

A Study of the Reality and the Plans that should be Made of General Universities in Charge of Secondary Science Teachers Training – In the Perspective of Science Education Professors

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Abstract

The purpose of this study is to discuss the reality and the plans that should be made of general universities in charge of secondary science teachers training, to provide the suggestion and basis for the adjustment of the institutions.

The research, which is based on literature discussion with regard to research purposes and questionnaire to be answered, devises semi-structured interview outline and research-analysis categories. The analysis categories are revised into four aspects after they are analyzed by the interview date: (1) general pedagogical knowledge, (2) content knowledge, (3) pedagogical content knowledge, and (4) professional attitude of teacher. The research methods adopt semi-structured interview, and use purposive sampling method to choose 12 interviewers whose are chosen from general universities and normal universities.

The research result includes two parts. First is “the reality and the plans that should be made of the structure of general universities”. It includes “the ideal of release teacher training system doesn’t achieve”, “employ science education professor is not enough in general universities”, and “general universities should plan a complete program to train science teacher”. Second part is about professional knowledge and competence of science teacher which has general pedagogical knowledge, content knowledge, pedagogical content knowledge, and professional attitude of teacher four aspects. It provides the suggestion and basis for general universities to adjust secondary science teacher training program.

Key words: general university teacher training, secondary science teacher training, professional knowledge and competence of science teacher