

**MOTIVATION TO LEARN BUSINESS MATHEMATICS AMONG UiTM  
STUDENTS AFFECTED BY DESIGN OF BUSINESS MATHEMATICS  
TEXTBOOK**



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## 1.0 PROPOSED EXECUTIVE SUMMARY

Textbook is the main reference for students and lecturer. Reading texts that are not simplified important to improve student's critique level and thinking capabilities. However many students in most of subject find it a problem to read textbooks or even study the problem solving examples in the textbooks. In fact, lecturers need to change the style of contents in the textbooks in order to make it easier for students to understand. Research done by Lawson (1995) and Tunku Intan (2002) also show that the design of textbooks does not induce interest to read. Many factors determine achievement and motivation is one of the factors (Brigg, 1984). Shneiderman (1998) states that "memorable educational experiences are enriching, joyful, and transformational". However, once a learner's attention is lost, motivation is lost and learning does not occur. Thus, it is important that motivation elements be included in textbook (Briggs 1984, Robert 1993). These elements are needed to increase student's interest in continue learning (Briggs 1984, Robert 1993). The ARCS Model identifies four essential strategy components for motivating instruction, namely, Attention strategies for arousing and sustaining curiosity and interest; Relevance strategies that link to learners' needs, interests, and motives; Confidence strategies that help students develop a positive expectation for successful achievement for effort (Keller, 1993). It would be an advantage to know whether the "Business Mathematics for UiTM" textbook has these four motivation elements, and if so, what is the motivational level of the students towards the design of this textbook?

## 2.0 ENHANCED EXECUTIVE SUMMARY

In an effort to understand how the motivation to learn Business Mathematics among UiTM students is affected by the design of Business Mathematics textbook, a study was carried out on Part One students who took Business Mathematics course at UiTM, Arau Campus. An adapted version of the Instructional Materials Motivation Survey (IMMS) was used to assess the student motivation towards the Business Mathematics textbook. The adapted version of the instrument that consists of 36 questions was designed according to the ARCS Model which consists of four components namely Attention(A), Relevance(R), Confidence(C) and Satisfaction(S). A Rasch analysis was done on the ARCS Model to help assess the motivational level of the students towards the Business Mathematics textbook. Overall results showed that the design of the Business Mathematics textbook did not really motivate the UiTM students to learn Business Mathematics. The presentation style is the main reason why most UiTM students could not pay full attention when using the textbook. Since the presentation style of the textbook does not fully induce student' attention, the level of relevance related to those criteria has also been reduced as well. The first impression of the students towards the Business Mathematics textbook does not really instill confidence in them. In other words, the confidence level of the UiTM students is not intensely influenced by their first impression towards the textbook. However, most of the students agreed that the usage of the textbook in classroom gives a profound influence to their confidence level as learners in the learning process. Instructional design and classroom usage of the textbook play a significant role towards the satisfaction level of the students. Nevertheless, the satisfaction level among the UiTM students towards the Business Mathematics textbook is quite satisfactory. Results also showed that there was not much difference in the motivational level of the male and female UiTM students towards the Business Mathematics textbook. The performance of the students in their Mathematics subject during their secondary school level also did not have much influence on their motivational level towards learning Business Mathematics in UiTM using the Business Mathematics textbook.