

Sak Suwonnachaiy 2008: Development of Learning Resource Database in Science Discipline for Grade Range 4 Focusing on Strands 4 to 8 of Basic Education Curriculum B.E. 2544. Doctor of Philosophy (Curriculum and Instruction), Major Field: Curriculum and Instruction, Department of Education. Thesis Advisor: Associate Professor Maturros Chongchaikit, Doctorat de 3eme Cycle. 281 pages.

The objectives of this research were to 1) develop the Learning Resource Database in Science Discipline for Grade Range 4 focusing on Strands 4 to 8 of Basic Education Curriculum B.E.2544 and 2) study teachers' usage models of this Learning Resource Database in Science Discipline.

The sample groups for the quality development of the Learning Resource Database were 3 science experts in Physics and Astronomy and 3 experts in Educational Technology. The sample group for studying the usage model of the Learning Resource Database were 10 science teachers teaching strands 4 to 8 in Grade Range 4 that were selected by purposive random sampling from the schools in Educational Area 1 of Khon Kaen Province. The research instruments were the questionnaire and the set of questions for group interview. The data were analyzed by using percentage.

The research findings were as follows: 1) the website of Learning Resource Database in Science Discipline for Grade Range 4 focusing on Strands 4 to 8 of Basic Education Curriculum B.E. 2544 was designed and developed with quality, consisting of 4 main topics which were Learning Outcomes, Learning Activities, Learning Assessment and Learning Units-Lesson Plans. 2) The study of teachers' usage model of this Learning Resource Database showed that all of them could use this Database to fulfill their teaching responsibilities on curriculum development and student learning development. They could access and use the Database via internet and download some parts of the information for various used. The teachers had the best opinions up to 90 percents towards all aspects of the Database which are the content and information areas provided for searching, the ways to access the information, the web development technology, and the usefulness of the information searching.

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Thesis Advisor's signature