The Study on Teaching Strategies for Conic Sections in High School Mathematics Based on the ARCS Motivation Model

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Abstract - This paper analyzes the application of the ARCS model of motivation in the learning teaching of conic sections of high school math, attempting to arouse students' motivation to learn, eliminate the difficulty to learn, and improve the teaching efficiency. Nowadays most of the students usually lack the enthusiasm to learn mathematics so as to acquire a weak comprehension on the concept of conic sections; and teachers experience problem including single teaching modes and a rough assessment system. By adopting ARCS model and the attention attracting, attention activating and the strategies of creating relevance, gaining confidence and experiencing success, this paper aims to arouse the students' learning enthusiasm and enhance the learning effectiveness. Furthermore, this model not only completes the theory system about motivation research in mathematics education, but also supplies the systematical strategies for teaching practice and it has high theoretical and practical values.

Keywords - ARCS motivational model; high school mathematics; conic sections; teaching strategies