FACTORS FOR PCK DEVELOPMENT OF FILIPINO GRADE 8 TEACHERS IN TEACHING CELL DIVISION AND MENDELIAN GENETICS USING THE INQUIRY-BASED APPROACH

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ABSTRACT

This study was conducted to determine how four (4) Grade 8 science teachers developed their PCK as they used the inquiry-based approach in teaching cell division and Mendelian Genetics. Through interviews, classroom observations, and analysis of artifacts, the data were collected and analyzed using constant comparative analysis. The analysis of multiple sources of data identified the four (4) approaches that the teachers used to develop their PCK, namely, institution-initiated trainings, self-study, consultation with colleagues or peer consultation, and self-reflection. A continuous professional development program through attending trainings and seminars is suggested geared toward PCK development as IBA is used. With peer consultation as observed to be one of the factors that contributes to teachers' PCK development, it is recommended that collaboration among teachers be strengthened. The schools should provide a space like synchronous interactions among teachers where they can share their best practices in using IBA. An online inter-school synchronous conversation can likewise be facilitated by school administrators. Self-study may be enriched by making a compilation of previous materials for an easy access when in use. Likewise, self-reflection is suggested to be maintained as the teachers become open to receiving knowledge from others. Recommendations for future research are in line with the K-12 implementation that will investigate PCK and the inquiry approach across grade levels.

Keywords: Constant Comparative Analysis, Inquiry-Based Approach, PCK, PCK Development, Peer Consultation.