

## **Abstract**

Thesis Title : Multi-Factors Affecting Mattayomsueksa 2 Students' Abilities of Their Applied Thinking Skills in the Office of Secondary Educational Service Area 36,  
Chiang Rai Province

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The purposes of this study were to explore factors on student and classroom levels affecting the Mattayomsueksa 2 students' abilities of their applied thinking skills in the Office of Secondary Educational Service Area 36, as well as to create the equation of multi-factors affecting the Mattayomsueksa 2 students' abilities of their applied thinking skills in the Office of Secondary Educational Service Area 36. Apart from 53 classrooms, 1,850 Mattayomsueksa 2 students out of the 18 secondary schools in the Office of Secondary Educational Service Area 36, Chiang Rai Province were selected by the multi-stage sampling technique.

In terms of variables carried out for this study, variables related to student levels included its learning achievements, attitudes towards student's instructional management, achievement motivation, styles of learning, and student parents' pedagogical promotion. As classroom atmospheres, teacher's teaching behaviors, and student – teacher personal interaction were all used for independent variables on classroom levels, student's abilities of applied thinking skills were associated with dependent variables. Research tools were divided into 3 parts: the 1<sup>st</sup> part concerning a checklist-based, cloze test-designed questionnaire on student's personal information; the 2<sup>nd</sup> part related to a rating scale-based questionnaire on factors affecting students' abilities of applied critical thinking skills, and an aptitude test on student's applied thinking skills.

As divided into 2 steps of research methodology, the purposes of the study aimed to figure out the co-efficiencies of student-level, and classroom-level variables analyzed through using mean and standard deviation, as well as the weight of student-level, and classroom-level variables affecting students' abilities of applied thinking skills analyzed through using the HLM programme. The findings of the study were as follows:

1. Student-level factors affecting the students' abilities of their applied thinking skills, with its percentage of 47.268, were significantly different at 0.01 in terms of their learning achievements, autonomous learning styles, and attitudes towards student's learning activation;
2. Classroom-level factors affecting the students' abilities of their applied thinking skills, with its percentage of 70.07, were significantly different at 0.01 in terms of their teacher's teaching behaviors whereas their teacher – student personal interaction resulting in the student's abilities of positive applied thinking skills was significantly different at 0.05;
3. Predicted equations used for factors affecting student's abilities of applied thinking skills were shown below as follows:

### 3.1 Student-level equation

Predicted equation found in raw scores

$$\text{APPLY}'_{ij} = 50.996534^{**} + 6.446941^{**}\text{ACH} + 3.861356^{**}\text{ATTITUDE} - 0.300425\text{AMO} - 0.169960\text{COMPET} - 0.794317^{*}\text{COLLA} - 0.600435\text{DEPEN} + 4.520497^{**}\text{INDEPEN} + 0.018514\text{AVOID}$$

Predicted equation found in standard scores

$$Z_{\text{APPLY}'_{ij}} = 3.644978^{**}Z_{\text{ACH}} + 0.836969^{**}Z_{\text{ATTITUDE}} - 0.10251Z_{\text{AMO}} - 0.04525Z_{\text{COMPET}} - 0.09815Z_{\text{COLLA}} - 0.11883Z_{\text{DEPEN}} + 2.630485^{**}Z_{\text{INDEPEN}} + 0.00308^{**}Z_{\text{AVOID}}$$

### 3.2 Classroom-level equation

Predicted equation found in raw scores

$$\text{APPLY}' = 50.766783^{**} + 2.392191\text{ENV} + 4.211823^{**}\text{TEC} + 3.896013^{*}\text{INT}$$

Predicted equation found in standard scores

$$Z_{\text{APPLY}'_{ij}} = 0.178Z_{\text{ENV}} + 0.622^{*}Z_{\text{TEC}} + 0.226^{*}Z_{\text{INT}}$$