

Indonesian Biology Teachers' Perceptions about Climate Change of Socio-Scientific Issue-Based Biology Instruction

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ABSTRACT

Promoting socio-scientific issue (SSI)-based instruction in Indonesian science classrooms requires competent science teachers. To understand teachers' perceptions about the implementation of SSI-based instruction, a case study involving four biology teachers engaged in a teacher professional development program was conducted. The program consisted of four phases: reflection on teachers' prior teaching experience and background knowledge, 3-day SSI-based teaching workshop, collaborative development and implementation of SSI-based learning in biology, and post-implementation reflections by teachers. Teachers' perceptions were gathered via interviews and written reflections, which were analysed qualitatively with an explanation building mode approach. Findings indicated a positive development along four dimensions: knowledge about SSIs and scientific literacy, the necessity of including SSIs in science instruction, situational factors related to addressing SSIs in class, and teachers' attitude towards teaching SSIs. Further research needs to be conducted in Indonesian contexts to be able to extend the SSI teacher professional development program to different regions.

Kata Kunci: biology teachers, perceptions, knowledge, climate change