

A Study on the Blackboard Writing Behavior of Math Teachers in Senior High School



Han Wang Wei Tan Jian Lu
College of Teacher Education,
East China Normal University

1 Abstract

This study intends to investigate the characteristics of high school mathematics teachers' multimedia blackboard writing and traditional blackboard writing in the new situation. Data source includes videotaping of instruction by six senior high school math teachers. The data shows that blackboard writing is dominant, while writing via multimedia platforms is auxiliary even though every classroom has a multimedia platform. Multimedia blackboard writing is mainly used for problem presentation and dynamic demonstration.

2 Research purpose

With the popularization of information technology, Teaching Electronic Interactive Whiteboard are widely used in the classroom, which is a revolution for teachers. The purpose of this paper is to investigate the characteristics of high school mathematics teachers' multimedia blackboard writing and traditional blackboard writing in the new situation.

3 Research design

The video study presented here is based on 12 videotaped mathematics lessons 6 teachers from three senior high school in three cities (Shanghai, Shenzhen, Changsha). Each teacher was videotaped two period math lessons. The videotapes were analyzed by qualitative methods. In this paper, each lesson is divided into three teaching sessions: Reviewing, introducing new contents, examples and exercises explanation. The blackboard writer includes the teacher-led, the student-led and the teacher-student interactive blackboard writing. The blackboard writing media includes blackboard, multimedia.

4 Analysis

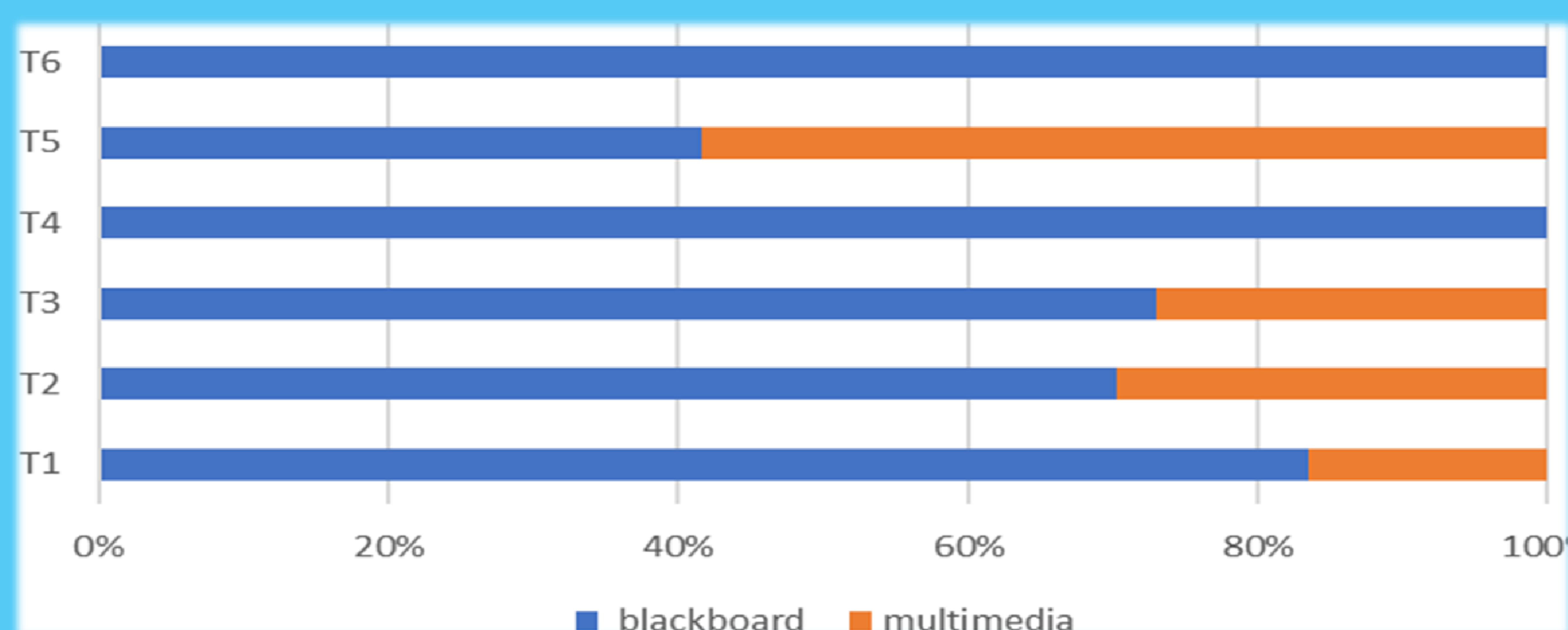


Table 1: percentage of time devoted to writing media in introducing new contents

	Reviewing	Introducing new contents	examples and exercises
Blackboard media	Multimedia	Blackboard and multimedia	Blackboard and multimedia
Blackboard writing	Teacher-led	Teacher-led and teacher-student	Teacher-led and student-led

5 Research outcomes

The study shows the following results :

- (1) Blackboard writing is dominant, while writing via multimedia platforms is auxiliary;
- (2) Multimedia blackboard writing is mainly used for problem presentation and dynamic demonstration, while traditional blackboard writing is used for problem solving and knowledge points;
- (3) The teacher-led blackboard writing is the main position, and the student-led blackboard writing always appear in the exercise solving.