

# STAGE: LTTA Workshop 3

## Visualising Science: Crafting Compelling Infographics for the general audience

Groningen - Netherlands  
Tuesday 16th Jan. 2024 - 14:00 - 14:45



CARDET







# **Our Learning Objective:**

To familiarise learners with the fundamental principles governing the design of compelling infographics intended to effectively communicate scientific concepts to a non-specialist audience.

# The importance of effective science communication

To increase appreciation for science as a useful way of understanding and navigating the modern world.

To increase knowledge and understanding of the science related to a specific issue.

To influence people's opinions, behaviour and policy preferences.

To engage with diverse groups so that their perspectives about science related to important issues can be considered in seeking solutions to societal problems that affect everyone.

# Infographics: a robust communication medium

An infographic is a **visual representation** of information, designed to convey **complex data** or concepts in a **clear** and **concise** manner.

It combines **text, images,** and **graphical elements** to present information in a visually engaging format.

Infographics are effective tools for **simplifying complex ideas**, making data more accessible, and enhancing audience understanding.

They are commonly used in various fields, such as science, education, and journalism, to **communicate information efficiently** and **capture attention**.

The goal of an infographic is to **facilitate quick comprehension** and **retention of information** through a **visually appealing** and **organized design**.

# 50 YEARS OF SPACEWALKING

Extravehicular activity (EVA) is any activity done by an astronaut outside a spacecraft beyond the Earth's appreciable atmosphere



## Gemini

1961-1966

Orbital capabilities demonstration

**9**

Total number of spacewalks outside Gemini capsules

Gemini suit was designed to develop spacewalk techniques / technologies

## International Space Station

1998-Present

**184**

Total number of spacewalks outside the ISS

ISS suit was redesigned for increased mobility



## Apollo

1961-1972

Lunar surface exploration

**21**

Total number of spacewalks on the surface of the moon

**160+**

Hours spent by astronauts exploring the surface of the moon



## Hubble

1990-Present

**1 MILLION**

Number of observations made by Hubble

**166**

Hours spent during EVAs servicing Hubble



## Deep Space

By exploring an asteroid, we will be able to test a number of new capabilities needed for future human deep space expeditions, including to Mars

## Orion

2014

**4:24**

Time of mission duration of first flight test in 2014



## PLSS

Advanced Life Support Development

**30+**

First new design of a life support system for an EVA suit in more than 30 years



## Space Shuttle

1972-2011

**82**

Total number of spacewalks outside of Shuttle airlocks

**8:56**

Time of longest recorded EVA, performed by Jim Voss and Susan Helms in 2001



## Mars

Human exploration of Mars will require innovative design solutions for EVA systems to protect the crew



## Skylab

1973-1979

EVA service maintenance operations

**10**

Total number of spacewalks outside of Skylab



# Understanding your audience

Primary School  
Students

Secondary School  
Students

University  
Students

General non-expert  
public

# Group Discussion: Understanding your audience



**Identify key characteristics of your audience** ought to be taken into account while designing an infographic



# Essential Design Elements of your Infographics

Content & Language  
Elements

Graphic Design  
Elements

Interactive  
Elements

Communication Strategy  
Elements

# Essential Design Elements:



**Study closely the Resource & Clarification Section of the Hands-on Activity Template**

# Essential Design Elements in practice



**Engaging with Hands on Activity 1  
in four sub-groups**



# Q&A Session

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