

# **A Study of the Implementation of “Inquiry and Practice” Curriculum in the Field of Natural Science in Senior High Schools**

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With the implementation of Taiwan’s Twelve-year Basic Education, “Inquiry and Practice” has been added as a compulsory course in the field of natural science in senior high schools. In this study, therefore, we aim to explore how this new course has been implemented in terms of curriculum integration model, curriculum implementation level, material usage and design, and problems faced by schools and corresponding solutions.

The results of the study showed that “Intradisciplinary” was the dominant model of curriculum integration, suggesting that the degree of curriculum integration could be further improved. About 90% of the schools adopted this curriculum in the sophomore year because teachers claimed that students should be equipped with the relevant foundational knowledge in their freshman year before shifting to the interdisciplinary model. With the belief that textbook usage would limit scientific inquiry teaching and learning, approximately 67% of the schools developed their own teaching materials within each individual school’s teacher communities instead of using textbooks. In addition, the schools encountered both internal and external problems that compelled them to come up with different resolutions. Finally, we offer some suggestions for enhancing the curriculum quality of “Inquiry and Practice”.

Keywords : 12-Year Basic Education, science curriculum, inquiry and practice, senior high school education

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