

Module 2: REASONING, ARGUMENTATION & CRITICAL THINKING

OVERVIEW AND AIM

- This module aims to enhance future teachers' competences in reasoning, argumentation and critical thinking through the use of media reports on environmental socio-scientific issues (SSIs).
- The module provides resources and strategies to help prospective teachers to grasp underlying ideas and to create effective learning environments for reasoning, argumentation and critical thinking.

TEACHING AND LEARNING DIMENSIONS

At the end of this module future teachers will get an overview on how to use media reports in their classroom practices. In particular, they will

- experience in analyzing a text from everyday life by identifying the claim, counter claim and the evidence that supports them.
- aware that scientific knowledge is characterized by proper scientific explanations or arguments involving the coordination of the data and the claim to support or refute an explanatory conclusion, model or prediction.
- aware that they should be able to explain, in an informed manner, the grounds on which they agree or disagree with the viewpoints presented in a news article.
- consider the power but also the limitation of science in respect of challenging SSIs.
- aware that citizens make their decisions based on their knowledge, beliefs, social values, worldviews, as well as based on the understanding about science and its nature.
- have the knowledge and skills to evaluate new information by comparing it to what they already know and to information from other sources.

NEWS ARTICLE



WORKSHEETS

First read the news article and then answer the following questions.

<u>The Main Claim</u>	<u>Evidence that supports the claim (Data)</u>
<u>Counter Claim</u>	<u>Evidence that supports the counter claim (Data)</u>

Insecticide

- If you were a Swiss citizen, which option would you chose at the referendum?
- Using only the news article, make a list of arguments against your decision.
- Using only the news article, make a list of arguments for your decision.
- How would you convince someone who are against your argument?