

Annexe A. Space Awareness Generic Outcomes – full version

This document describes the over-arching intended outcomes for the Space Awareness project. They have been built on the widely used Generic Learning Outcomes framework¹. Note that not all outcomes will be appropriate to all participants or all resources – these general outcomes have been prioritised and narrowed down when considering individual activities.

‘Participants’ refers to the people using Space Awareness resources which could include teachers and other educators, students and members of the public. **Outcomes only relevant to teachers are shown in blue.**

***Enjoyment, inspiration and creativity* = MAJOR PRIORITY CATEGORY**

Participants will:

Priority outcomes

- find Space Awareness activities interesting
- enjoy learning about space
- feel inspired by space science
- feel positive about space science and (for some individuals) aspire to space science careers

***Attitudes and values* = MAJOR PRIORITY CATEGORY**

Participants will:

Priority outcomes

- value the diverse contributions of many different cultures to space science
- value the contributions made by both women and men to space science
- value trans-national European & Global citizenship
- appreciate that space science contributes to everyday life e.g. the uses of satellites and also technologies that were first used in space but are now in standard use
- appreciate that school science is relevant to current space science

Additional outcomes

- appreciate that people who work in space science are ‘real people’

Knowledge and understanding

Participants will learn:

Priority outcomes

- highlights of space science (Our Wonderful Universe, Our Fragile Planet, Navigation Through the Ages)
- **that space science can be used for teaching in many disciplines including cross-disciplinary contexts and non-science subjects**
- understand space science career opportunities are diverse, rewarding and highly accessible (particularly to girls and ethnic minorities).

¹ <http://www.inspiringlearningforall.gov.uk/toolstemplates/genericlearning/>

- space science needs an interdisciplinary approach with contributions from engineers, a range of scientists as well as those working in other disciplines
- space science is a European/global endeavour

Additional outcomes

- career opportunities in space science and technology at all levels
- relevant pathways to these career opportunities
- how space science is done using the scientific method
 - space science is not a fixed body of facts or topics but a process that builds on contributions made by scientists over time
 - new discoveries are being made continuously through scientific inquiry and sometimes these disprove previous theories

Action, behaviour and progression

Participants will:

Priority outcomes

- access and use EUSPACE activities confidently
- want to learn more about space science
- choose, or consider choosing, or **encourage others**, to study and pursue careers in space science and engineering or science and engineering more widely, especially girls and ethnic minorities.

Additional outcomes

- share their understanding of space science and technology with learners, peers, family and/or their community

Skills

Participants will:

Priority outcomes

- learn how to carry out scientific or technical activities themselves
- develop inquiry-based skills for **teaching/learning** about space science
- learn how to use IT to **teach/learn** about space science
- **learn how to be more inclusive while teaching**

Additional outcomes

- develop skills used by space scientists (outlined in D2.1)



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