**DEVELOPMENT OF BASIC CHEMISTRY TEXTBOOK SUPPORT BY AUGMENTED REALITY AND ITS EFFEC TO CONCEPTUAL UNDERSTANDING AND SPATIAL ABILITY OF COLLEGE STUDENT**

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ABSTRACT

This research is the first year of the two-year Doctoral Dissertation Research (PDD) funded by DRPM Direktorat Penguatan Riset dan Pengembangan Kemenristekdikti Anggaran Tahun 2019. This first-year research is about Need Assessment and preparation of prototype Basic Chemistry textbooks. The purpose of this research in the first year is to: 1) reveal the perceptions of lecturers and students of Basic Chemistry textbooks support by Augmented Reality technology, 2) describe student learning styles, and 3) validate the prototype of Basic Chemistry textbooks based on standard aspects set of Pusat Perbukuan, there are material, presentation, and language or readability according to experts, lecturers and college students. This research use the Borg & Gall Research and Development (R&D) model with stages 1 to 3 for the first year. The subjects of Need Assessment are lecturers of Chemistry Education study programs and students majoring in Mathematics and Natural Sciences of FKIP Khairun University, Ternate. Data collection techniques used were questionnaires, observations, and interviews supported by field notebooks/logbooks. Data were analyzed qualitatively descriptive.