

ABSTRACT

Research Title: Integrating Mathematical Literacy and English Literacy Using Contextualized Learning

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The use of English as a medium of instruction for subject matter learning is the policy of International College, Suan Sunandha Rajabhat University. Many research studies have shown that integrating subject matter and English related to real life and career enhance student's learning achievement in subject matter and skills in using English. The purposes of this study were (1) to study effectiveness of integrating mathematical literacy, contexts in business and finance, and using English learning mathematics; and (2) to measure students' attitudes toward learning mathematics integrated the use of mathematical literacy, contexts in business and finance, and using English learning mathematics. The participants of this study were 36 undergraduate students in Bachelor of Arts in International Business (International Program). This study was classroom action research, the researchers developed integrated trans-disciplinary five units through the concepts of mathematics, business and financial contexts, and English and designed integrated learning activities with four steps: (1) Engaging, (2) Exploring and concept constructing, (3) Conclusion and extending knowledge, and (4) Measurement and evaluation. The researchers collected two types of data: quantitative and qualitative. Quantitative data collection involved the students' scores on the tests, and qualitative data collection contained students' attitude toward learning mathematics. The researcher analyzed the data to study effectiveness of integrating mathematical literacy, contexts in business and finance, and using English learning mathematics by using Mohr's formula and found that the effectiveness index of integrated learning activities was 0.7937. The results of this study indicated integrating mathematical literacy, contexts in business and finance, and using English learning mathematics in the Business Mathematics Course (International Program) appeared to influence growth of students' learning development 79.37% (above criteria 0.50 or 50 %). For analyzing the data to measure students' attitudes in three categories: integrated content learning, integrated learning activities, and integrated technology and innovation for learning, the results showed that 31.4 % of all students displayed positive attitudes at Level 5 (Strongly Agree), 56.4 % of all students displayed at Level 4 (Agree), and 12.2 % of all students displayed at Level 3 (Neutral).

Keywords: Mathematics Literacy, English Literacy, Transdisciplinary, Business Mathematics