

**PENGEMBANGAN MODEL PEMBEKALAN KEMAMPUAN
MERANCANG PEMBELAJARAN SESUAI KONTEKS KEJURUAN
BERBASIS *PEDAGOGICAL CONTENT KNOWLEDGE* DAN
COLLABORATIVE LEARNING BAGI CALON GURU KIMIA**

ABSTRAK

Pembekalan kemampuan merancang pembelajaran kimia sesuai konteks kejuruan penting bagi calon guru kimia. Penelitian ini bertujuan untuk menghasilkan dan menguji efektivitas model pembekalan berbasis PCK-CL. Aspek yang dikaji meliputi penguasaan pengetahuan kurikulum dan konten kimia konteks kejuruan, serta tingkat pencapaian kemampuan menganalisis konten kimia konteks kejuruan dan menyusun representasi PCK. Metode penelitian yang digunakan adalah *Research & Development (R&D)*. Prosedur Penelitian meliputi tahap studi pendahuluan, desain, pengembangan, uji coba serta diseminasi dan implementasi. Model pembekalan diterapkan pada perkuliahan Kimia SMK dengan desain *nonequivalen control group*. Penelitian ini menghasilkan model pembekalan berbasis PCK-CL yang dikembangkan menjadi lima tahap pembekalan, yaitu analisis konten kimia, integrasi kurikulum kejuruan dan konten kimia, penguatan konten kimia konteks kejuruan, eksplorasi PCK konteks kejuruan dan pengembangan PCK konteks kejuruan. Sintaks pembelajaran dalam tiap tahap pembekalan meliputi; orientasi, observasi dan eksplorasi, klarifikasi serta elaborasi. Setelah mengikuti pembekalan berbasis PCK-CL, calon guru memiliki kemampuan cukup baik dalam merancang pembelajaran kimia sesuai konteks kejuruan. Namun demikian pembekalan berbasis PCK-CL belum efektif dalam menyiapkan semua kemampuan dasar yang diperlukan dalam merancang pembelajaran kimia. Model yang dikembangkan mampu meningkatkan pengetahuan kurikulum dan konten kimia konteks kejuruan serta membekali kemampuan menganalisis konten kimia sesuai konteks kejuruan dengan baik. Model yang dikembangkan belum mampu membekali dengan optimal kemampuan calon guru untuk menyusun *CoRe* dan *p-PaP-eRs* konteks kejuruan. Hasil lain menunjukkan bahwa efikasi diri calon guru meningkat setelah mengikuti pembekalan dan calon guru memiliki kemampuan kolaborasi yang sangat baik.

Kata kunci: *pedagogical content knowledge*, pembelajaran kolaboratif, kimia konteks kejuruan, merancang pembelajaran kimia, calon guru kimia

DEVELOPMENT OF PROVISION MODELS OF THE ABILITY TO DESIGN CHEMISTRY LEARNING IN VOCATIONAL CONTEXT BASED PEDAGOGICAL CONTENT KNOWLEDGE AND COLLABORATIVE LEARNING FOR PRESERVICE CHEMISTRY TEACHERS

ABSTRACT

Preparation of ability in designing chemistry learning in vocational context is necessary for preservice teachers. This study aims to produce the provision model based PCK-CL. Studied aspects are include of mastery of knowledge of curriculum and chemistry content in vocational context, and the level of achievement of the ability to content analysis and to construct PCK representation. The study design used is Research & Development. Research procedures include preliminary study, design, development, field testing and dissemination & implementation. The provision models is applied in vocational chemistry subject. This study produce a provision model based PCK-CL was developed into five stages, namely the analysis of chemistry content, integration of curriculum and chemistry content, chemistry content enrichment, exploration of PCK in vocational context and development of PCK in vocational context. Syntax of learning in each stage of provision models include orientation, observation & exploration, clarification and elaboration. After following the provision model based PCK-CL, preservice teachers have a fairly good ability in designing chemistry learning of vocational context. However, the provision models based PCK-CL has not been effective in preparing all aspects of basic ability in designing chemistry learning. Developed models can increase the mastery of curriculum and chemistry content knowledge and prepare the ability of analyzing chemistry content in vocational context well. Developed models not prepare of ability to construct CoRe and p-PaP-eRs in vocational context in an optimal. Other results showed that self-efficacy of preservice teacher increased after they are following the provision. Pre service teachers also have a very good collaboration ability.

Key words: pedagogical content knowledge, collaborative learning, chemistry in vocational context, designing of chemistry learning, preservice chemistry teacher