
Research Papers



Pre-Service Teachers Teaching Anxiety about Mathematics In Drill Lesson

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Abstract

Why do we teach mathematics? What do we want to achieve in our mathematics lessons? These were the questions which we asked our self while joining the career of a mathematics teacher. In fact these are good questions which all teachers should ask themselves from time to time in their daily practice. This study is based on the principle that the mathematical anxiety in pre service teachers and they should be encouraged towards mathematics. It is expected from teachers that he can teach very well this confidence to prepare exercises improving mathematical ideas for their students.

This study focused upon 100 pre-service teachers (B.Ed. trainee) in their teaching mathematics in drill lesson, and 5 teachers of mathematics methodology. For data collection mathematics anxiety questionnaires are used and percentage technique is used. Our research raises new challenges in teacher training, Overcoming mathematical anxiety among pre service teacher is important for them to become effective teachers of mathematics in future.

KEYWORDS : Pre-Service Teacher, Teaching Anxiety, Drill Lesson.

Introduction:

The construction of the professional identity of a teacher begins even before pre-service training and develops during pre-service training and throughout the professional trajectory, as a function of the desires and personal conditions of the teacher (biographical transaction) and of the challenges or obstacles in the contexts in which the teacher operates (relational transaction). We have

used the term “psychosocial identity” to refer to the identity of the teacher when the teacher enters pre-service training [5]. In the choice of profession, for example, there are dimensions of personal identity associated with representations of the profession, which lead the

individual to choose this profession rather than another one. It is this identity that will be transformed during pre-service training, giving rise to the “basic professional identity” [1], the identity of the teacher after completing the training. It is this basic identity which will be put to the test in the work contexts, at the beginning and throughout the professional career, giving rise to, at each stage of that career, the “current identity” of the teacher. According to Claude Dubar [1], the basic professional identity is part of the biographical transaction and is a generational problem. For the same author, it can be identified from the professional illusions and disillusionments throughout the professional career: if the identities

proposed by the systems of action should be analysed with reference to the activity being studied, the real identities inherent to the biographical transaction can only be analysed through the trajectories of individuals, as reported by them.

Aiming to contribute towards improving the effects of pre-service teacher training, a research was carried out focusing the impact of pre-service training curricula and school work on primary teachers' identities construction. Biographical narratives of teachers were collected through semi-structured interviews. As Bolívar, Domingo and Fernandez [6] mention, personal dimensions "can only be expressed through narratives", where "the social is psychologised and the psychic is socialised".

Interviewed teachers had their initial training at the same institution (in an important Portuguese urban centre) at four different historical moments: the first half of the 70s (before the democratic revolution), the second half of the 70s, the 1980 s.

Definition:

1. Mathematics anxiety is defined as feeling of anxiety that one cannot perform efficiently in situations that involve the use of mathematics. Although it is mostly associated with academics, it can apply to other aspects of life.

2. Mathematics teaching anxiety can be defined as pre-and in – service teacher's feelings of tension and anxiety that occurs during teaching mathematical concepts, theories and formulas or during problem solving.

Need and Importance:

Anxiety concerning teaching mathematics is a frequent fear of pre service teachers. It may reflect real or perceived knowledge deficits in mathematics content as well as in mathematics failure or anxiety (Levine, 1993) Gardner and Leak (1994) conceptualized teaching anxiety as anxiety experienced in relation to teaching activities that involve the preparation and education of classroom activities. Teaching anxiety in general appears to be a problem for a significant number of post-secondary educators (Gardner & Leak, 1994; Ameen, Guffey, & Jackson, 2002) And mathematics teaching anxiety appears to be a specific problem.

The symptoms of mathematics teaching anxiety can include extreme nervousness the inability to concentrate negative self talk, being easily upset by noises, being unable to hear the students, and sweaty palms- to name just a few.

Godbey (1997) stated that negative self-talk can be the root cause of mathematics failure in some students. In fact, negative self-talk can be the root cause of mathematics teaching anxiety in some pre-service teachers, too. When teaching a mathematical concept in practice, the pre - service teacher probably will not be able to teach a mathematical concept if she or he is constantly saying to themselves, I can't teach this concept, or I have never been good at mathematics teaching or I just can't teach this problem solving. The teacher can fail simply because they are convinced they cannot be successful in teaching.

Objectives:

The objectives of the study:

1. To study the mathematics teaching anxiety of pre-service teacher.
2. To find the reasons of mathematics teaching anxiety.
3. To study the opinion of teacher educator about teaching anxiety of mathematics.

Method:

The purpose of this study was to investigate reasons of mathematical anxiety so it requires survey method.

Sample:

The participants of this study comprise 100 pre service teachers in that 60 males and 40 females and 05 teachers of mathematics methodology, selected randomly from 10 different teacher training colleges in Latur District.

Tools and Materials:

The instrument used to collect data in this study was questionnaire, Questionnaire was used for finding reasons of mathematical anxiety for teacher trainees and teacher educators.

Statistical Technique:

For Data Analyses, The data obtained from this study was evaluated using Percentage.

Results:

This section presents the results according to findings.

In this study, pre service teachers' mathematics anxiety was found to be at moderate levels. This is an expected level in these students. Mathematics anxiety does not have negative influences always. Low level of anxiety can be encouraging, middle level anxiety leads one to success, and high level of anxiety may have negative affects. Mathematical anxiety creates a lot of learning problems, these problems create obstacles in other areas of Life as well. Thus, total life activities are affected.

1. 84 percentage of pre service teachers reported that strong background is essential for teaching mathematics.
2. 73 percentage of pre service teachers reported that less confidence for teaching mathematics.
3. 90 percentage of pre service teachers reported that anxiety comes due to lack of content knowledge.
4. 84 percentage of pre service teachers reported that their parents say mathematics is difficult.
5. More students dread having to do mathematics.
6. 25 percentage of students reported that to learn new mathematics makes nervous.
7. 40 percentage of teachers help to understand individually.
8. 34 percentage of teachers takes interest to solve student's mathematical anxiety.
9. 70 percentage of students report that they can't get good result in mathematics.
10. 90 percentage of students like the teacher who motivates.
11. 80 percentage of students reported teacher take less time for solving mathematics.

Suggestions:

A strong background in mathematics is critical for good teaching career and job satisfaction in today's increasingly technological society.

1. Pre service teacher should full fill with content knowledge.
2. Pre service teacher must give more time for understanding mathematics.
3. Teacher Educator should create self confidence in pre-service teacher.
4. Teacher Educator must motivate pre-service teacher about teaching mathematics.
5. Pre-service teacher should use various types of teaching aids in teaching mathematics.

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