

Praiwan Pithaksalee 2009: Synthesizing Patterns of Curriculum Alignment: Case Study in Mathematics 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 Nataya Pihanthanond, Ph.D. 325 pages.

Research's purposes were to study patterns of curriculum alignment from the countries which used standards-based education, and then synthesizing to find out suitable pattern for Thailand context including developing curriculum alignment in case study of Mathematics; the 1st Range of Basic Education Curriculum B.E. 2544, and to evaluate the Mathematics curriculum alignment to website which is uploaded on website of Bureau of Academic Affair and Educational Standards, Office of Basic Education Commission, Ministry of Education.

Research finding were : 1) there are 3 styles of mathematics standards on standards-based curriculum in the State of America. Canada, and Australia; there are benchmarks in range, grade level expectation year by year and mixed altogether. Range of benchmarks are not the same, some states divided into 3, 4 or 5. Number of years in each range are not the same as well, it depends on learners' abilities and nature of subjects. There are few standards which are short and easy to understand. 2) There are many patterns of curriculum alignment, particularly, the state will provide 2-3 kinds of curriculum resources align to each standard or a group of standards. In case of benchmarks in range, the state provided grade level expectations and the others such as teaching activities, assessment activities, materials; in case of grade level expectations, the state provided lesson plans, teaching activities, and resources. 3) There are 5 patterns of curriculum alignment in Mathematics. 4) For Mathematic teachers in Thailand, in case of benchmarks in range, examples of grade level expectations, unit plans and assessment activities align to standards should be provided, but in case of grade level expectations, the state should provide lesson plans, teaching activities, assessment activities and integrated standards on the other subjects. Webpage for searching curriculum alignment which is suitable for Thai Mathematic teachers is showing the pull down menu (hiding the sub menus inside the core menus). 5) There are 3 core menus and 5 supported menus on <http://210.1.20.39/webmath/mainpage.html> which is developed on Mathematic standards, Basic Education Curriculum B.E. 2544. The core menus are Grade Level Expectations, Unit Plans, and Assessment Activities, the supported menus are Math Glossary, Math Standards, Extra Activities, Interesting Websites, and Frequently Asked Questions. 6) Evaluating quality of this website, the results is good (mean is 4.22) according to content and implementation.

Student's signature

Thesis Advisor's signature