

6 - Nature of Science: History, Philosophy and Sociology of Science | Empirical

SP - (15792) - SCIENCE TEACHERS' VIEWS AND ENACTMENTS OF SUMMATIVE ASSESSMENT OF NATURE OF SCIENCE IN THE CLASSROOM

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Short Abstract

Nature of science (NOS) has been included as a key component of K-12 science education in recent curriculum reforms. Although research suggests that NOS should be explicitly set as a learning goal by the teacher to be effectively learnt, there is little evidence as to how NOS learning could be assessed by teachers at the level of the classroom. This study draws upon the theories in NOS instruction and classroom assessment to investigate three science teachers' perceptions of and practices in the classroom assessment of NOS. Interviews and classroom videos were collected over a semester for this in-depth multiple case study. We illustrate the variation in the three teachers' views and enactments of NOS assessment, and how these interacted with the nature of NOS knowledge, the specific assessment tasks being used, and the accountability pressure in the school. From the findings, we suggest that more efforts are needed to support teachers' NOS assessment intentions and develop their skills for high-quality summative assessment of NOS in the classroom.