

spaceEU Self-assessment tool

Post-Implementation Survey

Adaptation of this Tool

This survey can be used as a self-assessment tool in the framework of different trainings and can be adapted based on the specifications of focus group, context and needs of the user.

Introduction (to be adapted)

This survey is developed to address in-/pre-service teachers who attended trainings organised by one of the Teacher Training Institutes (TTIs) within the spaceEU project. This survey is designed to find out more about how space-related resources can be used in teaching to spark interest in STEAM* education and careers among young people in Europe. This survey should take about 5 minutes to complete. All feedback is completely anonymous.

About spaceEU

[spaceEU](#) is a European-funded project that fosters a young, creative and inclusive European space community. It implements an exciting space outreach and education programme to spark the interest of young people in STEAM, and to encourage them to consider space-related careers. The project inspires and broadens young minds, develops a sense of European and global citizenship, and through our shared human relationship with space, fosters long-term partnerships between people from different countries and cultural backgrounds.

About EUN

Within the spaceEU project, [European Schoolnet](#) (EUN) is coordinating the activities related to educators continuing professional development. EUN is the network of 34 European Ministries of Education, based in Brussels, which aims to bring innovation in teaching and learning to its key stakeholders: Ministries of Education, schools, teachers, researchers, and industry partners.

** STEAM stands for Science (Physics, Chemistry, Biology, Geology), Technology, Engineering, Arts and Mathematics subjects.*



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Data Protection Disclaimer (Optional, to be adapted)**Information on data collection and processing:**

The data collected through this survey will be used for research purposes only, strictly in line with the objectives defined in the survey introduction. This information will be used only according to the purposes declared and will be deleted a.

Please indicate whether you understand and agree with the information provided above and that you are willing to participate in this survey:

1. Yes, I understand, agree, and am willing to participate in this survey.

I. Self-generated Identification Code (Optional)

The following 6-digit code will allow us to match your answers from the first and the second survey (pre- and post-implementation) and will keep your data anonymous at the same time. No identification will be possible from our side.

Just like in the first survey, please generate your personal code from following three questions:

- What day of the month is your birthday? (= two digits)
- What are the first two letters of your mother's first name? (= two letters)
- What is your father's birth year? (= two digits)

Example: if your birthday is on 8 May, your mother's first name is Julia and your father was born in 1950, then your code would be 08ju50.

(enter code)

Have you completed the spaceEU Self-Assessment Tool pre-implementation survey prior to attending the training?

(yes/no)

II. About the Training

2. Where did the training that you attended take place? [dropdown list]
3. How was the training held? [multiple choice]
 - Face-to-face
 - Online

III. Professional Background

4. Are you a pre-service or an in-service teacher? [multiple choice]
 - Pre-service
 - In-service
 - Other (please specify)
5. Do you mainly teach (or plan to teach) to primary or secondary students?
[checkbox]

- Primary (ages 5-11)
- Secondary school - lower (ages 12-14)
- Secondary school - upper (ages 15-19)
- Other (please specify)

6. What is your professional background? (Tick all that apply) [checkboxes]

- Primary school teacher
- Secondary school teacher
- Kindergarten teacher
- ICT¹ coordinator
- Headteacher
- School counsellor
- Teacher Trainer
- Policy maker
- Researcher
- Other (please specify)

7. How long have you been working in the educational field? [multiple choice]

- Less than 1 year
- 3-6 years
- 6-10 years
- 11-15 years
- 16 to 20 years
- More than 20 years
- Not applicable

8. Which of the following subjects do/will you teach? (Tick all that apply)
[checkbox]

- Art and Design
- Astronomy
- Biology
- Chemistry
- Earth Sciences
- Engineering
- Geography
- History
- Humanities

¹ ICT stands for Information and Communication Technologies.

- Informatics
 - Mathematics
 - Physics
 - Social sciences
 - Technology
 - Other (please specify)
9. On average, how often do you attend a professional training for your job?
[multiple choice]
- Less than once a year
 - Once a year
 - Every 6 months
 - Every 3 months
 - Every month
 - More than once a month
 - Not applicable
10. In the last five years, have you received training in any of the following areas?
(Tick all that apply) [Checkboxes]
- Supporting diversity in your classroom(s)
 - Encouraging gender balance in your classroom(s)
 - Using ICT tools in your classroom(s)
 - Using inquiry-based approaches in teaching science
 - Any other relevant online training
 - Improving classroom experience or engagement

IV. Teaching Efficacy

11. To what extent do you agree or disagree with the following statements?
[5-point Likert: Strongly Agree, Agree, Disagree, Strongly Disagree, Not applicable / No opinion]

Focus: Efficacy in teaching space-related topics

- I am *not* equipped to teach my students about space science.
- I feel supported by my school to teach about space in my classrooms.
- I have *limited* knowledge of how to teach about space science in my classroom.

- The goal for teaching space science is to transfer *factual* knowledge to my students.
- Space-related topics are given importance in my education curriculum.

12. To what extent do you agree or disagree with the following statements?
[5-point Likert: Strongly Agree, Agree, Disagree, Strongly Disagree, Not applicable / No opinion]

Focus: Efficacy in ICT

- I am *lacking* skills I need for using different technologies to teach science.
- I can use technology to develop relevant materials for my own lessons on science.
- I can share my problems of teaching science with other colleagues.
- Technologies are available that help me teach science content.
- There is a *lack* of appropriate instructional materials available to support my teaching of space science.

13. To what extent do you agree or disagree with the following statements?
[5-point Likert scale: Strongly Agree, Agree, Disagree, Strongly Disagree, Not applicable / No opinion]

Focus: Efficacy in Inquiry based teaching

- I have experience teaching my students how to plan investigations.
- I am *uncomfortable* with delving outside the limits of my own knowledge in the classroom.
- My teaching is *more* effective when students are doing the same activity at the same time.
- I am confident about how to use inquiry to teach space science.
- I am equipped to use inquiry to help achieve the aims of my curriculum.

Considering your current confidence with aspects of inquiry-based teaching...

14. Do you feel confident in the following aspects of inquiry-based teaching?
[Matrix; Response options: Yes, No, Unsure]

- Diagnosing scientific problems
- Critiquing experiments
- Distinguishing alternatives
- Planning investigations
- Researching conjectures
- Searching for information
- Constructing physical models
- Debating with peers
- Forming coherent arguments

15. Did the training contribute to any of these views? (multiple choice)

- Yes
- No
- Unsure / I don't remember

Considering your current ability to take the following into account in your teaching approach...

16. Do you feel capable of taking the following into account in your teaching approach? [Matrix; Response options: Yes, No, Unsure]

- Student diversity
- Gender balance

17. Did the training contribute to any of these views? (multiple choice)

- Yes
- No
- Unsure / I don't remember

Considering your current difficulty with sharing different space careers with the following student groups...

18. Do you feel capable of sharing different space careers with the following student groups? [Matrix; Response options: Yes, No, Unsure]

- Girls
- Boys
- All students
- Students with diverse ethnic backgrounds
- Students from religious minorities

19. Did the training contribute to any of these views? (multiple choice)

- Yes
- No
- Unsure / I don't remember

V. Satisfaction of Curriculum Needs

20. To what extent do you agree or disagree with the following statements?

[5-point Likert scale: Strongly Agree, Agree, Disagree, Strongly Disagree, Not applicable / No opinion]

- 'The delivery of the training was appropriate for my learning needs.'
- 'The content of the training sufficiently addressed my curriculum needs.'
- 'I feel capable of explaining space science concepts from the training to students who are confused.'
- 'I trust the scientific information in the training I attended.'
- 'The scientific explanations in the training were confusing.'

21. Were explanations in the training easy to understand? [multiple choice]

- Yes
- No
- Unsure / I don't remember

Considering your current capability of using education materials provided during the training to encourage students...

22. In the following topics, please indicate if you feel capable of using education materials provided during the training to encourage students to... [Matrix; Response options (Yes, No, Unsure)]

- Explore space topics on their own.
- Form their own ideas about scientific information.
- Discuss space topics with family.
- Discuss space topics with peers.
- Imagine the possibility of space exploration.
- Imagine the possibility of careers in the space sector.
- Share the relevance of space to their daily lives with family.
- Read books about space with family.
- Watch TV shows about space with family.
- Attend events about space in their local community.

23. Did the training contribute to any of these views? [Radio box]

- Yes
- No
- Unsure / I don't know

24. Please state below the likelihood of the following statements:

	Very unlikely	Unlikely	Likely	Very likely	Does not apply to me
I will use the topic "space" in my teaching					
I will use Space Awareness resources					
I will use ESA resources					
I will use Scientix resources					

25. What kind of support or information would you need to better promote STEM education and careers with the topic "space"? [open-ended question]