

2) การค้นหาตัวพยากรณ์ ด้วยวิธีวิเคราะห์สัมประสิทธิ์สหสัมพันธ์พหุคูณแบบลำดับชั้น พบว่า การรับรู้ต่อพฤติกรรมการสอนของครูวิทยาศาสตร์ และการสนับสนุนทางการเรียนจากครอบครัว สามารถพยากรณ์ การคิดขั้นสูงในวิชาวิทยาศาสตร์ทั้ง 3 องค์ประกอบได้ ส่วนเจตคติต่อวิทยาศาสตร์ไม่สามารถร่วมพยากรณ์การคิดขั้นสูงในวิชาวิทยาศาสตร์ทั้ง 3 องค์ประกอบ และในการพยากรณ์พบว่า การคิดวิเคราะห์มีค่าสัมประสิทธิ์พหุคูณเท่ากับ 0.615 มีสัมประสิทธิ์การพยากรณ์เท่ากับ 0.378 การคิดวิจารณ์ญานมีค่าสัมประสิทธิ์พหุคูณเท่ากับ 0.637 มีสัมประสิทธิ์การพยากรณ์เท่ากับ 0.405 และการคิดสร้างสรรค์มีค่าสัมประสิทธิ์พหุคูณเท่ากับ 0.466 มีสัมประสิทธิ์การพยากรณ์เท่ากับ 0.217

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Thesis Title	Factors Influencing Higher Order Thinking in Science of Mathayomsuksa 3 Students in Songkhla Province
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ABSTRACT

The objectives of the research were 1) to study the factors influencing higher order thinking in science of Mathayomsuksa 3 students in Songkhla province. 2) to find predictors of higher order thinking in sciences of Mathayomsuksa 3 students in Songkhla province. The factors were divided into 3 dimensions: perceptual of science teacher's teaching behavior, attitude toward science, and family support in learning.

3 components of higher order thinking in science consisted of analytical thinking, critical thinking and creative thinking were used to investigate. The samples were 390

Mathayomsuksa 3 students in Songkhla province studied in the second semester of 2009 under the jurisdiction of Songkhla Educational Service Area Office 1,2 and 3.

In collecting the data, a three-part questionnaire was used. Part I the questionnaire was about perceptual scale of science teacher's teaching behavior of which the reliability was 0.949. Part II the questionnaire intended to check attitude toward science of which the reliability was 0.941. Part III the questionnaire was about family support in learning of which the reliability was 0.847. There were 3 higher thinking tests in science.

1) analytical thinking test of which the reliability was 0.644 2) critical thinking test of which the reliability was 0.694 3) creative thinking test of which the reliability was 0.734.

The results were as follows:

1) The factors influencing higher order thinking in relation to perceptual of science teacher's teaching behavior, attitude toward science, and family support in learning in science of Mathayomsuksa 3 students in Songkhla province were correlated with the higher order thinking in science at .01 significance level.

The relationship between analytical thinking and three components of higher order thinking in Science was .605, .498 and .371 respectively. The relationship between critical thinking and three components of higher order thinking in Science was .619, .537 and .423 respectively. The relationship between critical thinking and three components of higher order thinking in Science was .457, .384 and .291 respectively.

2) As for finding predictors using multiple correlation coefficients, perceptual of science teacher's teaching behavior and family support in learning could predict the higher thinking order with 3 components in science while attitude toward science could not. In prediction found that analytical thinking revealed 0.615 multiple correlation and 0.378 prediction coefficients. critical thinking revealed 0.637 multiple correlation and 0.405 prediction coefficients. creative thinking revealed 0.466 multiple correlation and 0.217 prediction coefficients.

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