

Call for production of primary-level educational material



FuseNet
The European Fusion Education Network
ASSOCIATION

1. Introduction

FuseNet is an independent legal entity that was founded in December 2010 to provide a platform for the coordination of European fusion education activities, the initiation, development and implementation of new EU-wide actions, and the exchange and dissemination of fusion education information. The association is open to all European organisations that are active in the field of fusion education and research.

FuseNet believes that everyone in Europe should have access to fusion education, appropriate for their role in society. However, research shows that while most children have a positive attitude to science by age 10, interest wanes over the ensuing 4 years¹. While interest in science, technology, engineering and mathematics (STEM) by no means guarantee a career in nuclear fusion, they are a vital precursor.

FuseNet wants to develop several educational units that improve science education for children at the end of their primary school careers (age 10–12) to nourish their budding interest in STEM. The concrete scope of this call is the development of three one-hour educational units based on the following topics:

- A. What makes human beings unique? Dreaming of the future!**
- B. We can make our dreams reality.**
- C. Our dreams of the 21st century.**

“Dreaming” is a critical part of science—one that should not be overlooked. Creativity and imagination play a vital role in the development of science. Particularly so, when the main objectives of science is to shape (read: dream of) the future. Scientific knowledge and understanding spring from creative, curiosity-driven research where often serendipity provides the final push. This has proved to be the only road to new paradigms and true innovation.

2. Deliverables

This call is for three one-hour educational units in the English language to be delivered by February 2022. In terms of physical materials, the deliverables per unit should at least include:

1. materials—a reader or online app or other—to be used by the children;
2. an accompanying teacher manual.

In terms of content of the three educational units, the following is required.

3. Unit A, “What makes human beings unique? Dreaming of the future”, should concern the development of an educational unit to address the key elements that make human beings so unique in nature: e.g. verbal communication, capability to build complex instruments and tools, ability to imagine and shape the future making use of the scientific-technological alliance.

¹ DeWitt, J., Archer, L. & Osborne, J. (2014) ‘Science-related Aspirations Across the Primary–Secondary Divide: Evidence from two surveys in England’, *International Journal of Science Education*, 36(10), 1609–1629. Available at: <https://doi.org/10.1080/09500693.2013.871659> (Accessed 2 July 2021)

4. Unit B, "We can make our dreams reality", should concern the development of an educational unit to address the achievements of science in the 20th century. Topics include e.g. that the environment is fragile, the energy of stars, flying as the gate in the realm of creativity and fantasy to go where no man has gone before to overcome human limits.
5. Unit C, "Our dreams in the 21st century", should concern the development of an educational unit to address the scientific dreams in the 21st century. Topics include e.g. sustainable development, climate change and energy sources, health research and life science, controlling the energy that moves the universe (nuclear fusion). **NB. This unit needs to discuss nuclear fusion.**

3. Type of support

A maximum budget of €5000 (including VAT) is available to the successful applicant for this call.

4. Application procedure

1. Prospective applicants can send in their applications to feo@fusenet.eu.
2. Applications are evaluated by the WP_PRI work party on a running basis.
3. FuseNet draws up a purchase order based on the application document, which describes the deliverables.
4. Payment in full follows after all deliverables have been received by FuseNet.

5. Contents of the application

Applications are typically 2 pages and must at least include:

1. a motivation why the applicant is interested in developing these materials;
2. a draft of the structure of the three educational units (1/2 page per unit), including:
 - a. proposed learning goals;
 - b. the narrative of the educational unit;
 - c. the type of material that is envisaged (e.g. reader, app, etc.);
3. a top-level budget breakdown per educational unit that distinguishes between goods and services, and man hours.