



The Art of Scientific Communication

E-learning & Interactive Live Formats

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IR0000032 – ITINERIS, Italian Integrated Environmental Research Infrastructures System
(D.D. n. 130/2022 - CUP B53C22002150006) Funded by EU - Next Generation EU PNRR-
Mission 4 “Education and Research” - Component 2: “From research to business” - Investment
3.1: “Fund for the realisation of an integrated system of research and innovation infrastructures”



Programme




(14:00 – 15:15)

Presenting Science: Live or Online

-  The Foundations of Effective Science Communication
-  Presenting Science Live: On Stage
-  Presenting Science Live: Online

(15:30 – 16:30)

E-learning & Interactive Live Formats

-  E-learning intro
-  Interactive Live Formats
-  Some tools: Kahoot, Slido, OBS

(16:40 – 17:30)




Practical activity

-  Let's play !

E-Learning



the use of technology to access educational paths outside a traditional classroom.

-  **Total Flexibility:** We decide when and where to study.
-  **Accessibility and Personalization:** We access the best courses in the world and learn at our own pace.
-  **Efficiency:** It reduces costs

The Engine of E-learning: LMS and SCORM

 **How it works:** two key elements power e-learning

LMS

the platform, a "virtual school" hosting courses



Learning management system

SCORM

universal standard making content compatible everywhere



The Modes: Synchronous vs. Asynchronous

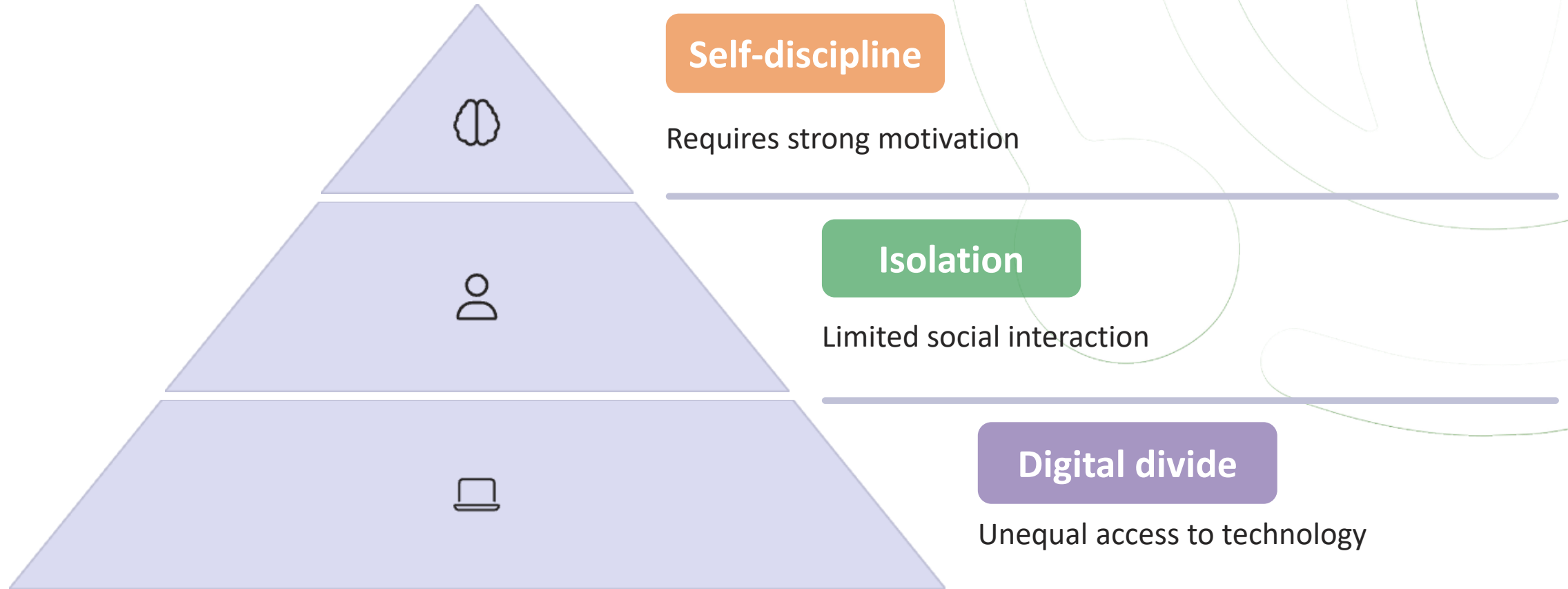
Asynchronous

- 🌐 Self-paced learning
- 🌐 Follow recorded lessons anytime
- 🌐 Maximum flexibility

Synchronous

- 🌐 Live online learning
- 🌐 Real-time interaction with instructor
- 🌐 Participation in polls and discussions

The Challenges



The Solution: Edutainment



Gamification

Points, badges, leaderboards



Storytelling

Narratives make lessons memorable



Interactive Videos

Choices influence learning path



The Future

AI Tutors

Personalised learning assistants



VR/AR

Immersive learning experiences



Microlearning

Bite-sized modules for busy lives

E-learning: a recap



Rich Ecosystem

More than just online courses



Varied Approaches

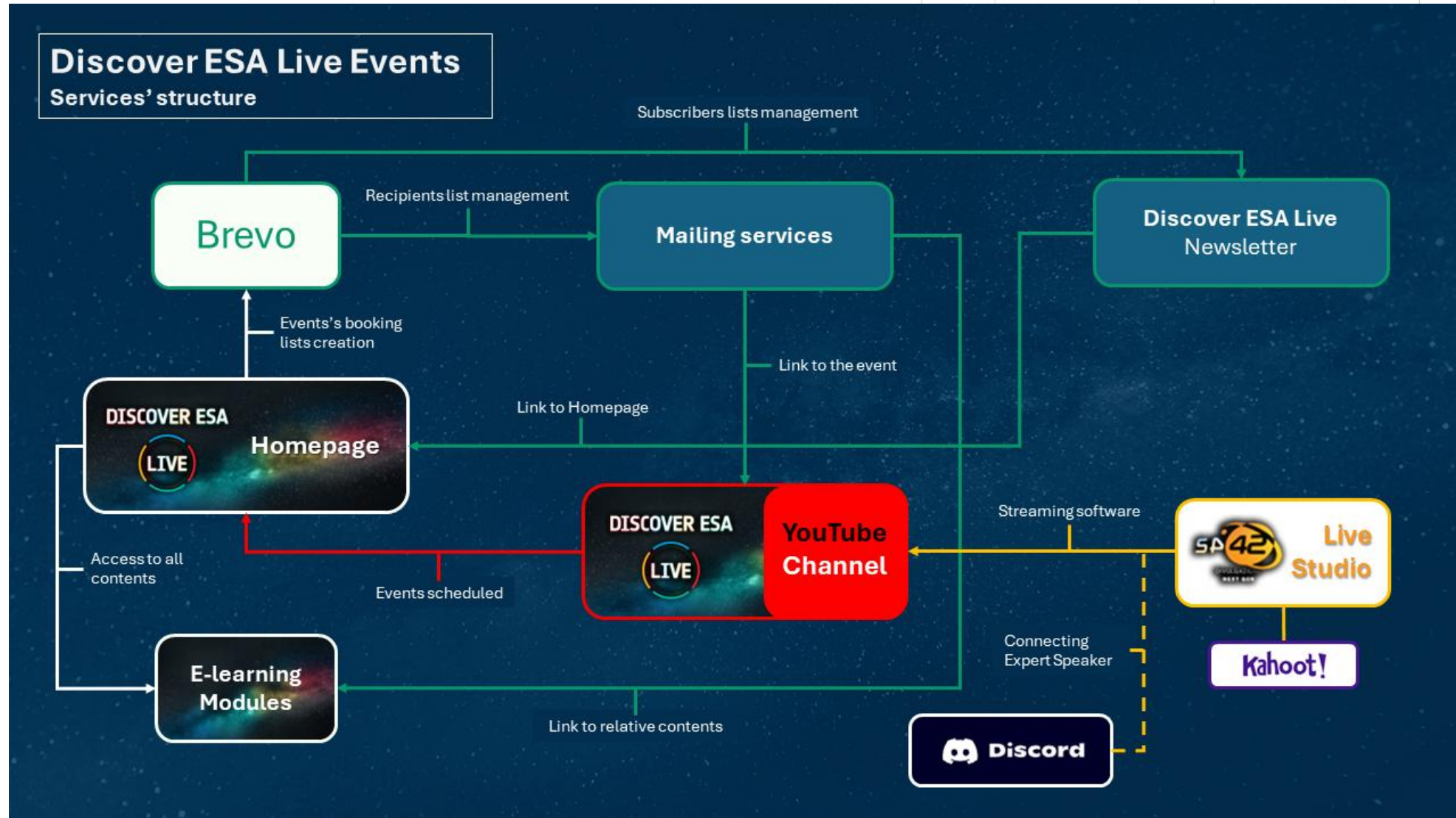
From LMS platforms to interactive webinars



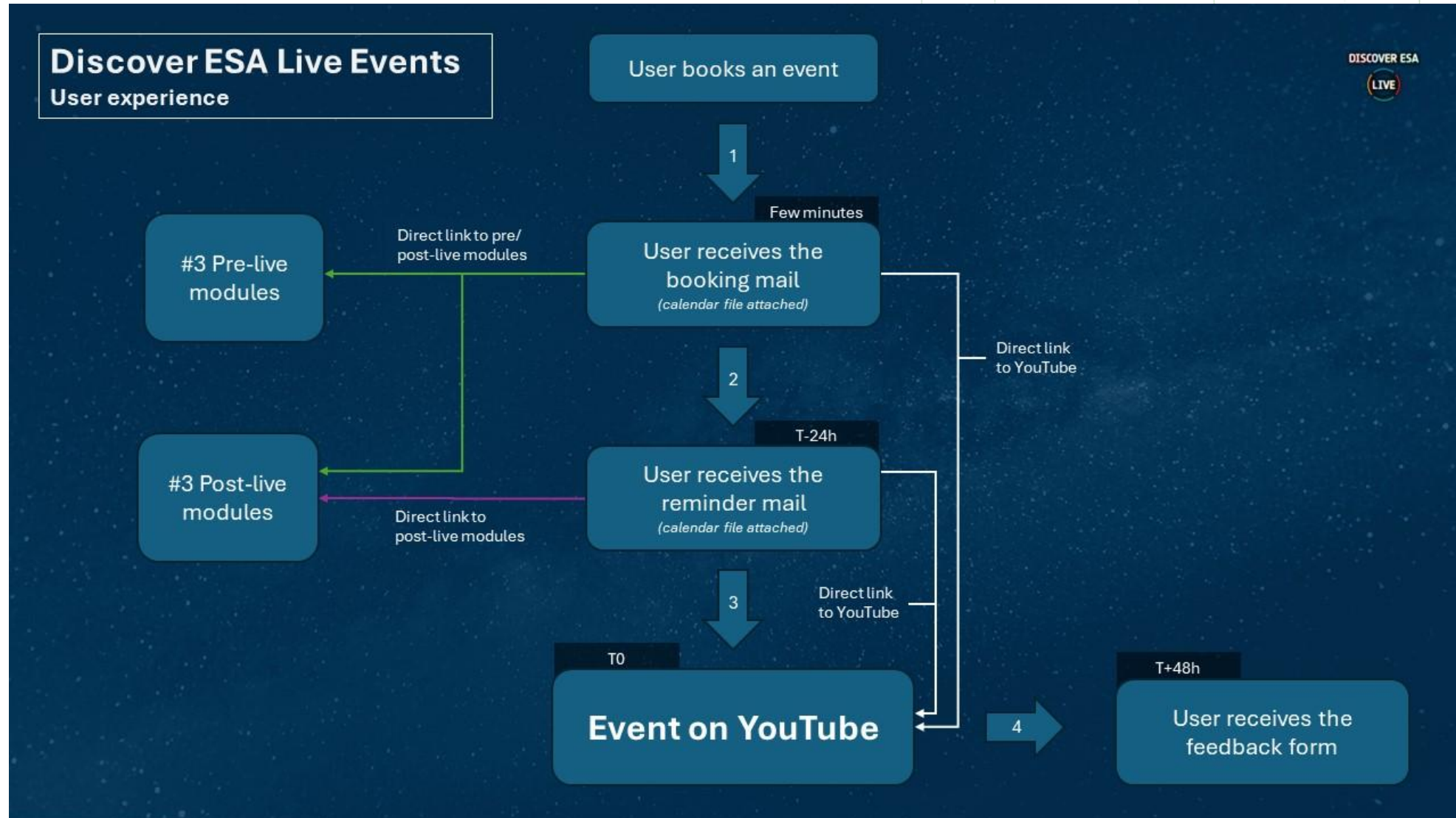
Continuous Learning

Powerful engine for lifelong education

An Example: Discover ESA Live (1)



An Example: Discover ESA Live (2)



Tools for Interactive Events

Kahoot!

slido

Kahoot: a little overview



- 🌐 Very popular
- 🌐 Several types of quizzes
- 🌐 Graphical layout
- 🌐 Easy to join
- 🌐 Friendly UI

Kahoot!




- 🌐 only web application
- 🌐 Video embedded from external platform (ie. YouTube)
- 🌐 Expensive for team (multiple licenses)

Kahoot: Application and backend



Slido: a little overview




 Integration with PowerPoint, Google Slides, Teams, Zoom, Webex


 Easy to join

 Friendly UI



 Limited layout customization (premium feature)

 Smaller quiz type

 The extension is to be installed on the PC you're going to use.

A streaming tool: OBS

What is OBS Studio?

What is it?

Free and open-source software for video recording and live streaming.

What's its purpose?

Captures screen, webcam, and audio, combining them to create professional broadcasts.

Who is it for?

Gamers, streamers, educators, content creators, businesses for webinars, and anyone who wants to record or broadcast high-quality video.

Versatile

Supports multiple video and audio sources.

Customizable

Scenes, transitions, audio, and video filters.

Cross-platform

Available for Windows, macOS, and Linux.

Key Features & Why Use It

Advanced Audio Mixer

Detailed control over each audio source with filters (noise suppression, gain, compression).

Scenes & Sources

Easily create and switch between different scenes (e.g., "Intro," "Gameplay," "Full Screen") with customizable transitions.


Recording & Streaming

Record high-quality videos locally or stream directly to platforms like Twitch, YouTube, Facebook Live.

Extensions & Plugins

Large community and availability of plugins to add extra functionalities.

An Example: Discover ESA Live setup



OBS 30.0.0 - Profilo: regia_per_dirette_live - Scene: Discover_ESA_Live

File Modifica Visualizza Pannelli Profilo Collezione scene Strumenti Aiuto

Transizion...
Transizione_D
+ -

pin: 8593186 DISCOVER ESA space42.eu/chat

Nessuna fonte selezionata Proprietà Filtri

Scene
Countdown
Live
scena_kahoot
scena_kahoot_ext
scena_kahoot_Sim
Question Time

Mixer audio
audio_ppt -6.0 dB
microfono1 -3.6 dB
microfono2 -7.9 dB

Controlli
Termina la diretta
Avvia la registrazione
Ferma la fotocamera virtuale
Modalità studio
Impostazioni
Esci

Fotogrammi persi 0 (0.0%) 10213 kbps 00:15:18 00:00:00 CPU: 7.2% 30.00 / 30.00 FPS
10:06
16/06/2025

Let's play

Outline a script for an interactive event about your project

WHERE ?

ie. location for on stage event, platform for online event.

WHO ?

ie. to whom the event is addressed (students, general public), age range, etc

HOW ?




ie. instrument(s) used, types of interaction, technical setup, etc

WHEN ?

ie. when it takes place, how long it lasts, the first in a series of events, etc.

Practical activity



-  **30 minutes** from now
-  You will present a **quick overview** of the event
-  You will simulate **the first 3 minutes** of the event



THANKS!

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