RECENT DISSERTATIONS

MATS LUNDSTRÖM, 2011

Decision-making in health issues: Teenagers' use of science and other discourses

Malmö University/Lund University, Sweden.

Malmö Studies in Educational Sciences No. 64.

Studies in Science and Technology Education No. 49.

Abstract

The purpose of this thesis was to develop knowledge about young individuals' reasoning and how they justify their standpoints concerning trustworthiness and decision-making in issues connected to health where available information is contradictory or uncertain. In the first step almost 300 students in Swedish upper secondary school answered a questionnaire, which had different types of questions about pseudoscience and science. The results demonstrated large differences in acceptance between the different pseudoscientific statements. There was no apparent relationship between the students' pseudoscientific beliefs and their factual knowledge about the human body. However, the analysis revealed that students who have taken three or more science courses have relatively lower faith to pseudoscientific ideas.

In the second step, students from the science programme were observed during two lessons, while discussing different explanation models in health. The students discussed two different cases which contained a question and then two proposed answers that differed a great deal from each other with respect to scientific level. The results demonstrated that the students used four different types of epistemological resources; relativistic, normative, authoritative and scientific, when supporting their arguments about trustworthiness. No student clearly used resources from pseudoscience. The use of scientific epistemological resources was rare. The study also demonstrated that students were able to use different epistemological resources in different situations.

In the third step, seven teenagers participated in a video diary study and an individual interview. Four girls and three boys documented their decision-making about the new influenza and vaccination against it. The different statements and answers were categorized using discourse psychology. The categorized repertoires were of two main types; experienced emphasis and important actors. The first category comprised risk, solidarity and knowledge. In the second family and friends, media, school and society were included. The school repertoire was seldom used by the students, indicating that school and science education are not available interpretative repertoires in this context. The results demonstrate the difficulties for the teenagers to use science knowledge, in the format of correct facts or concepts. This scientific discourse seems to be important when teenagers reason, make decisions and justifies their decisions in health issues. The results also raise methodological questions concerning how to investigate scientific literacy. Video diaries is suggested as an appropriate data collection tool to investigate scientific literacy in an out-of-school context. With the use of video diaries, the possibilities to investigate decision-making go beyond the classroom.

Language: *English with summary in Swedish*
ISBN: *978-91-86295-15-8*
Contact: *mats.lundstrom@mah.se*
Download: *<http://forskning.mah.se/id/lumali>*