

## DEVELOPING REFLECTIVE THINKING: EFFECTS OF KEEPING REFLECTIVE JOURNALS WITH PRE-SERVICE SCIENCE TEACHERS

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### Abstract

Reflection is an important element of teaching and teachers are expected to guide students in this regard. However, the studies conducted at university level especially with pre-service teachers showed that pre-service teachers' reflection levels are generally low. The aim of this study is to determine effects of writing reflective journals supported with feedbacks in General Chemistry Laboratory (GCL) course on first-year pre-service science teachers' reflection levels. For this cause, 14 first-year pre-service science teachers were trained about reflective thinking and writing reflective journals with a two-hour program. The participants were asked to write reflective journals every week after GCL course. One of the reserachers examined, wrote feedback notes on the journals and hand them back to the participants. The study lasted 8 weeks and 105 reflective journals were written by the pre-service science teachers. The journals are examined by using Moon's (2009) reflective writing categories. The resuts showed that the pre-service science teachers' journals generally fit in "reflective journal" level, but rarely included advanced leveled reflections.

**Key Words:** Reflective Thinking, Reflective Journal, Pre-Service Science Teacher, General Chemistry Laboratory.