

Apichaya Suwanpracha 2014: Grade 12 Students' Views about Pseudoscience in Human Body System. Master of Education (Science Education), Major Field: Science Education, Department of Education. Thesis Advisor: Assistant Professor Akarat Tanak, Ph.D. 99 pages.

The purpose of this study was to survey the grade 12 students' views of pseudoscience on the topic of human body system. The participants of this study were seventy three grade 12 students from three schools in Bangkok selected by purposive sampling. An open-ended questionnaire consisted of ten questions which included three questions about science and seven questions about pseudoscience. The questions were two aspects asked in each item; (1) Understandings of pseudoscience and (2) Students' views about pseudoscience. Data on students' understandings of pseudoscience was analyzed and compare to the criteria of 60% or students' answers were correct more than six questions. Data about students' views about pseudoscience was categorized into three groups as either science; pseudoscience and not identified.

The findings indicated that in aspect of understandings of pseudoscience, there were three students whose scores met criteria of 60%. The majority of students tended to make the correct answers in science questions which they could relate to scientific concept for instance, Yakult related to excretory system, digestive system, microorganism bacteria. In pseudoscience questions, the majority of students tended to make the wrong answers that pseudoscience was science especially in Alkaline water, Glutathione and Bird's nest respectively. However, the most correct answers of pseudoscience were do not eat an eggs after operation, Liver Detoxification respectively. In aspect of students' views about pseudoscience, the majority of students (42.70%) had scientific ideas about advertisement or massage of body system because they believed that it had scientific inquiry, scientific process and scientific knowledge which relied on empirical evidence in its advertisement. Some of them used their scientific ideas for judgment the advertisement whether it was pseudoscience or science. The students (36.30%) used pseudoscience for judgment whether it was pseudoscience or science while the students' answers (21.00%) were not identified. The implication of this study is to guide science teacher to integrate pseudoscience and nature of science aspect into teaching practice in order to reduce students' views about pseudoscience.

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Student's signature

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Thesis Advisor's signature