

STUDY ON DEVELOPING THE SCIENCE LITERACY ORIENTED MATERIAL FOR BASIC EDUCATION

ABSTRACT

A study was conducted to empower potential writers includes basic education teacher to plan and write science literacy-oriented material, focused on preparing Guidance in Arranging Science Literacy-Oriented Material for Basic Education. Science Literacy taken from Latin words *litteratus* (which means marked by letters, literate, or educated), and *scientia* (which means having knowledge). Based on today's phenomenon that teacher's comprehension on science study upon the establishment of student's science literacy, has to be improve, and based on the report of *Trend of International Mathematics and Science Study (TIMSS)* in 2007 on mathematics ability, a study by *Programme for International Student Assessment (PISA)* in 2006 on scientific literacy, and study by *PILRS (Programme of International Reading Literacy Study)* on reading ability. In Indonesia student's abilities based on those three international study have to be elevated. The education development and engineering. Has been chosen with the involvement of teachers considered representing sample characteristic. It has been used eight data collecting instruments for teacher comprehension on the student's science literacy test, questionnaire, observation sheet, guideline interview guidance sheet, the guidance on arranging material evaluation sheet, and for validation sheet. Based on the phenomenon, theoretical & synthetic study, eleven references have been decided as guidance in arranging science literacy-oriented material for basic education: 1) the advisability of the material content, 2) the purpose of arranging material, 3) the concept clarity, 4) the curriculum compatibility, 5) attracts student's interest, 6) develops motivation and stimulates student's activity, 7) picture presentation, 8) communicative, logic and systematic, 9) contextual, 10) respects differences, and 11) placing values. Guidance used by teacher, and material arranged by teacher empirically examined through a study process and validated by expert (using Cochran Q test) has shown significant, was followed up by perfecting. The result of both tests shows that the guidance in arranging science literacy-oriented material for basic education is ready to use by potential writers and education teachers.