The Problems of Teaching Mathematics among Learning Difficulties Student Teachers, and its Relationship to their Beliefs about Learning and Teaching Mathematics

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Abstract:

The research aimed to identify the problems of teaching mathematics, and to examine the beliefs about learning and teaching mathematics among learning difficulties student teachers, as well as to investigate the relationship between the problems and the beliefs.

To achieve these objectives, the researcher prepared a questionnaire of teaching mathematics problems, and a scale of learning and teaching mathematic beliefs. Both of the tools were judged by some teaching mathematics experts and learning difficulties experts. In order to verify the reliability of the questionnaire and the scale, the researcher applied them with an exploratory sample of students at the College of Education in Dammam. After that, the two tools were applied to a sample of 100 students at the College of Education in Dammam during the second semester of the academic year 2012 / 2013.

The Results revealed that there are (29) problems facing the student teachers concerning teaching mathematics to students with learning difficulties. The problems are classified into four themes. These themes are Firstly, the characteristics of students with learning difficulties, Secondly, the nature of mathematics and its curricula and Resources room, thirdly, the academic preparation of student teacher, fourthly, the supervision during the practical education. In addition, the results showed that the student teachers' beliefs about learning and teaching mathematics are generally compatible with the constructive theory. Nevertheless, the results revealed that there is not difference in the teaching mathematics problems or beliefs about learning and teaching mathematics due to the type of study at high school. Finally, the results showed that there is statistically significant positive relationship between teaching mathematics problems and the beliefs about learning and teaching mathematics. The problems of mathematics teaching are related to the beliefs of mathematics teaching and learning according to the behavioral theory.

Keywords: Student Teachers, Teaching mathematics problems, Beliefs about Learning and Teaching Mathematics, Learning difficulties.