

Suggestions to Teachers (Eijkman and Beri-Beri)

Expected results

After the lesson, the students are expected to:

1. Locate the way of design and the process of the Eijkman's scientific researches as well as his contribution to the development of science, based on some of his experiments.
2. Write the reasons for: a) the appearance of avitaminosis in the human body, only from the absence of the vitamins C and B and b) the mediterranean diet being an adequate food for the avoidance of the avitaminosis.
3. Demonstrate how the false explanation of a successful scientific experiment, can lead to the false conclusions.
4. Write a text in order to demonstrate the role of the Eijkman's scientific background for the false explanation of his research that was conducted in Indonesia.
5. Describe the characteristics of science and the ways it develops, according to the McComas' list, based on the narration as well the lesson activities.

About the activities of students

The proposed students' activities are indicative and they aim at the accomplishment of the above expected outcomes. Moreover, the teacher may choose some of them for the teaching process in relation to its aims, the needs of students and the available time. Finally, she/he can create her/his own activities.

About the emergence of the characteristics of science in the narrated story, these characteristics are quoted in the website, comprehensively (in classification of the stories by NOS).

About the locating of the characteristics of Nature of Science in the proposed activities, indicatively, we can quote the following:

A) The activity 2 concerns the characteristics of Nature of Science: a) "Science demands and relies on empirical evidence", b) "Science has a subjective element" and c) "Science is a highly creative endeavor".

B) The activity 3 concerns the characteristic of Nature of Science: "Scientific knowledge is tentative but durable".

C) The activity 4 concerns the characteristic of Nature of Science, which are quoted in the above activities 2 and 3.

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