**Comparison of two elementary preservice teachers' Science Identity: Experiencing lectures on the 'Nature of science'**

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**Abstract**

 *As mentioned in many previous studies, science identity is formed and changed by various contexts and factors. The purpose of this study was to explore the process of building science identity through the experience of two elementary school preservice teachers taking a course related to the "nature of science" in university. One of the preservice teache, A, was a student in the science and math track in high school, while the other, B, did not choose math and science courses and was in the liberal arts track. To explore the science identity that the two students were developing, the study had them write nine science-related essays over 15 weeks as part of the "understanding the nature of science" course, and conducted one preliminary interview and one in-depth interview. The results of analyzing the science essays and interview data are as follows. First, both preservice teachers had a positive attitude toward science and were in a state of psychological openness to approaching the nature of science without resistance, through positive experiences with science in their childhood or adolescence, such as fond memories with their parents or experiments and discussions in extracurricular clubs. Second, they had future plans to get even closer to the "nature of science" and apply it to their teaching by expanding scientific concepts through interesting scientific activities in class and emphasizing curiosity and freedom in their teaching methods. Third, their science identity as elementary preservice teachers were developing. In the weekly essays, they had various thoughts about themselves and gave different answers to various science-related topics, allowing the researchers to explore how their science identity were being formed. The various activities related to the "nature of science" in the course provided clues to the development of the preservice teachers' science identity, confirming the research significance.*

**Keywords**

Science Identity, Elementary preservice teacher, the nature of science, Scientific practice