

<b>Title</b>	A DEVELOPMENT OF SCIENCE INSTRUCTIONAL PACKAGE IN THE LINE OF INQUIRY CYCLE TO DEVELOP THE SCIENCE ACHIEVEMENT AND THE SCIENCE PROCESS SKILLS ON TOPIC “FOOD AND LIVING” MATHAYOMSUKSA II STUDENTS
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#### ABSTRACT

The independent study purposes were: 1) to create and study the efficiency of instructional package in the line of inquiry cycle to develop the science achievement and the science process skills on topic “Food and Living” for Mathayomsuksa II students at the criterion of 75/75 2) to implement the instructional package in the line of inquiry cycle to develop the science achievement and the science process skills on topic “Food and Living” for Mathayomsuksa II students with to 2.1) compare the science achievement before and after using the instructional package 2.2) compare the science process skills before and after using the instructional package 3) to study student’s satisfaction who study with the instructional package. The research methodology does by research and development in 3 stages: creating and studying the efficiency of instructional package, implementing the instructional package, studying student’s satisfaction who studies with the instructional package. Three experts examine the appropriate of instructional package and get experiment with Mathayomsuksa II students at Khaothaphra Municipality School, Chainat Municipality, academic year 2010 by 3 groups of students, 3 students, 9 students and 30 students to find the instructional package’s efficiency at the level of 75/75. The sample group is 32 Mathayomsuksa II students at Khaothaphra Municipality School, Chainat Municipality, academic year 2010.

The sampling method was cluster random sampling. The research design is One Group Pretest - Posttest Design and the research instruments compose 5 sets of the instructional package in the line of inquiry cycle to develop the science achievement and the science process skills on topic "Food and Living" for Mathayomsuksa II students, the science achievement test, the science process skills test, a student's satisfaction questionnaire, study efficiency with  $E_1/E_2$ . The statistics which used for data analysis are the average, the standard deviation, and t - test dependent.

The result of the study revealed that:

1. The instructional package in the line of inquiry cycle to develop the achievement and the science process skills on topic "Food and Living" for Mathayomsuksa II students compose 4 factors as follow; 1) manual of instructional package 2) lesson plan 3) learning materials 4) measurement and evaluation. The research instruments compose 5 sets of the instructional package in the line of inquiry cycle and practice the science process skills. It has been submitted for examining the appropriate every compositions of the instructional package at more level and met the efficiency at 77.24/76.80

2. The result of implementation as follow;

- 2.1 The students have the achievement after using the instructional package in the line of inquiry cycle to develop the science achievement and the science process skills on topic "Food and Living" for Mathayomsuksa II students higher than before at the statistical significant .01

- 2.2 The students have the science process skills after using the instructional package in the line of inquiry cycle to develop the science achievement and the science process skills on topic "Food and Living" for Mathayomsuksa II students higher than before at the statistical significant .01

3. The students have highly satisfied learning by using the instructional package in the line of inquiry cycle to develop the science achievement and the science process skills on topic "Food and Living" for Mathayomsuksa II students all of the whole and every 3 elements in the highest level.