

PART 1

WONDER AND INCLUSION



PART 1

REFLECTION: WONDER FOR SEN

Adapting wonder learning for SEN students: Analyse a lesson, or activity you currently teach. Identify potential barriers for SEN learners: What could challenge students with specific needs in this activity?

SEN category	Possible barriers (tick or write)
ADHD	□ Overstimulation □ Task-switching □ Distraction risk
Dyscalculia	□ Number anxiety □ Sequencing □ Abstract reasoning
Autism/sensory needs	□ Noise sensitivity □ Unclear transitions □ Visual overload
Language processing	□ Complex instructions □ Symbolic language □ Reading load
Physical/motor	□ Manipulating materials □ Navigating space □ Writing fatigue

Select from the list below (or add your own) to adapt your activity for wonder and inclusion.

Sensory & aesthetic adaptations	Narrative & emotions
□ Use calming visuals, nature objects, or ambient music □ Offer sensory-rich materials (soft textures, scents, natural light) □ Create a quiet "pause space" for individual reflection	□ Add a symbolic or simple story element □ Use visual storytelling (images, drawings, gesture) □ Let students explore at their own pace

Accessible expression options	Inclusive teacher behaviours
□ Photo or voice response instead of writing □ Drawing or tactile models instead of tests □ Emojis or scales for emotional check-ins	□ Slow down your speech and include pauses □ Ask open-ended, wonder-driven questions □ Notice and name moments of beauty or surprise

PART 1

UNIVERSAL DESIGN FOR LEARNING

Universal Design for Learning (UDL) focuses on designing curriculum, instruction, and assessments in ways that are flexible and inclusive so that all learners, regardless of ability, background, or learning style, have equal opportunities to succeed.

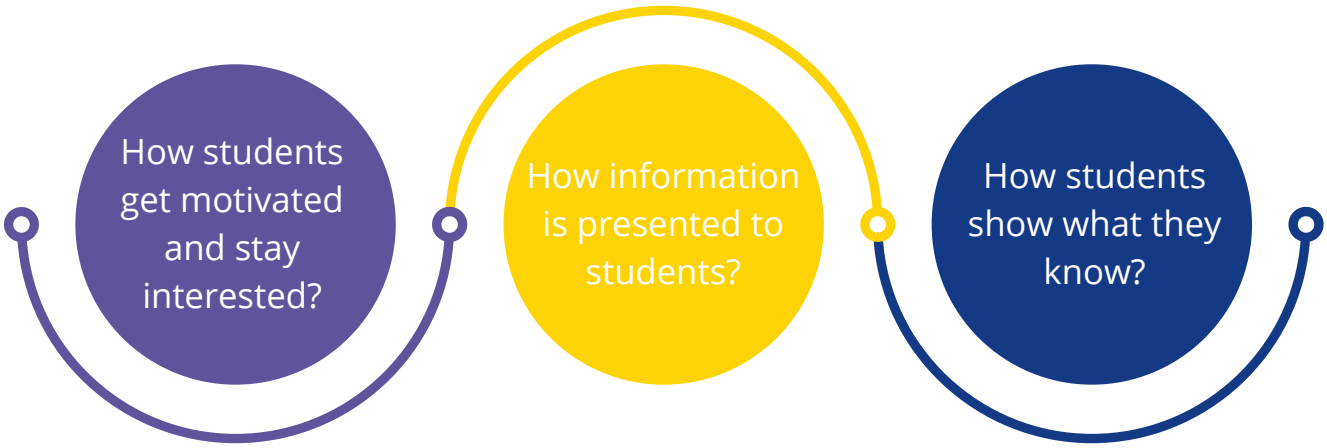
The framework was developed by Center for Applied Special Technology and is grounded in neuroscience and the understanding that learners differ in how they:

- Engage with learning,
- Take in and process information, and
- Show what they know.

Checklist for lesson planning:

- ✓ Did I provide at least 2 ways to keep students engaged?
- ✓ Did I use more than one format to present content?
- ✓ Did I allow more than one option for students to express learning?

The 3 principles of UDL



PART 1

UNIVERSAL DESIGN FOR LEARNING

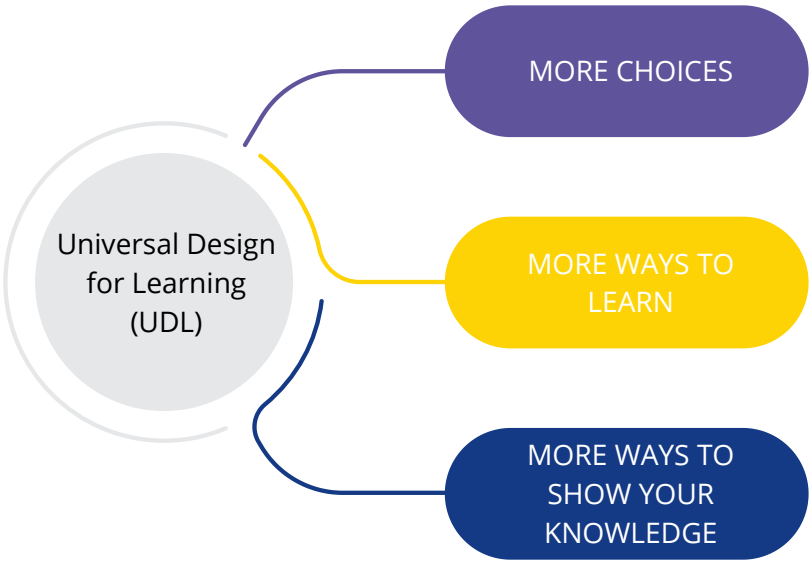
The table below contrasts traditional teaching methods with UDL approaches, showing how small shifts in practice can make learning more flexible, inclusive, and accessible for all students.

Traditional teaching	UDL
Teacher assigns a written essay as the only way to demonstrate learning.	Students can choose: essay, podcast, video, infographic, or oral presentation with supports like graphic organizers and text-to-speech.
Students read from a single textbook in print.	Content is offered in multiple formats: print, audio, video, simulations.
Teacher lectures with spoken explanations only.	Teacher combines spoken explanation, visuals, demonstrations, and multimedia.
Note-taking required with pen and paper.	Students use guided notes, graphic organizers, speech-to-text, or digital note-taking tools.
One timed paper-and-pencil test for assessment.	Assessments include projects, quizzes, portfolios, or digital products.
Only students who raise their hands can participate in discussion.	Students contribute through chat boards, sticky notes, small groups, or digital tools (e.g., Padlet, Wakelet).
Science knowledge shown only in a lab report.	Students demonstrate understanding with photo journals, videos, models, diagrams, or traditional reports.
Teacher provides a single reading level text.	Materials are scaffolded: simplified summaries, vocabulary support, translations, and extension texts.
Classroom activities are one-size-fits-all.	Students have choice and flexibility: group/solo work, different task types, and optional challenge extensions.
Teacher feedback is end-of-unit only.	Feedback is ongoing, and student-driven: peer reviews, self-reflection checklists, digital tools with instant feedback.

PART 1

UNIVERSAL DESIGN FOR LEARNING

Student-friendly way of explaining the UDL to students.



TRADITIONAL LEARNING		UDL
Everyone writes an essay to show learning.	**Activities**	You can choose: essay, video, podcast, poster, or speech.
You must take notes by hand.	**Notes**	You can use organizers, typing, drawing, or speech-to-text.
Only students who speak up in class can join discussion.	**Contributing**	You can join by talking, writing, posting online, or group work.
Feedback comes at the end only.	**Feedback**	You get feedback often: from yourself, peers, or the teacher.

PART 1

UNIVERSAL DESIGN FOR LEARNING

QUIZ

1. A teacher assigns only a 5-page essay to show understanding. Which UDL principle is being ignored?

a. Engagement
b. Representation
c. Action and expression
d. None, this is UDL.

2. Which UDL principle is about giving students choices and motivating them?

a. Engagement
b. Representation
c. Action and expression
d. Reflection

3. Which classroom strategy reflects UDL?

a. Giving all students the same reading level text
b. Offering options like text, audio, and video for reading material
c. Using only paper-and-pencil tests for all students
d. Providing no choices to keep class "fair"

4. The main goal of UDL is to...

a. Lower expectations so everyone succeeds
b. Create flexible, inclusive learning where all students can thrive
c. Focus only on students with disabilities
d. Replace teachers with technology

5. A science teacher lets students show their learning by writing a lab report, creating a video, or building a model. This is an example of:

a. Multiple means of engagement
b. Multiple means of representation
c. Multiple means of action & expression
d. Multiple means of grading

6. Using graphic organizers, sentence starters, or speech-to-text tools supports which UDL principle?

a. Engagement
b. Representation
c. Action and expression
d. Feedback

The right answers: 1 c; 2 a; 3 b; 4 b; 5 c; 6 c

PART 1

UNIVERSAL DESIGN FOR LEARNING

UDL Exercise	
Objective	Identify potential barriers in a lesson and redesign them using UDL strategies.
Pick a lesson activity you use	For instance: group discussion, test, reading, field trip, peer review.
List barriers that some students may face.	Example: “English learners may not understand vocabulary,” or “students with anxiety may not want to present aloud.” Barrier 1: Barrier 2:
Redesign the activity using UDL.	How students get motivated and stay interested? How information is presented to students? How students show what they know?

PART 2

WHERE TECHNOLOGY AND WONDER WORK HAND IN HAND

5Cs OF DIGITALLY EMPOWERED WONDER LEARNING

When integrating technology in the classroom, we are not simply adding devices, apps, and platforms. We are pursuing 5Cs learning goals: Connect, Communicate, Curate, Collaborate, Create.

These represent the core capacities students develop through purposeful tech use.

PART 2

5Cs OF DIGITALLY EMPOWERED WONDER LEARNING

01

CONNECT

To people, ideas, cultures, and data beyond the classroom walls. Example: A class joins a live video session with students in another country to discuss climate change from different perspectives.

02

COMMUNICATE

Using digital tools to express ideas clearly and meaningfully across languages and formats. Example: Students create multilingual infographics to explain water conservation for an awareness campaign.

03

CURATE

To find, evaluate, and organize digital content in thoughtful, critical ways. Example: Students gather articles, videos, and statistics to build a digital folder about the history of renewable energy.

04

COLLABORATE

With peers to solve problems, share perspectives, and build knowledge together. Example: Students co-create a digital magazine with peers across Europe, exploring cultural heritage (eTwinning project).

05

CREATE

Using technology to design original work, from videos and presentations to simulations and digital art. Example: Students use a tablet app to design a prototype of a sustainable house and present it.

PART 2

AVATAR CHALLENGE

The Avatar Challenge brings together digital literacy, storytelling, creativity, and reflective teaching practice.

AVATAR TIME

Create an avatar that represents your enthusiasm for wonder learning.
Visit avatarmaker.com to get started.

PLACE FOR YOUR THOUGHTS

1

WORDS

Create 5 keywords and 5 hashtags (#) that represent your avatar.

PLACE FOR YOUR THOUGHTS

2

280 CHARACTERS

Tell a story about your avatar in 280 characters. Who is this person? What do they do? Why do they do it? How do they do it? Where can we find more information?

PLACE FOR YOUR THOUGHTS

3

PART 2

INTERNET SAFETY IN WONDER LEARNING

The internet is a **public space** where everyone can be both a creator and a consumer of content. However, the **control** and **monitoring** of what is shared online are **inconsistent** and often **absent**, depending on the platform or region. Existing laws are not fully adapted to the way we use the internet today, particularly regarding issues like net neutrality and free access. As a result, information spreads rapidly and is difficult to contain once released. Fact-checking is almost nonexistent in many cases, and the speed at which we consume content makes it even harder to distinguish reliable information from misinformation.

When students are exposed to unsafe digital environments filled with fear, misinformation, or emotional overload, their ability to experience wonder diminishes. Instead of approaching the world with curiosity and attentiveness, they may retreat into anxiety or become **overstimulated** and **distracted**.

When students understand how to navigate risks online, such as protecting their personal information, avoiding harmful content, and responding to negative interactions, they feel empowered. This confidence enables them to explore the digital world with openness, not fear.

Internet safety also plays a key role in forming **ethical digital citizens**. When students learn to act with integrity online, they contribute to a space that encourages wonder. They learn to seek truth and engage with content that deepens their understanding, rather than content that merely entertains or distracts.

Technology in a wonder learning classroom is never used for its own sake. It is a tool that can support curiosity, creativity, and discovery. However, if it is not approached with care, the digital world can become overwhelming.

PART 2

INTERNET SAFETY IN WONDER LEARNING

Without guidance, students may slip into **passive consumption** or experience emotional overload. Teaching internet safety allows technology to be used purposefully. It gives students the awareness and discipline needed to use digital tools to express ideas, explore questions, and create meaningful work.

Teaching internet safety supports the development of autonomy. A core goal of wonder learning is to help students take responsibility for their own learning. When students know how to manage their time online, evaluate sources critically, and choose their digital experiences wisely, they gain a sense of independence. They become more thoughtful, more reflective, and more capable of engaging deeply with content. These are habits that support lifelong learning and intellectual maturity.

Seven common forms of information disorder:

- Satire or parody: Content created with no intention to cause harm but that has the potential to fool.
- Misleading content: Misuse of information to frame an issue or individual in a deceptive way.
- Imposter content: When genuine sources are impersonated to mislead or deceive.
- Fabricated content: Entirely false content designed to deceive and cause harm.
- False connection: When headlines, visuals, or captions do not match the actual content.
- False context: Genuine content shared with false contextual information, changing its meaning.
- Manipulated content: When genuine information or imagery is altered to deceive the audience.

Source:
https://exposed.news24.com/what-is-fake-news

PART 2

INTERNET SAFETY IN WONDER LEARNING

Internet safety terminology

Description	Examples
Lies: Statements that are knowingly false, told to mislead.	• Denying doing something you actually did. • Claiming to have finished homework when you haven't. • A politician falsely stating that a program was successful.
Deception: The act of misleading or hiding the truth to manipulate someone.	• A company exaggerating product benefits in an ad. • A student using a fake excuse to skip school. • A phishing email pretending to be from your bank.
Fabricated news: Entirely false news stories made to look like real journalism.	• An article claiming scientists confirmed the Earth is flat. • A fake story about a cure for cancer being discovered. • A news site posting made-up election results.
Hoax: A deliberately false claim or story intended to trick people.	• Fake celebrity death announcements, • False medical cures, • Fabricated news stories with clickbait headlines.
Propaganda: Biased or misleading information spread to support a political or ideological agenda.	• Posters glorifying a dictator while hiding human rights abuses. • Social media campaigns pushing one-sided war narratives. • Government-controlled media denying proven facts.
Misinformation: False or inaccurate information shared without harmful intent.	• Sharing outdated COVID-19 advice unknowingly. • Reposting a fake missing person alert. • Believing and passing along a myth about vaccines.

PART 2

INTERNET SAFETY IN WONDER LEARNING

Internet safety terminology

Description	Examples
Deep fakes: AI-generated videos or audio that realistically mimic real people saying or doing things they never did.	• A fake video of a president declaring war. • An altered video of a celebrity promoting a scam. • A fake audio of a teacher insulting students.
Fake news: News that is intentionally false, misleading, or sensationalized, often for political or financial gain.	• A story claiming a public figure was arrested when they weren't. • A fake news site posting outrageous celebrity gossip. • A false article blaming a group for a disaster.
Disinformation: False information created and spread deliberately to deceive.	• A state-sponsored campaign spreading lies about another country. • False voting instructions sent before elections. • A hoax claiming a protest was violent when it wasn't.
Clickbait: Sensational or misleading headlines designed to attract clicks.	• Fake celebrity death announcements, • False medical cures, • Fabricated news stories with clickbait headlines.

PART 2

INTERNET SAFETY IN WONDER LEARNING

HOW ALGORITHMS SHAPE WHAT WE SEE ONLINE

Understanding how and why the internet works the way it does is essential for staying safe online. When we use an internet search, what we see is filtered by algorithms that define how trustworthy, reputable, and authoritative a source is, at least according to the platform. This process can create an information bubble, a filter bubble or echo chamber, where we are repeatedly shown content that aligns with our past behavior or beliefs. These filters could be based on our sources of information, making it harder to access diverse or opposing viewpoints. News feed algorithms play a big role in this, shaping what we see and read, often without us realizing it. When we are consuming too fast, for instance just skimming headlines, we become more vulnerable to bias and less likely to question the truth of what we're seeing. That's why it's so important for students to pause, think critically, and consider the source before accepting information online.

HOW DO WE RECOGNIZE LIES, DECEPTION, AND MISINFORMATION?

- Read beyond the headline.
- Check the date: Is the information current or outdated?
- Check the source and the author: Are they reliable and trustworthy? Look for scientific or reputable sources.
- Consider the motives of the author: Is it news, reporting, or an opinion piece?
- Watch for emotional language and bias.
- Ask yourself: Is it clickbait or sensationalism?
- Is someone profiting from this information?
- Always use critical thinking and common sense.

> We all need to become online fact-checkers, digital detectives, and informed digital citizens.

PART 2

SIFT TECHNIQUE FOR EVALUATING SOURCES

SIFT technique is a simple method for evaluating the credibility of online information and sources. It was developed by Mike Caulfield as part of digital literacy education.

S

STOP

Stop, pause, and check your emotions. Content that evokes strong emotions should always be verified carefully. Before you believe or share something, pause. Ask yourself: does this look real?

I

INVESTIGATE

Investigate the source. Read laterally to check facts and see what other reliable sources say about it. Find out who made it. Is the author or website reliable? Why did they post it?

F

FIND

Search for better coverage. Check if other reliable outlets are reporting the same thing. Look for other sources. Do other trustworthy sites say the same thing?

T

TRACE

Follow claims, quotes, or images back to their original context to see if they were used accurately. Go back to the original. Check where the picture, video, or quote first came from.

PART 2

INTERNET SAFETY QUIZ

SAFE OR SORRY? HOW SAVVY AM I WHEN USING INTERNET AND TECHNOLOGY?

1. If a person takes a screenshot of my snaps, I can...

a. Punch him or her
b. Do the same back to him or her
c. Block him or her
d. Report him or her

2. To use the Internet and social media, I need to...

a. Be at least 13 years old in real life
b. Ask my parents or guardians for permission
c. Have the latest smartphone
d. Hack one of the school's computers

3. Fortnite is a game....

a. Rated PEGI 18+
b. For posting nudes and MEMEs
c. I can download from Partis, the App Store and Google Play
d. For users 12 years or older

4. If a user flags content on the Internet, it means...

a. The content is not in accordance with the guidelines or rules
b. The service provider needs to check or review the content
c. The user took a screenshot and reported it to the police
d. The user marked it as spam

5. If I want to make an online purchase, I need to...

a. Check for the https protocol
b. Check the who.is domain to see if the site is trustworthy
c. Create a fake account and buy a lot
d. Use my credit card everywhere

6. When I report a user anywhere on the Internet, this is what happens...

a. The user hates me and has the right to cyberbully me
b. Reporting is anonymous and my data is protected
c. The user can report me back
d. The user is notified, knows who I am, and gets my data

PART 2

INTERNET SAFETY QUIZ

SAFE OR SORRY? HOW SAVVY AM I WHEN USING THE INTERNET AND TECHNOLOGY?

7. If I block somebody online, the user cannot...

a. Send me private messages (PM, DM)
b. Access the Internet anymore
c. Use this social media channel anymore
d. Leave comments on my content

8. Silent witness means...

a. That you refrain from engaging in cyberbullying
b. That you are deaf and cannot speak
c. That you block or report, leave a group, or write hurtful comments
d. That you do not speak up when you see or hear something is wrong

9. I need to report inappropriate content in order to...

a. Make our teacher Zala happy
b. Follow the rules of Internet netiquette
c. Stop the misuse and sharing of harmful content
d. Create a boring Internet

10. If I wish to report content online, I need to...

a. Be an adult (18+)
b. Have a registered account or be a user of this channel
c. Know the rules and guidelines of the channel or community
d. Use a computer to do it

11. If I am being harassed online, I need to...

a. Block the user
b. Make fun of the user and harass them back
c. Tag the user, tell my friends, and yell at my parents
d. Make a screenshot or take a print screen

12. I do not film or share videos of violence online because...

a. I do not have the latest iOS
b. I can victimize the victim all over again
c. I can give the impression that violence is acceptable
d. Once shared, it is gone forever and can be taken out of context

PART 2

INTERNET SAFETY QUIZ

SAFE OR SORRY? HOW SAVVY AM I WHEN USING THE INTERNET AND TECHNOLOGY?

13. We don't wash dirty laundry online means...

a. Hating YouTubers on the Internet

b. That I can only troll people I know and are my friends

c. That I follow the rules of online netiquette

d. That the Internet is a space for civil discussion

14. A keyboard warrior doesn't...

a. Respect other people's rights and privacy online

b. Think of the consequences of his or her actions

c. Have to follow the rules of free speech

d. Believe he or she is harassing others with his or her behavior

15. Inappropriate content is...

a. Nudity, nudes, pornography (for ages under 18)

b. Hate speech, hurtful comments, fake profiles

c. Spam, hoaxes, chain letters, fraudulent messages

d. Memes of my hamster Pepy

16. When was the Internet created?

a. 1989

b. 1999

c. 1889

d. 1670

17. Mr Beast and IShowSpeed are...

a. YouTubers

b. Influencers

c. Older than 30 years

d. English

18. Robert Platt needs to create a new password for Gmail. Which one is suitable?

a. robert_new_password

b. platt_rob_2024!

c. ineedanewpassword?

d. This1sMyN3wPassw0rd:-)

PART 2

INTERNET SAFETY QUIZ

SAFE OR SORRY? HOW SAVVY AM I WHEN USING THE INTERNET AND TECHNOLOGY?

19. Acronyms such as YOLO and ROFL are...

a. Sentences

b. Abbreviations formed from sentences

c. Abbreviations formed from initial letters

d. Something on the Internet

20. https means...

a. Is encryption of data in interaction with a website

b. The site is not secure

c. I will get loads of spam when I browse

d. Data is transferred via secure connection

21. When I scan a QR code...

a. A link to a site/app opens

b. I get access to an app/site

c. Nothing happens

d. A site is denied by the FBI

22. If I wish to install Wakelet on my phone, I need to...

a. Use Aptoide

b. Use App Store

c. Click the link I got from my friend who knows computers

d. Use Google Play

23. The 5Cs of classroom experience are...

a. Connect, create, copy, collaborate, check

b. Create, curate, consume, communicate, collaborate

c. Create, collaborate, curate, communicate, connect

d. Calculate, challenge, create, communicate, choose

24. Internet should be (3 pillars of Innovative Pedagogy)...

a. Free for all

b. Learn, entertain, educate

c. Get information, have fun, learn new things

d. Fun 24/7/365

PART 2

INTERNET SAFETY QUIZ

SAFE OR SORRY? HOW SAVVY AM I WHEN USING THE INTERNET AND TECHNOLOGY?

25. The attention span of today's learners is...

a. 7 sec or less
b. Less than of a goldfish
c. 7 minutes or less
d. More than 60 seconds

26. If a user adds me to a Viber/WhatsApp group...

a. I am angry
b. Everyone in the group can see my personal data
c. Everyone in the group can private message me
d. Someone really cares about me

27. When I read something on the Internet, I...

a. Always believe it, if my friends share it
b. Know data, images and content can be manipulated, misleading
c. Need to check more sources across the Internet
d. Need to find more information about the author

28. What types of content can you share in a Wakelet collection...

a. Links, PDFs and QR codes
b. Links, PDFs, Adobe Express
c. OneDrive, Google Drive and YouTube links
d. All, except GIFs

29. When you share a Wakelet collection with others, you...

a. Can copy link
b. Can't get a QR code
c. Can share in Teams
d. Need to generate a special code

30. In Padlet I can...

a. Use search function
b. Upload an MP3
c. Create a poll
d. Share an audio recording

PART 2

INTERNET SAFETY QUIZ

SAFE OR SORRY? HOW SAVVY AM I WHEN USING THE INTERNET AND TECHNOLOGY?

31. Online harassment and bullying isn't harmful and illegal until police become involved.

a. True
b. False

32. A keyboard warrior is a person who respects people's privacy and boundaries.

a. True
b. False

33. Stereotypes are sets of prejudice that are highly irresistible to change.

a. True
b. False

34. Stereotypes can be positive or negative.

a. True
b. False

35. Prejudices are unjustifiable and positive attitudes towards people, groups, and minorities.

a. True
b. False

The right answers: 1 c, d; 2 a, b; 3 d; 4 a, b; 5 a, b; 6 b; 7 a, d; 8 d; 9 b, c; 10 c; 11 a, d; 12 b, c, d; 13 c, d; 14 a, b, d; 15 a, b, c; 16 a; 17 a, b; 18 c, d; 19 c; 20 a, d; 21 a, b; 22 b, d; 23 c, 24 b, c; 25 a, b; 26 b, c; 27 b, c, d; 28 b, c; 29 a, c; 30 a, c, d; 31 b; 32 b; 33 a; 34 a; 35 b

PART 2

THE INTERNET SAFETY CASES

Learning by doing the exercise	Using an internet safety cases, we will practice the principles of digitally empowered wonder learning.
Scripts	On the following pages, you will find four different scripts related to internet safety. Each script includes a story and accompanying activities for students.
Tasks	Form your groups accordingly. Complete the exercise. Create your content and post it on the Padlet or Wakelet (you can use Canva, Genially, or any tool you prefer). Generate a word cloud at https://www.wordclouds.com/ Develop your script and prepare to perform it in the classroom.

PART 2

THE INTERNET SAFETY CASES

It couldn't happen to me 1: Deleted?

On the playground in front of our school, a few students got into a row. They argued at first, and then a fight erupted. There were many students around, and someone from the crowd took his or her mobile phone and started filming the fight.

On the recording, it can clearly be heard how other students are having fun, laughing, cheering, and saying, "Punch him/her, he/she totally deserves it, asshole! Punch him/her, don't be a pussy."

Some of the students are present and clearly enjoying themselves while this is being recorded. When teachers finally arrive to break up the fight, they tell the person filming to delete it immediately, on the spot.

The person says, "I have, it is deleted," but later the video is posted and found in the Snapchat group of class 9C.

PART 2

THE INTERNET SAFETY CASES

Story 1: Tasks

Wonder trigger	Tasks
Discuss	Who is involved in this situation? Who is the victim, who is the bully, who are the witnesses? What do we need to do? Consider everyone involved: The person who filmed and posted the video, the witnesses, classmates, members of the Snapchat group, teachers, the school, and parents. Provide 5–10 suggestions. What can we do during the incident, after it has happened, and to prevent such actions in the future? What should we do online: Both when the incident happens and afterward? How should we respond to violence on the Internet?
Script and roleplay	Prepare a short script of how you would speak to your students and their parents about the incident after it has happened. Imagine you are at a parent-teacher meeting. Role-play the script in your class.
Follow-up	Create a poster with your suggestions for safe and responsible use of the Internet, addressing online violence and harassment. Go to https://www.wordclouds.com and create your own Word Cloud using the most important words you want to share or remember. Share all graphics in Padlet or Wakelet.

PART 2

THE INTERNET SAFETY CASES

It couldn't happen to me 2: The fake profile

The biology professor is very strict. The students don't like her much, especially in our class where she is the least favorite teacher. She also has no idea how to use the Internet or technology.

Someone in the class decides to create a fake Instagram profile named "Maria_uglydinosaur." Each day, new content is added: memes, funny GIFs, and eventually real photos of her taken from the school website and the Internet. These photos are edited and ridiculed.

Later, some users find pictures of her real family, her children and husband, and this content is also posted to the fake profile. The comments become increasingly hurtful, and some are even aggressive. When someone at school discovers the profile and reports it to the school counsellor, the student who created it claims, "It was just a prank, a joke, no harm done."

PART 2

THE INTERNET SAFETY CASES

Story 2: Tasks

Wonder trigger	Tasks
Discuss	Who is involved in this situation? Who is the victim? Who is the bully? Who are the witnesses? What do we need to do? Consider everyone involved including the person who created the profile, the witnesses, classmates, those engaging with the profile, teachers, the school, and parents. Provide 5 to 10 suggestions for action. What can we do during the incident, after it has happened, and to prevent such actions in the future? What actions should we take on the Internet both when it happens and after it happens? How should we handle inappropriate content and fake profiles on the internet?
Script and roleplay	Prepare a short script of how you would speak to your students and their parents about the incident after it has happened. Imagine you are holding a class session with your students. Role-play the script in class.
Follow-up	Create an Instagram post with your suggestions for safe and responsible use of the Internet, focusing on how to prevent online violence and harassment. Go to https://www.wordclouds.com and create your own Word Cloud using the most important words you want to remember. Share all graphics in Padlet or Wakelet.

PART 2

THE INTERNET SAFETY CASES

It couldn't happen to me 3: In the chosen circle

My best friend and I love using Instagram. It's fun, and there's so much you can do with it. One day, we were added to a private group on Instagram called "The Chosen," created by one of our classmates. This classmate posted a screenshot of a story from another student. The image had been altered and included hurtful text: "You ugly bitch, do you really think you look cool? You're ugly as fuck, you dumb cow, nobody likes you 😂😂 lmao."

The group members continued commenting and shared inappropriate memes. Some of the comments were really uncomfortable to read, especially because the person being targeted had no idea this was happening.

I feel really uncomfortable and scared. I want to do the right thing, but I'm afraid that if I speak up, there will be consequences.

What can I do?

PART 2

THE INTERNET SAFETY CASES

Story 3: Tasks

Wonder trigger	Tasks
Discuss	Who is involved in this situation? Who is the victim? Who is the bully? Who are the witnesses? What do we need to do? Consider everyone involved: The person who created and shared the post, the witnesses, classmates, those engaging with the content, those silently observing, teachers, the school, and parents. Give 5 to 10 suggestions for action. What can we do during the incident, after it has happened, and to prevent such actions in the future? What actions should we take on the Internet both when it happens and after it happens? How should we respond to harassment, cyberbullying, and hateful behavior on the internet?
Script and roleplay	Prepare a short script of how you would advise a student who comes to you in confidence about what is happening. Imagine you are a school social worker or counsellor. Role-play the script in your class.
Follow-up	Create a Facebook post with your suggestions for safe and responsible use of the Internet, focusing on how to recognize, respond to, and prevent online violence and harassment. Go to https://www.wordclouds.com and create your own Word Cloud using the most important words you want to remember. Share all graphics in Padlet or Wakelet.

PART 2

THE INTERNET SAFETY CASES

It couldn't happen to me 4: Too good to be true

I've recently started buying clothes online. There's so much choice, and I can find really cheap deals. Just recently, my best friend found a website that offers amazing bargains: Almost 50% cheaper than anywhere else. They even promise a 100-day return guarantee.

Since my friend said she was really satisfied, I decided to give it a try. I created an account on the site and ordered five items. Now I'm waiting for the package to arrive.

Yesterday, I received an email from the store saying there was a problem with my order and that I needed to confirm my details. The email included a link that said "Click here to access your order." I clicked the link, filled in my username and password, and confirmed everything as requested.

But now my email is acting strange. Even worse, my parents just got a notification from their bank that a 500 EUR charge was made to their account. They want to talk to me immediately.

What happened? I'm really confused and scared. I think I made a huge mistake, and I'm too embarrassed to tell anyone because I feel so stupid.

What should I do?

PART 2

THE INTERNET SAFETY CASES

Story 4: Tasks

Wonder trigger	Tasks
Discuss	Who is involved in this situation? Who is the victim? Who is the bully? Who are the witnesses? What do we need to do? Consider everyone involved: The friend, the shopper, the bank, and the parents. Give 5 to 10 suggestions for action. What can we do during the incident, after it has happened, and to prevent such actions in the future? What actions should we take on the Internet both when it happens and after it happens? How should we respond to scams, deception, and fraudulent content on the internet?
Script and roleplay	Prepare a short script of how you would talk to this person if he or she were your son, daughter, niece, or nephew after the incident happened. Then role-play the script in your class.
Follow-up	Create a Facebook post with your suggestions for safe and responsible use of the Internet, focusing on how to recognize and avoid scams, fraudulent content, and phishing. Go to https://www.wordclouds.com and create your own Word Cloud using the most important words you want to remember. Share all graphics in Padlet or Wakelet.

PART 2

WONDER TRIGGER QUIZ CHALLENGES

Learning by doing the exercise	In this exercise, teachers explore how to design wonder-driven challenges for their students using technology.
Questions	In the following pages, you will find sets of questions. Students are allowed to use any form of technology to find the answers and to present their results.
Tasks	Form groups of 4 to 6 participants. Open any document of your choice on your computer, tablet, or mobile phone. Use it to save the tasks in any format you prefer. Share your work with the rest of the group on Padlet or Wakelet.

PART 2

FAKE NEWS CHALLENGE

Learning by doing the exercise	In this simulation, teachers explore how to bring wonder into lessons about misinformation. After these activities, students will be able to spot, understand, and push back against common tricks used to spread false information online.
Task 1	Work individually to play the game and familiarize yourself with how to become a "fake news expert." https://www.getbadnews.com/en
Task 2	In pairs or groups, complete the Break That News assignment. Think of a fake story you would like to "break" to the world, to mislead and lie about. Use https://breakyourownnews.com/ to generate the graphic (with the title and subtitle) to promote the story. Create and write a social media plan and include the following: • WHERE would you promote your fake story? • HOW would you promote it? • WHO would be your target audience? • HOW LONG would the campaign last? Share your work on Padlet and Wakelet.

PART 2

WONDER TRIGGER QUIZ CHALLENGES

Instructions: Group 1

Take your devices and use the internet to find the answers to the questions below.

Prepare and open a document of your choice on your computer, tablet, or mobile phone. Use it to record the tasks below in any format you prefer.

Questions	
1	How old is the Internet?
2	Find and screenshot three education-related websites that use the https:// protocol.
3	What is Reddit and who is its founder?
4	What do LOL, SHTF, and TL;DR mean?
5	What does “#OscarsSoWhite” mean?
6	How many annual users did Pinterest have in 2023?
7	How do you say "Have a safe trip" in German?
8	Can you sign in to Kahoot using your social media accounts?
9	Find an Instagram account with more than 1 million followers. Copy the link. Does this user have a website or any other social media channels?
10	Who is Khaby Lame? Share five facts about him.

PART 2

COGNITIVE BIAS AND EMOTIONS

Learning by doing the exercise	With this exercise students will be able to recognize and analyze real-life examples of bias in online content.
Tasks	See the next page on cognitive biases. Find five or more examples of bias on the Internet. Copy the sources or links, or write a short summary of what you have seen or encountered. Share your work in Padlet or Wakelet. Make it visually and content-appealing. You can use tools like Canva, Genially, or any other creative platform you prefer.

PART 2

COGNITIVE BIAS AND EMOTIONS

12 cognitive biases that influence your happiness

Description	Examples
FOMO (Fear of Missing Out): The fear that others are having rewarding experiences without you.	You scroll through social media and feel unhappy because your friends are at a party you didn't attend.
Anchoring: Relying too heavily on the first piece of information when making decisions.	A shop shows a jacket at €200, then "discounts" it to €120. You buy it, thinking it's a good deal, even though the jacket may only be worth €80.
Curse of knowledge: Assuming others know as much as you do, leading to miscommunication.	A math teacher skips steps while explaining a problem, forgetting that beginners don't know the shortcuts.
Hindsight bias: Believing you could have predicted an outcome after it has already happened.	After a football team wins, you say, "I knew they would win all along," even though you were unsure before the match.
Pessimism bias: Overestimating the likelihood of negative outcomes.	You don't apply for a job because you assume you will be rejected, even though you're qualified.
Dunning-Kruger effect: Overestimating your abilities when you lack knowledge or skill.	A beginner chess player believes they can beat experienced players after only a few games.
Negativity bias: Paying more attention to negative experiences than positive ones.	You receive ten compliments and one criticism, but you only remember the criticism.
Confirmation bias: Favoring information that supports your existing beliefs.	If you believe a certain diet works, you only read articles that support it and ignore ones that question it.
Optimism bias: Believing you are less likely than others to experience negative events.	You text while driving because you think accidents happen to others, not to you.

PART 2

WONDER SEARCH CHALLENGE

Learning by doing the exercise

With this exercise student practice skills and knowledge of using mobile phones to find, collect, and use information online.

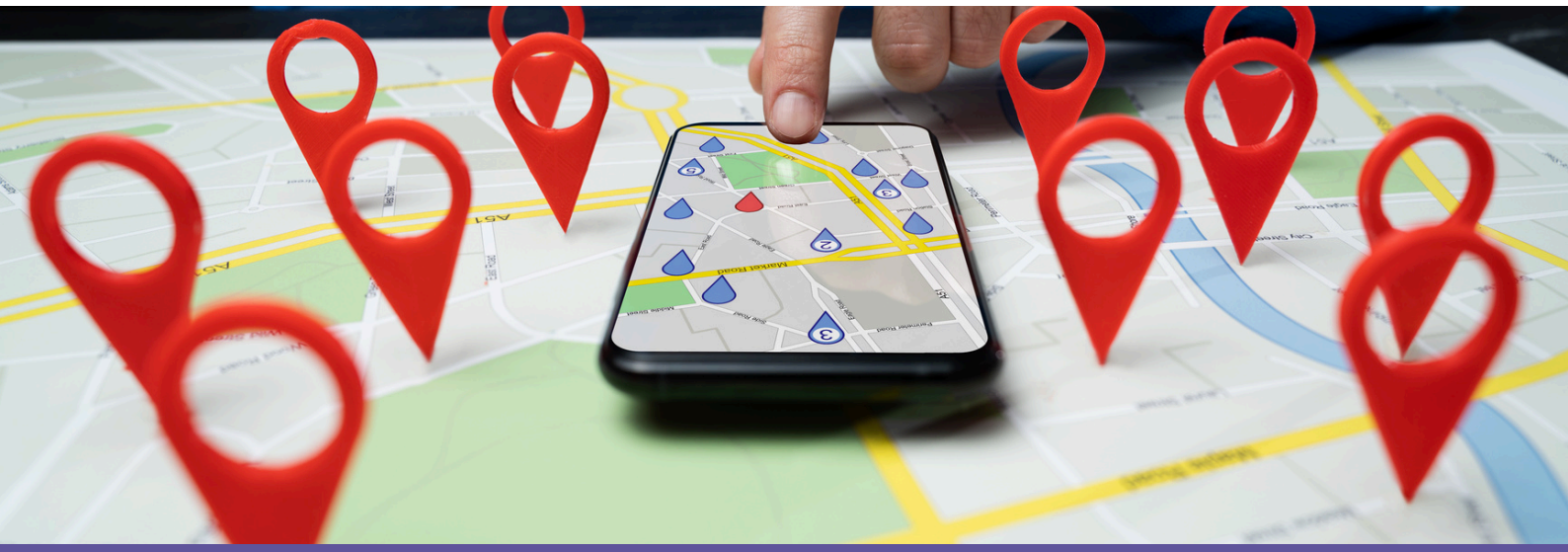
Tasks

Scan the QR code.

You must collect and search for the information needed to answer questions 1–12 using only the website provided.

Record your answers on your phone and share them with the class on Padlet. You may use any presentation format you prefer.

Make sure the Padlet app is installed on your phone before starting.



PART 2

WONDER SEARCH CHALLENGE

QR code

Questions

1	Where does the QR code take you? Which page do you land on? Does the site use cookies?
2	What are the nine types of information available on the homepage?
3	Does the site offer a live chat option?
4	Into how many languages can the site be translated?
5	What does “SDG” stand for and how many goals are there in total?
6	Which SDG is represented by the number 6 and what is it about?
7	Find and list at least three topics included under Goal 5: Gender Equality.
8	Which UN body is primarily responsible for monitoring progress of the SDGs?
9	Does the site include multimedia resources (videos, infographics)? If yes, name one.
10	Is there a youth-specific page or section? If so, what is its title or one activity listed there?
11	Zero hunger goal: If the global population is estimated at 8 billion, what percentage of the world population is currently undernourished?
12	Click on SDG 13. What is one of the targets listed under this goal?

PART 2

WONDER SEARCH CHALLENGE

Follow-up: Designing your own wonder search challenge

Create your own Wonder Search Challenge in which students practice using their mobile phones to collect and present data.

Choose one topic from any of the following areas: STEM, language learning, art, sustainability education, social studies, or SEN.

Write up to 16 open-ended, surprising, or data-based questions that require students to search for answers using their mobile phones.

Create a QR code for the target web platform.

The instructions for students can stay the same as in the previous case you experienced.

Follow-up reflection for students: “What surprised you the most?”, “How did using your phone change your thinking?”

PLACE FOR YOUR THOUGHTS

PART 2

WONDER ACTIONBOUND

Learning by doing exercise	Actionbound is an app for playing digitally interactive scavenger hunts to lead the learner on a path of discovery.
Tasks	Download the Actionbound app. Scan the QR code in class or click the provided link. Enter your details, such as your name or nickname. We will begin the scavenger hunt and clue search when we leave the training room. Answer the assignments: Take a photo, write a note, record your voice or a video, and share it on Padlet or Wakelet.

PART 2

WONDER ACTIONBOUND

QR code

Provide the QR code or link here.

Assignments

1	Find something yellow.
2	Find something green.
3	Find something square.
4	Find something modern.
5	Find something ancient or old.
6	Find something tall or big.
7	Find something short or small.
8	Find something that seems unfamiliar or foreign.
9	Find something that feels familiar or you've seen or experienced before.

PART 2

WONDER ACTIONBOUND

Here are some examples of how teachers use Actionbound to inspire you to create your own digital scavenger hunt in your teaching practice.

The examples cover the topic areas: STEM, sustainability education, language learning, art, social studies, and SEN.

Topic	Use example	Outcome
Art	Art museum gamification: Students explore a museum using Actionbound to answer questions about selected artworks, complete drawing tasks, and share opinions via audio clips.	More thoughtful engagement and higher participation.
Art	Everyday art hunt: A quest guide students to find examples of patterns, symmetry, colors, or textures in their environment. They then upload images, complete short reflections, and connect elements to artistic concepts (e.g., balance, contrast).	To see art in the everyday world and apply abstract concepts in real time.
Social studies	Local history walking tour: Students follow a GPS-guided route using Actionbound to visit historical landmarks, memorials, or cultural sites. At each location, they complete tasks such as answering questions, taking photos, listening to oral histories, or mapping the significance of the site.	Brought textbook content to life.
STEM	Students explore their school grounds with Actionbound tasks like: identify plant types, measure temperatures, find signs of erosion or insects, and take photos. They answer quiz questions or upload short reflections at each location.	Observation, hypothesis-building, and real-world scientific thinking.
STEM	Math quest challenge: Students complete a scavenger hunt with QR codes placed in different locations. At each stop, they solve applied math problems: measure the angle of a ramp, estimate the height of a tree, calculate surface area of classroom items, or count geometric shapes.	Transformed abstract math into movement-based, visual problem-solving.

PART 2

WONDER ACTIONBOUND

Topic	Use example	Outcome
Sustainability education	Eco-detectives: Students explore different parts of the school (classrooms, cafeteria, restrooms, playground) using Actionbound to investigate energy use, waste practices, and water consumption. At each stop, they answer quiz questions, take photos, and give sustainability ratings.	Students critically assess their own environment.
Sustainability education	Water footprint trail: Students explore the hidden water costs of everyday products (e.g. jeans, burgers, smartphones) through video prompts and fact-based quiz tasks. At the end, they calculate their personal water footprint and reflect on changes they could make.	Raised awareness of resource consumption.
Social studies	Students take on roles such as mayor, citizen, activist, or journalist and move through simulated scenarios in the Bound. They engage with dilemmas like the construction of a new shopping mall: Voting, justifying their views, and considering diverse perspectives. In another task, they debate whether to reduce car traffic or increase parking.	Promotes empathy, critical thinking, and civic responsibility.
Language learning	Interactive tale in target language: Students follow an original narrative Bound (e.g. a mystery or travel story), solving language puzzles at each stage: matching phrases, filling gaps, recording short responses, or ordering story events.	Narrative understanding, grammar in context, and active language production.
SEN	Adaptations for SEN: Use visuals to guide steps rather than heavy text. Offer flexible output options (e.g., voice, video, photo, drawing). Scaffold tasks with routine-based instructions.	

PART 2

ACTIONBOUND EXAMPLE

Storyline introduction: You are part of the youth climate council of the year 2040. Earth has faced decades of damage, but there is still hope. Your mission is to travel back to 2025 and investigate how schools, families, and cities can take action. At each stop, you'll uncover clues, solve puzzles, and make choices that shape the planet's future.

01

THE ENERGY CHOICE

Task: Scan a QR code near the school's heating system or light switch.
Question: Which type of energy does your school use? Fossil fuels or renewables?
Mini-challenge: Take a photo of one energy-saving tip in your classroom.

02

THE FOOD RIDDLE

Question: What food product has the highest carbon footprint: beef, rice, or potatoes?
Media task: Watch a 30-sec embedded video on sustainable diets.
Reflection prompt: Type one thing your family could do to reduce food waste.

03

THE PLASTIC TRACKER

Location clue: "Go where most plastic is thrown away at school."
Task: Count visible plastic items in the bin. Record the number.
Decision task: Choose: Ban plastic bottles at school or install more recycling bins? Justify your choice.

PART 2

ACTIONBOUND EXAMPLE

04

NATURE CONNECTION

Outdoor task: Find a living thing (plant, insect, etc.) near you and take a picture.
Reflection: Why do we often overlook nature in everyday spaces?

05

GREEN TRANSPORT TRACKER

Survey task: Ask three classmates how they get to school each day.
Calculation: Estimate how much CO_2 could be saved if half your class walked or biked instead.

06

WATER WATCH

Location clue: Go to a sink, fountain, or water-related area in your school.
Observation task: Time how long it takes to fill a 500ml bottle.
Question: Estimate how much water a student uses per day at school (washing hands, drinking, etc.).
Challenge: Take a photo of any leak, dripping tap, or water-saving feature.
Reflection: Why is water conservation important even in places where water is abundant?

PART 2

DESIGNING WONDER ACTIONBOUNDS

Guidelines

In designing for wonder, it's important to engage emotion, spark curiosity, encourage student engagement, connect to real life, vary sensory input, and create space for reflection. The guidelines help teachers keep these principles in mind when designing Actionbounds.

Tips for using the **free version** of the app efficiently

Run the Bound in small groups of 3–5 students (only one login per group needed).

Use offline mode by preloading the Bound onto devices if Internet access is unstable.

After the Bound, debrief as a class and have students share photos, results, or reflections on Padlet or Wakelet.

PART 2

DESIGNING WONDER ACTIONBOUNDS

Keep in mind to design each stop in the Bound so it ties back to a bigger learning goal from your curriculum. Without this connection, the Actionbound risks becoming just entertainment.

01

START WITH A STORY OR MISSION

Create a narrative or challenge that places students in an active role (e.g., eco-detective, time traveler, young inventor). Stories engage emotions and spark curiosity.

02

USE REAL-WORLD CONTEXTS

Tie tasks to students' surroundings: Schoolyard, classroom, neighborhood, museum. This helps them connect learning to lived experience and rediscover the familiar with new eyes.

03

DESIGN WITH EMOTION AND SURPRISE

Include unexpected questions, hidden clues, or videos that trigger awe, empathy, or surprise. For example, a shocking statistic on water usage or a visual of plastic waste.

04

EXPLORE THROUGH SENSES

Incorporate tasks that require students to observe, photograph, draw, record audio, or video. Use prompts like "find something unusual," "listen carefully," or "spot a detail others miss."

PART 2

DESIGNING WONDER ACTIONBOUNDS

05

INTEGRATE REFLECTION AND CHOICE

Include open-ended questions, dilemmas, or short reflections that ask students to justify choices, share opinions, or imagine alternatives. Use platforms like Padlet or Wakelet for sharing.

06

CLARITY

Keep instructions clear and age-appropriate. Use visuals or voice prompts for younger learners or those with special needs. Offer flexible response formats (text, photo, audio).

07

MULTIMEDIA AND INTERACTIVITY

Embed videos, audio clips, mini-quizes (via Google Forms or Kahoot), and GPS navigation to increase engagement. Let students unlock content step-by-step like a digital mystery.

08

SHARING AS PART OF THE EXPERIENCE

Encourage students to share findings or creations (e.g., artwork, recordings) on Flipgrid, Wakelet, or a Padlet.

09

DEBRIEF WITH WONDER

After completing the Bound, hold a discussion or digital circle (using Mentimeter or Flipgrid) to reflect: What surprised them? What did they notice? What questions remain?

PART 2

ACTIONBOUND DESIGN TOOLKIT

Use this tool to select and combine elements for each Bound you create. Choose elements from each category to structure an engaging, balanced learning experience. This tool serves purely as inspiration. Feel free to design in any way you like. You don't need to follow it systematically.

Task types

- ◻ Observation (find, describe it)
- ◻ Calculation (estimate, measure)
- ◻ Matching or identification
- ◻ Ranking or rating (scale or emoji)
- ◻ Survey (ask peers or community)
- ◻ Decision-making (choose & justify)
- ◻ Create something (poster, slogan)
- ◻ Map or route challenge
- ◻ Interview or group response
- ◻ Short quiz or multiple choice

Input elements

- ◻ Video clip (embedded or linked)
- ◻ Audio clip (recordings, interviews)
- ◻ QR code
- ◻ Image (e.g. artwork, graph, prompt)
- ◻ Text story or scenario
- ◻ Slideshow or infographic
- ◻ Webpage or linked document
- ◻ Puzzle or riddle
- ◻ Character role brief (mayor, actor)

Student output

- ◻ Photo upload
- ◻ Voice recording (reflection, slogan)
- ◻ Video
- ◻ Typed response
- ◻ Emoji rating / scale
- ◻ Choice selection (vote or justify)
- ◻ Sketch or drawing (paper or digital)
- ◻ GPS location check-in
- ◻ Interactive quiz result
- ◻ Group selfie

Engagement hooks

- ◻ Mystery storyline or role-play
- ◻ Countdown timer or time challenge
- ◻ Collect points or “badges”
- ◻ Map-based journey with stops
- ◻ Real-world link (school, park, museum)
- ◻ Humor or surprise element
- ◻ Allow flexible response (voice or text)
- ◻ Avoid text-heavy pages or long videos

PART 2

STATION WORK

GOALS

The goal of the station work is to:

- use our body and movement to move around
- use devices to search for information
- learn and practice how to search for reliable and trustworthy information and sources
- revise some of the materials or topics we've already introduced in this handbook
- have fun, collaborate and try something new

INSTRUCTIONS

Print out the stations (9 sheets of paper) and stick them on the classroom walls. Explain the process and rules (including timing) to the participants. Create groups of at least 2 and no more than 6 people. The final results of their work should be shared on Padlet or Wakelet (or whichever tool you are using in your training).

There are 9 stations around the room.

1. At each station, find the question and complete the task.
2. When the bell rings, rotate to the next station. Move around the classroom in a clockwise direction.
3. Save or record your work on your phone so you can use it later. You may use any method of gathering information; the most important thing is to apply the 5Cs in your group to collect all the information needed.
4. The tasks are timed, so you will have only a limited amount of time. Be sure to follow the teacher's instructions.

PART 2

STATION WORK

STATION 1

How many kilometres is it from city A to city B by car?

How many miles is that?

If we travel from city A to city B by car at a cost of €0.43 per kilometre, how much would the trip cost?

If we travel by train or bus, how long does the journey take?

How much does a train or bus ticket cost?

Please explain how you sourced this information and provide a list of references.

NOTES:

PART 2

STATION WORK

STATION 2

Write 15 facts about the city where the training takes place (or any city of your choice).

Explain how you sourced this information and provide a list of references.

NOTES:

PART 2

STATION WORK

STATION 3

Find a student in your class who has a different nationality than you, and take a selfie together (make sure to ask for permission first!).

Write 10 facts about their country or culture.

NOTES:

PART 2

STATION WORK

STATION 4

Name 10 examples of online harassment and bullying.

Explain how to address and prevent online harassment and bullying.

Describe how you sourced this information and provide your references.

NOTES:

PART 2

STATION WORK

STATION 5

What is the 10-day weather forecast for the following cities:

- New Delhi,
- Vienna,
- Tokyo,
- Sydney,
- Singapore,
- Athens,
- Dublin, and
- Oslo?

Take a screenshot of the website or app where you found this information.

NOTES:

PART 2

STATION WORK

STATION 6

What is “Land der Berge, Land am Strome”?

Who is the author of the music and the lyrics?

Share the national anthem of one of the members of your group and write a short summary of it.

NOTES:

PART 2

STATION WORK

STATION 7

Search for 10 examples of sexism and list them.

Associate each example with values or prejudices. List the sources you used.

NOTES:

PART 2

STATION WORK

STATION 8

The clock in Vienna shows 9 a.m. CET. What time is it in:

- New Delhi (India),
- New York (USA),
- Auckland (New Zealand),
- Sofia (Bulgaria),
- Dublin (Ireland),
- Manchester (UK),
- Manila (Philippines), and
- Tallinn (Estonia)?

Please provide the time zones of these countries, the time difference compared to Vienna, and their currencies.

Also, state which tool you used to calculate this information.

NOTES:

PART 2

STATION WORK

STATION 9

When you visit Vienna, you must try the Sachertorte.

What is it, and what are its origins?

Find a recipe for it and write down the ingredients.

Explain how you sourced this information and provide your references.

NOTES:

PART 2

AFTER THE STATION WORK

INDIVIDUAL WORK

From all the data you gathered during the station work, use the information from Station 2: Write 15 facts about the city you chose in your training, to create an **infographic** with these facts. Make it visually appealing and useful, like a leaflet for someone who wants to learn more about the city before their next visit.

Remember, the purpose of an infographic is to present facts and numbers visually and clearly so that people can remember them quickly.

Post your infographic in Padlet or Wakelet.

NOTES:

PART 2

STATION WORK

Here are some other possible examples of station tasks you can use.

AGEISM

Search for five examples of ageism and list them. Associate each example with the values or prejudices behind it. Provide the sources you used.

RACISM

Aaron does not believe himself to be racist and sincerely states that he has nothing against people of color. However, he tends to avoid them. This is an example of ___ racism:
a) Distancing
b) Explicit
c) Non-discriminatory
d) Benevolent
e) Aversive

Sasha's parents were denied good opportunities for housing, education, and work because they were Black/Asian/Roma/Albanian. As a result, they had a lower economic status and were not able to save much money for Sasha's education. This is an example of:
a) Intersectionality
b) Stereotyping
c) Systemic Racism
d) Snowball Racism

Find the correct answer. Explain how you sourced this information and provide a list of references.

PART 2

WONDER LEARNING GPT

Wonder Learning GPT is a **digital teaching assistant**, created within ChatGPT, that helps teachers design lessons inspired by the wonder approach.

You can speak to the tool in plain language. No technical skills are needed. You simply type your question or upload a lesson plan, and it will give you ready-to-use ideas, activities, and resources.

It can suggest classroom activities that spark awe, surprise, and focus, while also recommending simple digital tools that enrich learning rather than distract from it. The tool also supports inclusion by helping adapt lessons for different learners, including students with special educational needs.

Think of it as a colleague who is always available to support you in your planning.

Access the Wonder Learning GPT

Open the web link:
https://chatgpt.com/g/g-67694e3cb51c8191b94599ee834c28d8-wonder-learning

No installation is needed. You only need an internet connection and a browser.

PART 2

WONDER LEARNING GPT

What you can ask this GPT to do.

01

REDESIGN LESSON PLAN

Upload an existing lesson plan and ask:
“Please adapt this lesson plan to the Wonder Learning approach.”

02

CREATE NEW LESSONS

Ask:
“Design a Wonder Learning lesson on fractions for 10-year-olds with digital tools.”

03

ADD DIGITAL TOOLS

Ask:
“Suggest digital tools that add depth (not distraction) to this art lesson.”

04

SUPPORT DIFFERENTIATION

Ask:
“How can I adapt this lesson for SEN learners using the wonder approach?”

05

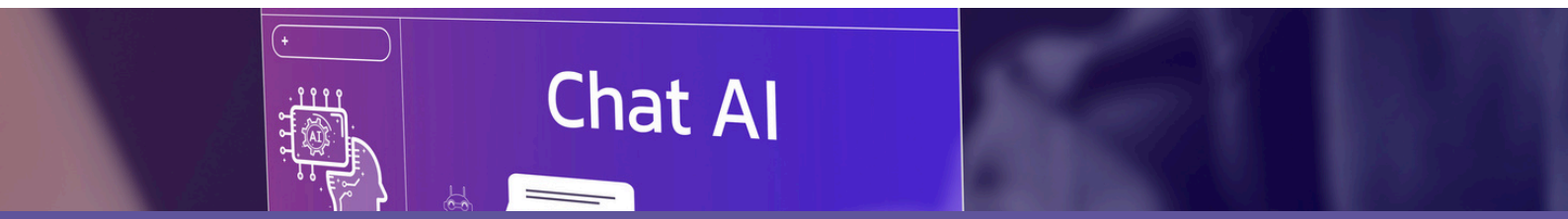
ENRICH REFLECTION

Ask:
“Give me reflective questions that spark curiosity at the end of a science class.”

PART 2

WONDER LEARNING GPT

Tips for wonder-aligned use	Ask yourself: Does this tool or idea add mystery, beauty, or focus or just noise? Use GPT to simplify rather than overload, helping to strip lessons down to what really matters. Balance digital elements with silence and reflection, for example after a Mentimeter word cloud allow a one minute silent pause before moving into group sharing.
Example prompts	Turn this traditional history lesson into a wonder learning experience with mystery and silence. Give me 3 open-ended questions to trigger curiosity in a lesson on ecosystems. How can I use Padlet in a way that supports wonder, not overstimulation? Adapt this math lesson for SEN learners, keeping beauty and inner motivation in mind.



PART 3

WHERE TECHNOLOGY AND WONDER WORK HAND IN HAND

DIGITALLY EMPOWERED WONDER LEARNING LESSON PLANS

This chapter presents a collection of digitally empowered wonder learning lesson plans designed to help teachers bring curiosity, emotion, and creativity into their classrooms. Each lesson connects learning goals with meaningful use of technology. The examples span different subjects and focus on students aged 9–15.

PART 3

WONDER AND LESSON PLANNING

When planning lessons, we need to be mindful of the broader concept of inquiry-based learning and intentionally integrate elements of wonder. This integration is important because it nurtures curiosity, motivates learners to explore, and encourages deeper engagement with the learning process. Here is an example of how a teacher can think when integrating wonder into a broader inquiry-based framework.

1 - Anticipation: Start with something that sparks curiosity: a question, image, short story, or real-life problem. This is a moment to invite students in, stir their interest, and create a sense of mystery or surprise. Let them share what they already know or are wondering about. Think of this as lighting the spark that will guide the whole lesson.

2 - Encounter: Let students explore the topic in a meaningful way. This might be through a story, hands-on activity, artwork, or a short walk outside. Keep it simple. The goal is to let them observe, feel, and connect. Let their own questions emerge naturally.

3 - Investigation: Let students explore the questions that came up. They might research, experiment, create something, or work together to find answers. This is where they take the lead and make learning their own.

4 - Discovery: This is when students start to understand something new. It might be a quiet insight or a big "aha!" moment. Give them space to reflect, talk about what they've learned, or present it in their own way.

5 - Propagation: Now it's time for students to express what they've learned. They might present, build, write, act it out, or simply have a conversation.

PART 3

WONDER AND LESSON PLANNING

WONDER IS NOT LINEAR

The phases may overlap or repeat. A single lesson might cycle between Encounter and Investigation multiple times. What helps you stay flexible?

INQUIRY AND WONDER

Inquiry without wonder can become mechanical. Wonder without inquiry can stay on the surface. Where in your unit do students feel something about what they're learning? How do you help students not just ask questions, but care about the answers?

PART 3

WL LESSON PLAN 1: ART

Expressing emotions through colors

This lesson invites students to explore and express their emotions through color and form, combining the wonder approach with meaningful digital tools to deepen self-awareness, creativity, and connection.

Theme: Art and creativity
Age group: 9–15
Duration: 60 minutes
Setting: Calm, inspiring space – classroom, art room, or outdoor setting

Wonder element	Present in lesson
Beauty	Emotional artworks, visual silence, classical painting
Mystery	Emotion cards, delayed reveal
Silence and focus	Silent viewing, mindful creation time
Inner motivation	Student-led choice of emotion + expression

Learning objectives	Materials needed
• Experience beauty and emotion through color and form • Cultivate self-awareness by expressing feelings visually • Reflect on emotional expression as a universal human experience • Use digital tools to explore, and share emotional expression	• Art paper or textured materials (e.g., cardboard, canvas cloth) • Natural materials (e.g., leaves, petals, sand) • Colors: Pencils, crayons, watercolors, pastels • Emotion cards with abstract visuals • Optional: Calm instrumental music • Optional digital tools: Mentimeter, Google Slides, Canva, Adobe Express, Padlet, Google Sites, Seesaw, Chrome Music Lab, WeVideo, StoryboardThat, TwinSpace (eTwinning)

Step-by-step lesson plan	
Step 1: Wonder trigger, anticipation 10 min	Begin with a digital projection of a powerful, emotional artwork such as Starry Night. Have students observe it silently for one minute, then invite them to reflect on the following prompts: • What do you feel? • What is this painting not saying? • If this color could speak, what would it say? Ask students to share one emotion or word that comes to mind by posting anonymously on a shared Padlet or Mentimeter board.
Step 2: Creative invitation, encounter and investigation 5 min	Display digital "Emotion Cards" featuring abstract, wordless visuals on an interactive whiteboard or digital platform. Ask students to select the image that best represents how they feel using a collaborative tool such as Google Jamboard, Canva, or Padlet. Once everyone has made a choice, reveal the actual emotion names. Introduce the creative challenge: "You will create an emotional landscape using only color, texture, and shape — no words or symbols."
Step 3: Personal creation time, investigation 25 min	Students create their emotional artwork using digital drawing tools such as Canva, Sketchbook, or Adobe Fresco. The teacher serves as a curator of wonder, guiding reflection through gentle, open-ended questions: • Where do you feel this emotion in your body? • Is this feeling heavy or light? • How does your color move on the screen? Encourage students to experiment with digital brushes, layers, and blending modes to explore texture and depth.
Step 4: Gallery walk and reflection, discovery and propagation 15 min	Begin with a silent viewing, then move into group reflection: • What surprised you? • Did someone's work express something you also feel? Emphasize moments of unexpected discovery and emotional connection.
Step 5: Propagation 5 min	Students upload their artworks to a shared Padlet, Wakelet, or Miro board to form a collective digital gallery. All artworks and reflections are then curated into a final digital exhibition using Wakelet, Google Sites, or Canva.

Ongoing learning	
Assessment and feedback	Teacher observes: focus, emotion, attentiveness. Peer-to-peer feelings-based feedback (verbal or audio-recorded). Self-reflection: “What did I learn about myself through this emotion?” Optional digital tools: Digital portfolio (Google Sites, Seesaw) with: • Photo of artwork • Audio or written reflection • Digital remix: Adding new layers, textures, filters, animating, combining with sound, video, or text
Differentiation	Younger students: Simpler emotion cards, more teacher support. Older students: Use metaphor (“What season is your emotion?”), or create abstract digital animations with Chrome Music Lab or WeVideo. SEN support: Provide multimodal tools, incorporate touch or scent, and allow freedom to use either digital or traditional mediums.
Real-life connection	colors are present in every aspect of daily life through nature, art, fashion, digital media, and even emojis. They shape how we feel and help us communicate emotions without using words. By exploring emotions through color and texture, students link the creative process to the ways they already express and perceive feelings in everyday experiences, such as choosing clothing colors, reacting to digital images, or sensing the mood of a space.
Extension options	Emotion mural: Physical or digital mural combining all artworks. Audio diary: Students narrate their creative process. Literary link: Write a poem or metaphor describing their emotional color piece. Digital remix: Convert artwork into a short animation using Canva or StoryboardThat. Partner school: Upload class artworks to TwinSpace (eTwinning) or a shared Padlet with a partner school. Students exchange wonder-based reflections across cultures.

PART 3

WL LESSON PLAN 2: ICT

Problem-solving with Micro:bit

This lesson invites students to discover how simple programming can solve real-world problems. Using the micro:bit, students will design interactive solutions that connect technology with art, language, science, and music.

Theme: ICT and interdisciplinary problem-solving
Age group: 10–14
Duration: 60–75 minutes
Setting: ICT classroom or makerspace

Wonder element	Present in lesson
Beauty	Simplicity of code, creative animations, and digital storytelling
Mystery	Hidden functions of micro:bit revealed step by step
Silence and focus	Quiet observation of how code comes alive
Inner motivation	Student choice of problem or task

Learning objectives

- Experience the beauty of programming as a creative tool, not only a technical skill
- Cultivate curiosity and problem-solving by applying coding to real-life, cross-curricular challenges
- Develop self-confidence and motivation through student-led project choices
- Use digital tools to create, test, and share solutions authentically

Materials needed

- Computers/tablets with internet access
- Micro:bit devices or online simulator in MakeCode
- Projector/interactive board for demos
- Pre-prepared interdisciplinary prompts (traffic/police, science quiz, English Q&A, music notes)
- Optional: Padlet or Mentimeter for digital reflection and sharing
- Optional: Headphones for groups working with music

Step-by-step lesson plan	
Step 1: Wonder trigger, anticipation 10 min	Show a short demo: A micro:bit displaying a mysterious moving animation (heart beating, traffic police arm signals, or notes playing). Ask: • "What problem do you think this program is solving?" • "What else could this tiny device do?" Allow silent observation before sharing guesses.
Step 2: Creative invitation, encounter and investigation 5 min	Present the challenge: "You will use the micro:bit to design a small program that solves a real-life problem or connects to another subject." Students choose from interdisciplinary topics: • Traffic and safety: Program a micro:bit animation of a traffic officer giving hand signals • Science: Create a micro:bit quiz about animals, where tilting the device shows different answers • Language: Write simple English questions or statements (e.g., about health or emotions) that appear on the micro:bit • Music: Program the micro:bit to play a simple melody
Step 3: Personal or group creation, investigation and discovery 25 min	In groups, students code their chosen project in MakeCode online editor. Ask: • "What mystery is hidden in your code?" • "What would happen if you changed this one block?" • "How could this program make learning in another subject easier or more fun?"
Step 4: Demo, propagation 10 min	Select a few programs, project them without saying who made them. Students guess: "Which subject could this belong to? What problem is it solving?"
Step 5: Wrap-up 5 min	Quick self-checkout: Students answer on Mentimeter or aloud: • "One word for how you feel now" • "One thing you'd like your micro:bit to do next time"

Ongoing learning	
Assessment and feedback	Observation of the problem-solving process, not just final program. Peer-to-peer positive feedback on creativity. Self-reflection: “What did I learn about coding and problem-solving today?” Digital portfolio option (Google Sites/Seesaw): upload code screenshot + audio reflection.
Differentiation	Beginners: Use pre-prepared code blocks to modify. Advanced: Add extra layers (e.g., random generators, multi-step animations). SEN support: Visual block-based coding, two students working together, step-by-step scaffolding.
Real-life connection	Micro:bits are real-world tools. They can simulate traffic lights, quiz games, thermometers, or even compose music. Students connect coding to daily life by creating small digital solutions that solve practical or creative problems.
Extension options	Cross-curricular showcase: Present micro:bit projects in science, language, or music classes. Advanced challenge: Design a simple “digital assistant” program combining input, sound, and display.

PART 3

WL LESSON PLAN 3: MEDIA LITERACY

GILLETTE: The best men can be – How media shapes beliefs and behaviors

This lesson invites students to critically explore how media and advertising influence our views, values, and actions. Using the Gillette ad, students will identify prejudice, stereotypes, and generalized beliefs, and reflect on their own interpretations.

Theme: Media literacy, identity, critical thinking, digital influence
Age group: 13+
Duration: 1–3 sessions (flexible blocks of 45 min)
Setting: Classroom with projector or screen, individual and group workspaces

Wonder element	Present in lesson
Beauty	Exploring truth, goodness, and representation in media
Mystery	Unpacking messages, asking open-ended questions
Silence and focus	Space for observation, emotional reactions, reflection
Inner motivation	Students construct personal meaning and creative responses

Learning objectives

- Understand and distinguish between stereotypes, prejudices, and generalized beliefs
- Recognize how media content can manipulate or reinforce social attitudes
- Develop media literacy skills through inquiry and critical reflection
- Express personal understanding of identity and values through storytelling or visual media

Materials needed

- Sticky notes with words (stereotype, prejudice, sexism, value, etc.)
- Projector or screen
- Gillette “The Best Men Can Be” ad (YouTube)
- Printed generalisation statements
- Paper, markers, or digital design tools for creative response
- Optional: alternative advertisements for contrast

Step-by-step lesson plan	
Step 1: Vocabulary and warm-up, anticipation	Distribute sticky notes with key concepts: stereotype, prejudice, gender, value, opinion, etc. In pairs or small groups, students define and provide real-life examples. Share and clarify meanings as a class.
Step 2: Exploring beliefs, encounter	Present written generalisation statements (e.g. “Boys don’t cry”, “All politicians are corrupt”). Students classify as S (stereotype), P (prejudice), or G (generalised belief). Open discussion: • What emotions are triggered? • Are these views rational or emotional?
Step 3: Viewing the first ad, investigation and discovery	Show the Gillette ad 1989: “The Best A Men Can Get”. Before viewing: • What do you expect? After viewing: • What is the story? • What stands out? • What roles do men and women play? • What message is the brand trying to deliver?
Step 4: Viewing the second ad, investigation and discovery	Show the Gillette ad 2019: “The Best Men Can Be”. Before viewing: • What do you expect? After viewing: • What is the story? • What stands out? • What roles do men and women play? • What message is the brand trying to deliver?
Step 5: Media reflection, discovery and propagation	Group inquiry: • What roles and values are portrayed? • What stereotypes are challenged or reinforced? • Is this message beautiful? True? Manipulative? Optional: Compare to other ads (Axe, Dove, etc.)
Step 6: Creative response, propagation	Students design a media message (ad/poster/storyboard) that reflects a truthful and beautiful portrayal of gender, identity, or values. Formats: Drawing, slogan, mini video idea, visual storytelling.

Ongoing learning	
Follow-up activity	Ask the students to read the story: History's Biggest Scapegoat. Then, discuss how prejudice can harm others and impact individuals, groups, minorities, and everyday life.
Assessment and feedback	Observation during discussions and group work. Self-reflection journal prompt: “What surprised me today?” Evaluation of creative project based on clarity, emotional depth, and originality.
Differentiation	Visual, verbal, and written formats offered. Emotional check-ins for sensitive topics. Scaffolded examples and peer support for analysing ads.
Real-life connection	Students reflect on messages they encounter daily on social media, YouTube, and TV. Discussion connects abstract terms (e.g., stereotype) to lived experience.
Extension options	Students create their own short video ad. Invite a local media creator or psychologist to speak about media influence. Connect with social studies or ethics curriculum: identity, power, responsibility.

PART 3

WL LESSON PLAN 4: ENGLISH LESSON

The way it's done: Expressing rules and obligations

This English lesson invites students to explore how language expresses rules and responsibilities in real life. Through engaging videos, dialogues, and collaborative activities, students will discover how to use modal verbs ("have to," "don't have to," and "mustn't").

Theme: Grammatical structures (have to, don't have to, mustn't)
Age group: 13 years old
Duration: 40 minutes
Setting: Classroom

Wonder element	Present in lesson
Beauty	Structure revealed through well-crafted examples; classroom respect encouraged
Mystery	Why are rules different in other countries?
Silence and focus	KWL chart encourages personal thinking time before discussion
Inner motivation	Self-assessment and peer collaboration promote autonomy and engagement

Learning objectives	Materials needed
• Understand and correctly use "have to," "don't have to," and "mustn't" • Express rules and obligations using appropriate vocabulary and structure • Develop skills in listening, reading, writing, and speaking	• Textbook • Smart board • KWL chart • Board • Online videos: • British Council: Have to / Must / Should • iSLCollective: 5 Things You Mustn't Do in Britain

Step-by-step lesson plan	
Step 1: Intro, anticipation 10 min	Teacher introduces topic and invites brainstorming on known modal verbs. KWL chart with 3 columns: • What do you already know? • What do you want to know? • What have you learnt? (The students answer the third question in the end of the lesson.)
Step 2: Encounter 10 min	Play iSLCollective video: 5 Things You Mustn't Do in Britain Teacher invites reactions and open questions: Would this rule surprise you in your country?
Step 3: Inquiry, investigation 10 min	Present grammar using examples from video: have to, don't have to, mustn't. Students work in pairs to match rules with correct modal verb. Group exercise on smart board: drag-and-drop quiz or sentence builder.
Step 4: Expression, discovery 5 min	In pairs, students write or act out a mini-dialogue using all three modals. Optional: record short role-plays (using classroom tablet or phone). Share selected examples with the class.
Step 5: Reflection, propagation 5 min	Students complete the "L" column in KWL chart. Ask: What did you learn that surprised you?

Ongoing learning	
Assessment and feedback	Ongoing oral feedback and peer discussion. Informal pronunciation and usage check.
Differentiation	Visual support via videos and board. Peer collaboration supports mixed-ability learning. Creative task flexibility for more advanced learners.
Real-life connection	Grammar tied to real social behaviors and norms across cultures. Language becomes a tool for respectful and clear communication.
Extension options	Compare school rules in different countries. Add should / shouldn't in a follow-up lesson on advice. Students create video blogs giving "travel tips" using modal verbs.

PART 3

WL LESSON PLAN 5: CAREER ORIENTATION

Me and the people around me: Discovering professions

This lesson invites students to explore the world of professions by discovering the people who contribute to their community. Students learn job-related vocabulary while connecting emotionally to the value of everyday work.

Theme: Exploring professions in our environment
Age group: 10 years old
Duration: 40 minutes
Setting: Classroom

Wonder element	Present in lesson
Beauty	Use of vivid illustrations, colors, and real photos of people doing meaningful work
Mystery	Children guess the job through audio clues or image fragments (Who could this be?)
Silence and focus	T-chart writing and picture matching include quiet, reflective moments
Inner motivation	Students choose a profession they admire and share why it matters to them

Learning objectives	Materials needed
• Learn and correctly use vocabulary related to common professions • Connect words to real-life people in their environment • Practice listening, writing, and speaking through engaging, student-centered activities	• Smart board • Printed or digital images of professions • T-chart handout • Notebooks Links: • Jobs & Workplace – iSLCollective • Jobs Word Game – British Council • YouTube Jobs Song (optional)

Step-by-step lesson plan	
Step 1: Intro, anticipation 10 min	Play a short sound (e.g., siren, chalk on board, baking timer) or show a mysterious object/tool (e.g., firefighter helmet, stethoscope). Ask: Who might use this? Students guess professions. Ask: What makes you think that? Words go on the board.
Step 2: Encounter 10 min	Watch selected moments from the iSLCollective video, showing professionals in their workplaces. After each, pause and ask: What do you notice? What do you feel watching this? Emphasize the human meaning behind the job, not just the name.
Step 3: Inquiry, investigation 10 min	Students complete a T-chart: Left: Name of job Right: Short, meaningful description of what that person does Add a third optional column: Why this job is important to me / the community?
Step 4: Expression, discovery 5 min	In pairs: students pick one profession they admire and say why (1–2 sentences). The teacher invites a few students to share aloud, focusing on respect for different professions.
Step 5: Reflection, propagation 5 min	Ask: • What did you learn today that surprised you? • How do these people help us? • Would you like to do one of these jobs someday? Why or why not? Students draw a symbol or write one word in their notebook that describes how they felt.

Ongoing learning	
Assessment and feedback	Observation of verbal participation and respectful listening. Review T-charts for vocabulary use and depth of personal connection. Reflective feedback shared aloud or written at the end of the lesson.
Differentiation	Visual prompts and paired dialogue help ELLs or SEN students. Early finishers: Write a “thank you card” to a profession of their choice. Students may draw instead of write if language is a barrier.
Real-life connection	Learning directly tied to real people students see daily: drivers, nurses, teachers, bakers. Empowers children to see work as meaningful and community as interconnected.
Extension options	Invite students to bring a photo or short story about someone in their family or neighborhood who has a meaningful job. Optional: create a “Community Wall of Wonder” celebrating people’s contributions.

PART 3

WL LESSON PLAN 6: DIGITAL LITERACY

"Can You Tell What's Real?" Exploring AI, Truth, and Perception

In a digital world where AI can create art, write poems, or generate fake news, students are increasingly exposed to content they must learn to question. This lesson invites students to explore the mystery of what is real and what is artificially created.

Theme: AI literacy, media awareness, digital citizenship
Age group: 9-14
Duration: 2 class periods (45–60 min each)
Setting: Digital classroom or computer lab

Wonder element	Present in lesson
Beauty	The mystery and design of human vs AI creations; appreciation of authenticity
Mystery	Invites questioning and reflection
Silence and focus	Time is given to quietly reflect before revealing answers
Inner motivation	Students are driven by curiosity, not competition

Learning objectives	Materials needed
• Develop critical thinking when engaging with digital content • Identify AI-generated vs. human-created media • Reflect on the emotional and cognitive impact of authenticity • Express personal insight through creative output • Understand the ethical and social implications of AI	• Devices with internet access (1 per student or pair) • Projector or interactive whiteboard • Student journals or digital writing app Access to: • Britannica Quiz: Real or AI? • Sightengine: AI or Not • DetectFakes Tool Optional: Padlet for Wonder Wall

Step-by-step lesson plan	
Step 1: Wonder, anticipation 10 min	Ask: “What makes something feel real?” Show a few anonymous text/image samples (some AI, some human). Students observe silently and write: “Which do you think is real? Why?”
Step 2: Interactive digital exploration, encounter 25 min	Students explore Britannica’s Real or AI Quiz in pairs. Debrief in small groups: What was surprising? Which ones fooled you?
Step 3: Deep steps, investigation 30 min	Introduce Sightengine for images. Introduce DetectFakes for text/news headlines. In groups, students analyze one image and one text. Ask: Can machines help us see truth?
Step 4: Creative response, discovery 35 min	Each group creates a “Fool Me” challenge: ◦ Either generate a short AI or real piece (text or image) ◦ Peers must guess: real or AI? Use Canva, PowerPoint, or paper.
Step 5: Reflection, propagation 20 min	In a reflection circle, ask: • “How does it change how you feel when you learn something was fake?” Students contribute one new question to a Wonder Wall (digital or physical).

PART 3

WL LESSON PLAN 7: ICT

If I were AI

Students explore the idea of what it would be like if they themselves were artificial intelligence. Through discussion, exploration, and creative writing, they craft original stories from the perspective of an AI. This lesson addresses curriculum goals in digital literacy, creative writing, critical thinking, and social-emotional learning.

Theme: Creative writing and digital literacy
Age group: 14-15
Duration: 90 min
Setting: Digital classroom or computer lab

Wonder element	Present in lesson
Beauty	The aesthetic power of AI-generated images and storytelling.
Mystery	Mystery of consciousness: Can AI “feel” or “dream”?
Silence and focus	A calm writing atmosphere with focus on reflection.
Inner motivation	Students choose the tone, character, and ending of their AI story.

Learning objectives	Materials needed
• Develop imagination and critical thinking about the role of artificial intelligence in the world • Encourage independent and creative expression through writing • Recognize the basic concepts of artificial intelligence and reflect on its impact on humans • Build digital literacy through the use of AI tools	• Computers or tablets with internet access • Paper and pens for notes • Digital whiteboard or projector • AI tools (e.g., ChatGPT, Bing Image Creator, DALL·E) • Background music for inspiration (soft instrumental music)

Step-by-step lesson plan	
Step 1: Wonder, anticipation 20 min	Begin with a short discussion: “What is artificial intelligence?” Watch a brief video or examine real-life examples of AI. Students then respond to questions such as: • “What would I do if I were AI?” • “Would I help people?” • “Would I have feelings?” • “Would I dream?” Students create a mind map on the topic of AI.
Step 2: Through the eyes of AI, encounter 10 min	The teacher presents several AI-generated images of the future (e.g., a city run by AI, AI as an artist). Students write down five words that come to mind for each image. Then, they imagine: “I am the AI in this picture.”
Step 3: Brainstorming, investigation 10 min	Students complete a short story plan: • Who am I as an AI? • Where do I live (world, system, network...)? • What is my purpose? • What do I desire? (Is there a conflict between my programming and emotion?) • How does my story end?
Step 4: Creative response, investigation, discovery 25 min	Students write a story titled “If I Were AI.” The teacher encourages silence and focus with gentle background music. Emphasis is placed on authenticity and creativity, not perfection.
Step 5: Story sharing, propagation 15 min	Volunteers read their stories aloud using the “Author’s Chair” technique. This is a classroom practice where a student sits in a designated chair—the “Author’s Chair”—to share their writing with the group. After the readings, students engage in a brief reflection: “What did I learn about myself through writing?” Followed by a class discussion: “Can AI be as creative as a human?”

Ongoing learning	
Assessment and feedback	Students can later create a digital version of their story such as a mini e-book in Canva or a short video story and share it on the school platform. Assessment criteria: Originality, emotional depth, narrative structure, and creativity. Feedback: Peer feedback format. Students offer each other compliments and constructive suggestions.
Differentiation	Advanced students can add a dialogue between a human and an AI. Students who find writing challenging can work in pairs and record an audio version of their story.
Real-life connection	Discussion on real-life examples: How do artists, programmers, and AI collaborate? Ethical discussion: What does it mean to have consciousness?
Extension options	Create a comic or digital diary of an AI character. Design a fictional AI profile on a social network. Use an image generator to visualize a scene from the story.

PART 3

WL LESSON PLAN TEMPLATE

Lesson title:

Lesson summary:

Theme:
Age group:
Duration:
Setting:

Wonder element	Present in lesson
Beauty	
Mystery	
Silence and focus	
Inner motivation	

Learning objectives	Materials needed

Step-by-step lesson plan	
Step 1:	
Step 2:	
Step 3:	
Step 4:	
Step 5:	

Ongoing learning	
Assessment and feedback	
Differentiation	
Real-life connection	
Extension options	


WONDER
LEARNING
"
A life full of wonder is a wonderful life.
-
unknown
DIGITALLY EMPOWERED WONDER LEARNING

PART 4

WHERE TECHNOLOGY AND WONDER WORK HAND IN HAND

DIGITALLY EMPOWERED WONDER LEARNING ASSESSMENT

Here are some examples of evaluation approaches that use digital tools to spark curiosity, awe, and personal expression, allowing students to demonstrate knowledge through creative, meaningful, and inquiry-driven tasks.

Such an evaluation is rooted in formative assessment, which focuses on ongoing feedback, reflection, and growth rather than final scores alone.

PART 4

WL ASSESSMENT EXAMPLES

Language learning

Exploring historical letters or diary entries in the target language.

Assessment plan	
Introduction	Teacher shows a scanned image of an old diary page or letter (digitized resource, e.g., Europeana archives). Questions: "What do you think this person wanted to share? What mysteries hide in their words?"
Digital inquiry	Students use a collaborative Padlet board to post their first impressions or questions. Then, in small groups, they receive a translated excerpt plus original text in the target language. They identify key phrases, emotions, and tone.
Assessment task	Students create a short digital story (e.g., Canva, StoryJumper, or Flip) imagining themselves as the letter's author writing to a friend today. They must use at least 10 new vocabulary words and 2 grammar structures from the unit.
Wonder reflection	Students share their digital stories in class (or online gallery). Peers comment using emojis + open questions like: "What surprised me was..." "This made me wonder about..."
Teacher's assessment criteria	Teachers communicate the following criteria to students **in advance**: • Language use: Vocabulary, grammar, fluency (accuracy + creativity) • Engagement: Evidence of curiosity and personal expression • Collaboration: Contribution to group Padlet and feedback • Reflection: How well they connect language to meaning and emotion?

PART 4

WL ASSESSMENT EXAMPLES

Health and wellbeing

Exploring how what we eat affects body and mind

Assessment plan	
Introduction	Show students a time-lapse video of how sugar impacts teeth or how plants grow differently with/without water. Questions: "What do you think happens inside our bodies when we eat certain foods? What mysteries are hidden in everyday meals?"
Digital inquiry	In groups, students use interactive online resources (e.g., PhET simulations, WHO infographics, or short explainer videos) to investigate links between food, exercise, and wellbeing. Each group gathers facts and insights on a digital Wonder Wall (Padlet).
Assessment task	Students create a short animated explainer or infographic using Canva, Powtoon, or Adobe Express titled: "A Day in the life of my body: How my choices affect my health." They must include: • At least 5 key vocabulary terms (nutrition, balance, energy, mental health, exercise) • One scientific explanation (e.g., how sleep supports the brain) • A personal reflection or recommendation for peers
Wonder reflection	Students upload their creations to a class digital gallery. Peers provide feedback with two questions: "What surprised me..." "This makes me wonder about..."
Teacher's assessment criteria	Teachers communicate the following criteria to students **in advance**: • Knowledge and accuracy: Correct use of key health and wellbeing concepts • Engagement and curiosity: Evidence of inquiry and wonder-driven connections • Reflection: Ability to link health knowledge to real-life choices

PART 4

WL ASSESSMENT EXAMPLES

Social studies

Migration journeys: Past and present

Assessment plan	
Introduction	Teacher shows a map animation of migration flows across history (e.g., Silk Road trade, refugee movements today). Questions: "What makes people leave their homes? What would it feel like to travel with only what you could carry?"
Digital portfolio	Students keep a living digital document (Google Docs, Padlet timeline, or OneNote) with three sections: • Initial wonder questions: What they are curious about at the start. • Midway insights: How their thinking or questions changed after research/discussions. • Final reflections: What they learned, what still puzzles them, and how it connects to real life.
Peer reflection	Students exchange portfolios in pairs and leave digital comments (highlighting: "I noticed…" / "This made me wonder too…"). Peer assessment focuses on depth of thinking and openness to new perspectives rather than correctness.
Teacher's assessment criteria	Teachers communicate the following criteria to students **in advance**: • Curiosity growth: Do the student's questions deepen and become more meaningful over time? • Perspective-taking: Does the student consider multiple viewpoints (historical, social, ethical)? • Reflection: Does the portfolio show awareness of connections to self, community, or global issues? • Engagement in dialogue: Quality of peer comments and openness to feedback

PART 4

WL ASSESSMENT EXAMPLES

ICT learning

The life of algorithms: How computers make decisions

Assessment plan	
Introduction	Show students a short video or simulation where two people get very different results from the same Google search. Questions: "Why do you think this happens? Do computers 'think' like us?"
Digital portfolio	Students keep a shared online journal (Google Docs, Padlet, or Seesaw) structured in three phases: Initial questions (before): "What is an algorithm?" "Do algorithms decide things by themselves?" Midway insights (during): After exploring short readings, AI demos, or coding activities, students refine their questions: "Who decides how an algorithm ranks information?" "Can algorithms be biased?" Students summarize (after): What they learned. What new questions they still have. How algorithms affect their own digital life (e.g., TikTok feed, YouTube recommendations).
Peer reflection	Students post one "wonder question" on a class digital wall (Padlet). Peers comment with "I wonder too…" or "This makes me think about…" responses.
Teacher's assessment criteria	Teachers communicate the following criteria to students **in advance**: • Curiosity growth: Depth and evolution of student questions over time • Critical awareness: Ability to connect ICT concepts (algorithms, bias, digital citizenship) to real life • Reflection: Evidence of personal meaning-making (e.g., "This explains why I see these ads…") • Engagement in dialogue: Quality of contributions to peer discussions

PART 4

WL ASSESSMENT EXAMPLES

Sustainability education

Exploring human choices and ecosystems

Assessment plan	
Introduction	Show a time-lapse video of a deforested area vs. a thriving forest. Question: "What story would the forest tell us about human choices?"
Interactive simulation	Students use a platform like SimCity EDU, Minecraft Education, or an online sustainability simulator. Task: manage a virtual ecosystem (forest, river, or city) and make decisions about: • Logging vs. conservation • Renewable vs. fossil energy • Industry vs. community wellbeing Each decision produces visible consequences (biodiversity changes, pollution, community health)
Assessment task	After playing the simulation, students record a short digital reflection (Flip video, Canva poster, or Padlet post): • What surprised me about the outcomes of my decisions? • What would I do differently if I could make a fresh start? • How do these choices connect to my real life or community?
Teacher's assessment criteria	Teachers communicate the following criteria to students **in advance**: • Awareness of complexity: Recognizes trade-offs in sustainability choices • Curiosity and surprise: Identifies what was unexpected in the simulation • Ethical reasoning: Explains reasoning behind decisions, not just outcomes • Real-life connection: Links virtual experience to real-world sustainability

PART 4

WL ASSESSMENT EXAMPLES

Art

Hidden stories in art

Assessment plan	
Introduction	Show a famous painting (e.g., Van Gogh's Starry Night or Frida Kahlo's Self-Portrait with Thorn Necklace). Use a digital zoom tool (Google Arts & Culture) to highlight tiny details. Question: "What do you notice that most people overlook? What story might this detail tell?"
Collaborative gallery	Each student chooses a detail (e.g., a symbol, color, or texture) from the artwork. They annotate it on a shared digital gallery wall (Padlet, Wakelet, or ThingLink) with: • A short interpretation ("This blue feels calm but also lonely") • A personal connection ("It reminds me of looking at the sky when I can't sleep") • A "wonder question" ("Why do you think Van Gogh painted the stars as swirls?")
Group reflection	Students read each other's annotations and reply with "This surprised me because..." or "This makes me wonder...". Together, they build a digital map of interpretations, showing multiple perspectives around the same artwork.
Teacher's assessment criteria	Teachers communicate the following criteria to students **in advance**: • Observation and sensitivity: Ability to notice details with fresh eyes • Emotional engagement: Depth of personal or emotional connections expressed • Curiosity: Quality and originality of "wonder questions" • Dialogue and collaboration: Respectful, thoughtful responses to peers' interpretations

PART 4

WL ASSESSMENT EXAMPLES

STEM

How might we design a city of the future that is healthy, sustainable, and fun to live in?

Assessment plan	
Introduction	Watch a short interactive video (e.g., on renewable energy, robotics in cities, or space colonies). Discuss: What problems do future cities need to solve? What would make them amazing to live in?
Student inquiry	Students choose ONE wonder path: Science: How will people stay healthy (air, food, water, energy)? Technology: What technologies will make life easier or safer? Engineering: How will buildings, bridges, or transport be designed? Math: How do we plan resources for a growing population?
Digital exploration and creation	Students use digital tools to investigate and test ideas, for example: • Simulations: PhET simulations, Tinkercad (engineering prototypes), GeoGebra (math modeling) • Research tools: Curated online databases, digital encyclopedias, AI for idea generation • Data collection: Using sensors/apps (if available) or online datasets (e.g., climate data) Students design a digital artifact to demonstrate their solution: 3D model, video, digital infographic, slideshow, simulation or game
Teacher's assessment criteria	Teachers communicate the following criteria to students **in advance**: • Curiosity and questioning: Did they ask a deep, wonder-driven question? • STEM thinking: Did they apply science, tech, engineering, or math meaningfully? • Digital empowerment: Did they use digital tools effectively to explore and present? • Communication: Is their idea clear, engaging, and supported with reasoning?

PART 4

WL ASSESSMENT EXERCISES

Wonder learning assessment is:

- ✔ Formative and ongoing
- ✔ Rooted in curiosity, surprise, emotion
- ✔ Encourages student reflection and self-expression
- ✔ Includes beauty, mystery, and real-life meaning
- ✔ Involves clear criteria, shared in advance
- ✔ Uses digital tools to support creativity, not stimulation

REFLECT:

1. Think of a recent assessment you gave. Did it include:
❑ A sense of mystery or curiosity?
❑ Emotional or personal connection?
❑ Student self-reflection or peer feedback?
❑ Creative expression instead of just right/wrong answers?

2. What would you change to bring more wonder into that assessment?

PART 4

WL ASSESSMENT EXERCISES

What makes an assessment wonder-full?

You will now compare two types of assessment and reflect on what defines a wonder learning approach. Read the two brief assessment descriptions below:

Assessment A: Traditional
Students read a chapter on ecosystems and complete a 20-question multiple-choice test to assess their understanding of terms like "food chain," "photosynthesis," and "biome."

Assessment B: Wonder-based
Students watch a timelapse of a forest regrowing after fire. The teacher asks, "What story would the forest tell us about our choices?" Students play a digital simulation where they manage a virtual ecosystem. They then record a Flip video reflecting on their decisions and what surprised them, linking it to real-life environmental questions.

Based on this comparison, check the features you believe are essential for wonder learning assessment:

a. Surprise or beauty
b. Emotional connection
c. Single right answers
d. Student voice or imagination
e. Use of meaningful digital tools
f. Final grade
g. Connection to real life
h. Reflection or self-assessment
i. Curiosity over correctness
j. Memorization and speed

PLACE FOR YOUR THOUGHTS

PART 4

WL ASSESSMENT EXERCISES

QUIZ

1. Which statement would be most appropriate as WL feedback?

a. Correct 8/10. Study more.

b. Your insight about the forest's recovery really surprised me. What made you think of that?

c. You forgot to cite sources.

d. Nice effort, but your answers are too short.

2. A WL teacher assigns a Flip video where students describe "what surprised them most" in a simulation. This supports...

a. Metacognition and emotional processing

b. The goal that every student completed the same task

c. Memorization

d. Testing vocabulary

3. In a WL classroom, students should know assessment criteria:

a. After they submit work

b. Before they start and during their work

c. If they fail

d. During report cards

4. Which of the following represents a good WL assessment task?

a. Memorize and recite a definition

b. Create a digital story showing how a concept appears in everyday life

c. Take a speed test

d. Fill out a worksheet silently

5. A WL assessment in math might include:

a. Timed multiplication drill

b. Completing repetitive equations

c. Matching terms to definitions

d. A story where a student explains how numbers appear in nature

6. A wonder learning rubric is most likely to include which criterion?

a. Evidence of curiosity and engagement

b. Correct answers only

c. Use of test-taking strategies

d. Use of academic vocabulary in all responses

The right answers: 1 b; 2 a; 3 b; 4 b; 5 d; 6 a

PART 4

WL ASSESSMENT EXERCISES

Read 3 different student assessment scenarios across subjects.

A
Subject: History
Task: “List five causes of World War I and describe each in one paragraph.”
Assessment: Based on completeness and accuracy.

B
Subject: Social Studies
Task: “Imagine you are a child writing a letter while fleeing your home during a war. What do you see? What do you feel? What do you carry?”
Assessment: Includes reflection, creativity, and connection to real events.

C
Subject: Science
Task: “Create a slideshow about the water cycle with animations, transitions, and voice-over.”
Assessment: Graded on design, vocabulary, and length.

Evaluate each example according to the wonder learning assessment principles. Scale: 1 - Low, 2 - Medium, 3 - High.

Wonder learning principle	A	B	C
Includes wonder or surprise			
Connects to student meaning			
Promotes curiosity or reflection			
Allows voice/choice			
Uses tech meaningfully			
Growth over performance			

Redesign one assessment: Choose example A, B or C. In groups, improve it using wonder learning principles:

- Add a wonder spark
- Make the task more meaningful or creative
- Add reflection and emotion
- Adjust the assessment criteria

PART 4

WL ASSESSMENT EXERCISES

Practicing WL assessment plan

Design a small-scale wonder learning assessment using the template below. Choose a topic from your subject area.

Assessment plan	
Introduction: What image, video, sound, or question could surprise or move students?	
Inquiry: What will students investigate, observe, or create?	
Assessment task: How will students express what they've learned (not just repeat it)?	
Student reflection: How will they reflect on what they discovered or felt?	
Teacher's assessment criteria: What will you assess? (e.g., curiosity, creativity, reflection, accuracy, collaboration...)	
Digital tools: What tool could support creativity or reflection (e.g., Flip, Padlet, Canva)?	

PART 5

WHERE TECHNOLOGY AND WONDER WORK HAND IN HAND

EVALUATION TOOLS

To follow an evidence-based approach and support reflective learning, this part of the handbook includes several suggestions for assessing teachers' needs, pre-assessment forms, post-assessment forms, evaluation surveys, and qualitative evaluation questions.

This will help trainers identify professional development priorities, monitor progress, and adapt their training to better support teachers' growth and the practice of digitally empowered wonder learning in the classroom.

PART 5

SELFIE TOOL

About SELFIE (Self-reflection on Effective Learning by Fostering Innovation through Educational technology)

SELFIE is a free tool developed by the European Commission. It helps schools reflect on how technology is used for teaching, learning, and student skills. Input comes from teachers, students, and school leaders, creating a full picture of digital learning practices.

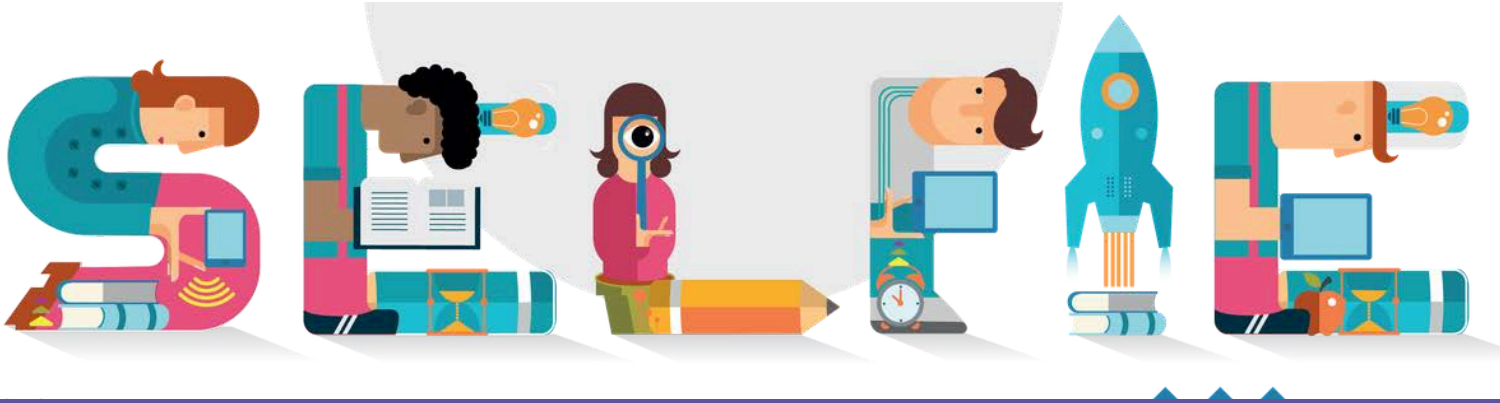
The questionnaires are available in **39 languages**.

Access

https://education.ec.europa.eu/selfie

The questions within the tool focus on **six** core areas:

- Professional engagement
- Finding and creating digital resources
- Teaching and learning practice
- Pupil assessment
- Empowering learners
- Facilitating student digital competences



PART 5

WL PRE-TRAINING SURVEY

The Wonder Learning Pre-training Needs Assessment Survey is designed to identify teachers' baseline beliefs, practices, and needs in relation to wonder-based, emotionally engaging, and digitally empowered teaching.

Read each statement carefully and evaluate your level of agreement using the scale below. Scale: 1 - Strongly disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly agree.

Item	1	2	3	4	5
I feel confident in my ability to create emotionally engaging lessons.	1	2	3	4	5
Curiosity and awe are essential to learning.	1	2	3	4	5
I intentionally create space in my lessons for students to reflect, observe, and wonder.	1	2	3	4	5
I am familiar with the wonder learning approach.	1	2	3	4	5
I often prioritize silence, beauty, or reflection in my classroom.	1	2	3	4	5
I often design open-ended activities that foster exploration in my lesson plans.	1	2	3	4	5
I often use surprise, mystery, or beauty to stimulate interest.	1	2	3	4	5
I feel confident in using digital tools to enrich learning experiences.	1	2	3	4	5
I feel confident in using digital tools that support emotionally engaging and student-centered learning.	1	2	3	4	5
I regularly adapt lessons for students with different learning needs (special educational needs, cultural, linguistic).	1	2	3	4	5

PART 5

WL PRE-TRAINING SURVEY

Select the option that best reflects your current beliefs or practices.

1. Do you intentionally cultivate a calm, wonder-inviting classroom environment?

a. No
b. Sometimes
c. I try, but struggle
d. Yes, but inconsistently
e. Yes, regularly and intentionally

2. When thinking about digital tools in the classroom, you feel...

a. Overwhelmed
b. Uncertain
c. Confident and excited
d. Motivated
e. Confident and excited

3. Have you used assistive or inclusive tools (e.g., digital portfolios, QR codes, audio support)?

a. Never
b. Once or twice
c. Occasionally
d. Often
e. Regularly

4. How do you currently assess student engagement beyond test results?

a. Observations
b. Student reflections
c. Peer feedback
d. Project work
e. I don't assess engagement

5. What kind of support would help you integrate more wonder in your classroom?

a. Sample lesson plans
b. Digital tools training
c. Peer collaboration
d. Time to reflect and plan
e. A deeper understanding of the wonder learning approach

6. Which of the 5Cs of digital education do you use regularly in your teaching?

a. Connect
b. Communicate
c. Curate
d. Collaborate
e. Create

PART 5

WL POST-TRAINING SURVEY

The wonder learning post-training assessment survey is designed to evaluate the impact of the training on teachers' beliefs, confidence, and classroom practices related to wonder-based, emotionally engaging, inclusive, and digitally empowered learning.

Evaluate your level of agreement using the scale below. Scale: 1 - Strongly disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly agree.

Item	1	2	3	4	5
I can describe the key principles of the wonder learning approach.	1	2	3	4	5
I feel more aware of how overstimulation can impact learning.	1	2	3	4	5
I apply Universal Design for Learning (UDL) principles more consistently.	1	2	3	4	5
I feel more confident designing emotionally engaging learning experiences.	1	2	3	4	5
I include opportunities for wonder in all stages of the learning cycle; e.g. discovery, sense-making, exploration, assessment.	1	2	3	4	5
I use technology to support creativity and inquiry, not just content delivery.	1	2	3	4	5
I feel more confident selecting digital tools that support wonder.	1	2	3	4	5
I apply the 5Cs (Connect, Communicate, Curate, Collaborate, Create) in lesson planning.	1	2	3	4	5
I balance screen use with real-world, sensory, or reflective activities.	1	2	3	4	5
I explore digital inclusion tools to support students with special needs.	1	2	3	4	5

PART 5

WL TRAINING FEEDBACK

The wonder learning feedback survey is designed to evaluate how teachers experienced the training and how they plan to apply the knowledge and strategies in their teaching practice.

Evaluate your level of agreement using the scale below. Scale: 1 - Strongly disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly agree.

During the training I felt:					
Interest	1	2	3	4	5
Joy	1	2	3	4	5
Hope	1	2	3	4	5
Pride	1	2	3	4	5
Boredom	1	2	3	4	5
Anxiety	1	2	3	4	5

Training quality:					
The training content was clear and well-structured.	1	2	3	4	5
The trainer(s) created an engaging and supportive environment.	1	2	3	4	5

After this training I will:					
Find more information about the wonder learning.	1	2	3	4	5
Share the knowledge and material with my colleagues.	1	2	3	4	5
Adapt the methods learnt to fit the needs of my students.	1	2	3	4	5
Include more opportunities for wonder into my work with students.	1	2	3	4	5
Use the material provided in my work with students.	1	2	3	4	5

PART 5

WL 4-F EVALUATION

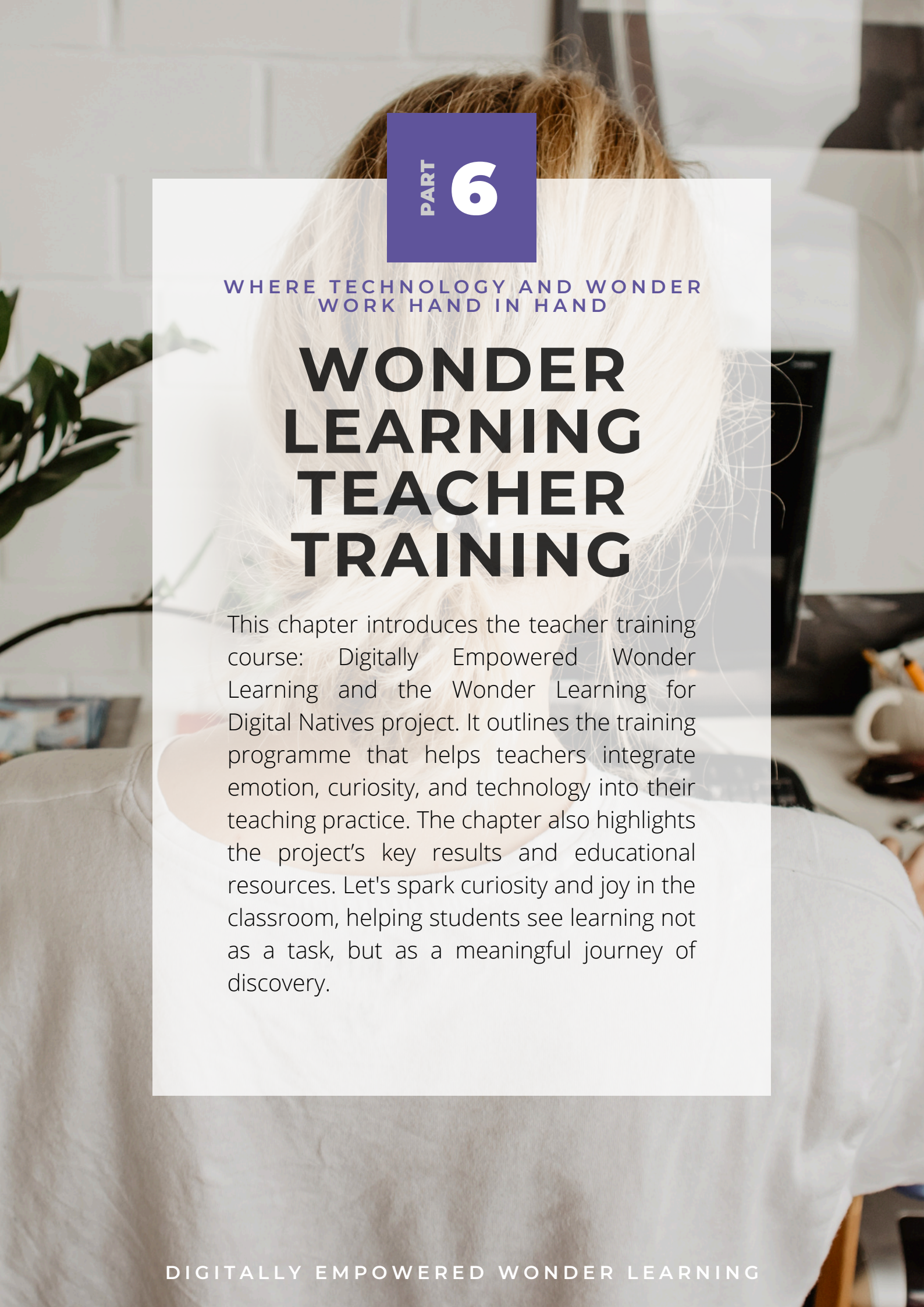
The 4-F evaluation activity can be done individually or in small groups. Each participant (or group) will use post-its to share their thoughts.

Use post-its: write one idea per note for each category: Facts, Feelings, Findings, Future. Place post-its on the board/wall under the right heading.

Group reflection: read, cluster, and discuss common themes.

Wrap up: highlight key insights and take a photo to remember commitments.

FACTS	FEELINGS
What are the key things you learned or discovered during this training?	How did you feel during the training?
FINDINGS	**FUTURE**
What insights or “aha!” moments did you experience?	How will you apply what you have learned in your teaching practice?



PART 6

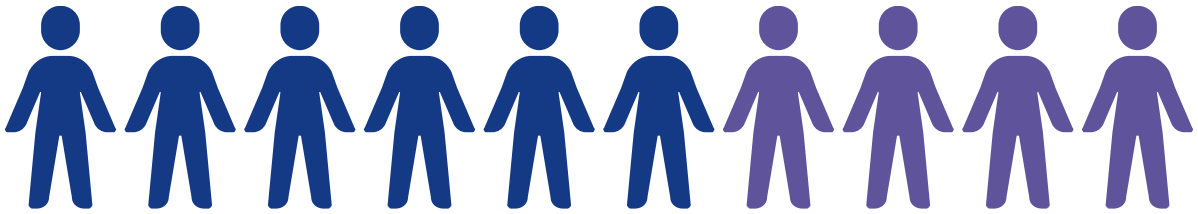
WHERE TECHNOLOGY AND WONDER WORK HAND IN HAND

WONDER LEARNING TEACHER TRAINING

This chapter introduces the teacher training course: Digitally Empowered Wonder Learning and the Wonder Learning for Digital Natives project. It outlines the training programme that helps teachers integrate emotion, curiosity, and technology into their teaching practice. The chapter also highlights the project's key results and educational resources. Let's spark curiosity and joy in the classroom, helping students see learning not as a task, but as a meaningful journey of discovery.

PART 6

TEACHER TRAINING COURSE: DIGITALLY EMPOWERED WL



SUMMARY

Where technology and wonder work hand in hand.

This professional development programme introduces teachers to the digitally empowered wonder learning approach, a pedagogy that integrates pleasant emotions, curiosity, and meaning-driven technology use into classroom practice.

Participants learn how to design emotionally engaging, inclusive, and digitally empowered lessons that nurture intrinsic motivation and deep learning, particularly for students aged 9–15, including those with special educational needs.

Format: blended, in-person or fully online.

Learning material: This handbook entitled Digitally Empowered Wonder Learning. The toolkit provides the conceptual framework, lesson design templates, reflective tools, quizes, assessment tools, and practical activities used throughout the training.

PART 6 TEACHER TRAINING COURSE: DIGITALLY EMPOWERED WL

Learning outcomes

By the end of the course, participants will be able to:

1. Understand the theoretical foundations of wonder learning and its link to emotional engagement and motivation.
2. Integrate awe, curiosity, and beauty as pedagogical triggers within subject-specific contexts.
3. Apply the 5Cs (Connect, Communicate, Curate, Collaborate, Create) of digitally empowered wonder learning to enrich classroom experiences with meaningful technology.
4. Design inclusive and accessible lessons using Universal Design for Learning (UDL) and SEN-sensitive adaptations.
5. Promote digital citizenship and internet safety, fostering healthy, ethical, and creative use of technology among students.
6. Reflect on and continuously improve teaching practices using the wonder self-coaching canvas and evaluation tools.

Learning methodology

The training is based on experiential and collaborative learning. Participants engage in interactive workshops and creative group design sessions. They take part in reflective discussions and peer feedback to deepen understanding and improve teaching practice. The trainer organizes interactive exercises on platforms such as Padlet, Wakelet, and Mentimeter to encourage creativity and idea sharing. Participants also design and practice their own lesson plans using the wonder learning lesson template, applying emotions, curiosity, and digital tools to their teaching context. Pre- and post-training self-assessments support reflection and the development of a wonder learning mindset.

PART 6

TEACHER TRAINING COURSE: DIGITALLY EMPOWERED WL

Module 1: The wonder learning mindset

- Understanding wonder as a driver of curiosity, focus, and intrinsic motivation
- Understanding the growth mindset in connection with learning
- Exploring pleasant emotions in learning (awe, surprise, admiration)
- The role of the teacher as curator of wonder
- Practice: Using the wonder self-coaching canvas for lesson design

Module 2: 5Cs of digitally empowered wonder learning / 1

- The 5Cs framework: Connect, Communicate, Curate, Collaborate, Create
- Using digital tools to inspire curiosity and creativity
- Digital wellbeing and balance: Avoiding overstimulation
- Practice: Exploring digital tools for meaning-driven technology use into classroom practice

Module 3: 5Cs of digitally empowered wonder learning / 2

- Exploring wonder triggers through technology
- Internet safety and media literacy for safe integration of technology into students' learning process
- Case studies: It couldn't happen to me
- Introducing the wonder learning lesson planning
- Practice: Exploring digital tools for meaning-driven technology use into classroom practice

PART 6

TEACHER TRAINING COURSE: DIGITALLY EMPOWERED WL

Module 4: Designing wonder learning lessons

- Introducing generative artificial intelligence
- Building sparks of wonder in STEM, language, art, and sustainability lessons
- Introducing wonder learning GPT agent for effective lesson planning
- Practice: Develop a mini lesson plan inspired by wonder principles

Module 5: Inclusion through wonder and UDL

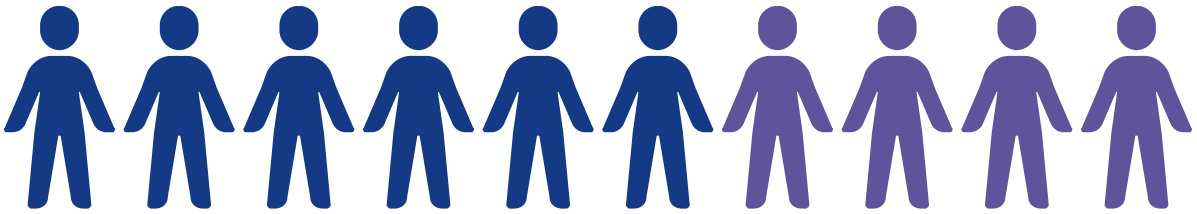
- Understanding wonder in inclusive contexts and its relevance for SEN education
- Creating aesthetically rich, sensory-friendly environments
- Applying universal design for learning (UDL) principles
- Practice: Redesign an existing lesson for inclusion and accessibility

Training outputs

- 1 completed wonder learning lesson plan (individual or team-based)
- Digital artifacts aligned with the 5Cs
- 1 inclusion redesign using UDL
- 1 personal reflection or video journal
- The results of the pre- and post assessment
- Evaluation
- Certificate of completion

PART 6

ABOUT THE WONDER LEARNING PROJECT



The Wonder Learning for Digital Natives project helps teachers use an interactive approach called “Wonder Learning” to make lessons exciting for students who grow up with digital tools. It helps both students and teachers improve their digital skills so they can learn and teach using modern technology, while also incorporating pleasant emotions into the learning experience, such as awe, surprise, and amazement.

REFLECTION

When was the last time your students looked truly amazed during a lesson? And what did you do to make that happen?

PLACE FOR YOUR THOUGHTS

PART 6

THE MAIN RESULTS OF THE PROJECT

GOOD PRACTICES BROCHURE

The brochure showcases 34 innovative teaching practices from across Europe. They spark WOW! moments and cover STEM, language, sustainability, arts, social studies, and special education, with a focus on active, digital, and inclusive learning.

TEACHER TRAINING TOOLKIT

The methodological workbook supports teacher development by guiding the design of Wonder Learning activities for students aged 9–15. It's ideal for training courses focused on active learning and technology use in the classroom.

ACTIVITY PACKS FOR STUDENTS

The pack includes an eTwinning project on environmental issues, an AI literacy guide for parents, and 25 activities for students aged 9–15, offering diverse ways to explore and build digital skills.

EVENTS

The project includes 3 international partner trainings and meetings, 8 local professional development events, 1 international student exchange, 8 multiplier events to share results, and 3 conferences for wider promotion of wonder learning.

THE RESULTS ARE AVAILABLE FOR FREE DOWNLOAD ON THE PROJECT WEBSITE.

PART 6

PROJECT PARTNERS

WONDER LEARNING

Escola B1/PE do Monte

Portugal
Primary school

Marijampolės „Ryto“ Basic School

Lithuania
School centre

Dr. Fevzi Mürüvet Uğuroğlu Ortaokulu

Turkey
Lower secondary school

EDUSPARKHUB

Romania
Educational NGO

EDUKOPRO

Bosnia and Herzegovina
Educational enterprise

Institut za primeneti istrazuvanja za biznis (IARB)

North Macedonia
Research institute

Primera - Zentrum für pädagogische Fortbildung Wien

Austria
Teachers’ association

Associação Cultural e de Solidariedade Social Raquel Lombardi

Portugal
Life-long learning NGO

7 COUNTRIES, 8 PARTNERS

PART 6

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Wonder Learning for Digital Natives