

Scaffolding language learners in secondary science classroom - An Observation Study

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Abstract

Like many other European societies, Norway has faced significant demographic change over the past decades. One major change has been the increasing number of students speaking languages other than the national ones. This has naturally had its implications on the field of education. Recent research evidence has shown that Norwegian students with an immigrant background are significantly lagging behind students that don't have an immigrant background. This can be regarded as challenging because it has negative trajectories considering students' future prospects. High-level teacher preparation has been highlighted as an important factor supporting these societal changes, as well as a solid understanding in how to put these competencies into practice. This paper takes a closer look at the teaching practices in science classrooms. The aim of this case study is to describe how teachers support their language learning students in developing their scientific literacy skills in Norwegian language. This study was conducted with the help of video observations in one classroom and two groups. Six head-mounted action cameras were distributed among the students and one camera was recording the classroom with audio gathered from a microphone on the teacher. The data was analysed by qualitative content analysis. The results indicated that teachers scaffold their students' scientific literacy development by a variety of *metacognitive*, *cognitive* and *social/affective instructional strategies*. However, a lack of clear strategy when it comes to implementing effective instructional scaffolds for language learners was observed. The results leave much space for improvement when it comes to teacher's ability to address language learners' specific needs in the science classroom.

Keywords: *Scientific literacy, Language learners, Norway, Observation study*