

Homework Policy in Montessori Schools: A Follow-up Study

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Literature Review

Homework does appear to contribute to student achievement, but what kinds of homework are most helpful? Shorter assignments for younger children appear to be most beneficial which fits with our understanding of child development and attention development. As children grow and develop cognitively and socially, the ability to sustain attention for longer periods of time increases (Berk, 2014; Casey, Tottenham, Liston, & Durston, 2005). In addition, it appears task-oriented homework and homework over skills mastered in the classroom contribute the greatest to overall student achievement (Hattie, 2009; Trautwein, Köller, Schmitz, & Baumer, 2002). Project-based homework and homework requiring higher-level thinking skills is least beneficial to the majority of students (Hattie, 2009). Students who spend more time practicing lower level skills, like math facts and sight word recognition, develop automaticity in these skills which reduces the amount of working memory required to process this information (Berk, 2104). Students who have developed automaticity with lower-level skills at home are able to use more of their limited working memory resources for higher-level thinking in the classrooms (Adams & Ericsson, 2000).

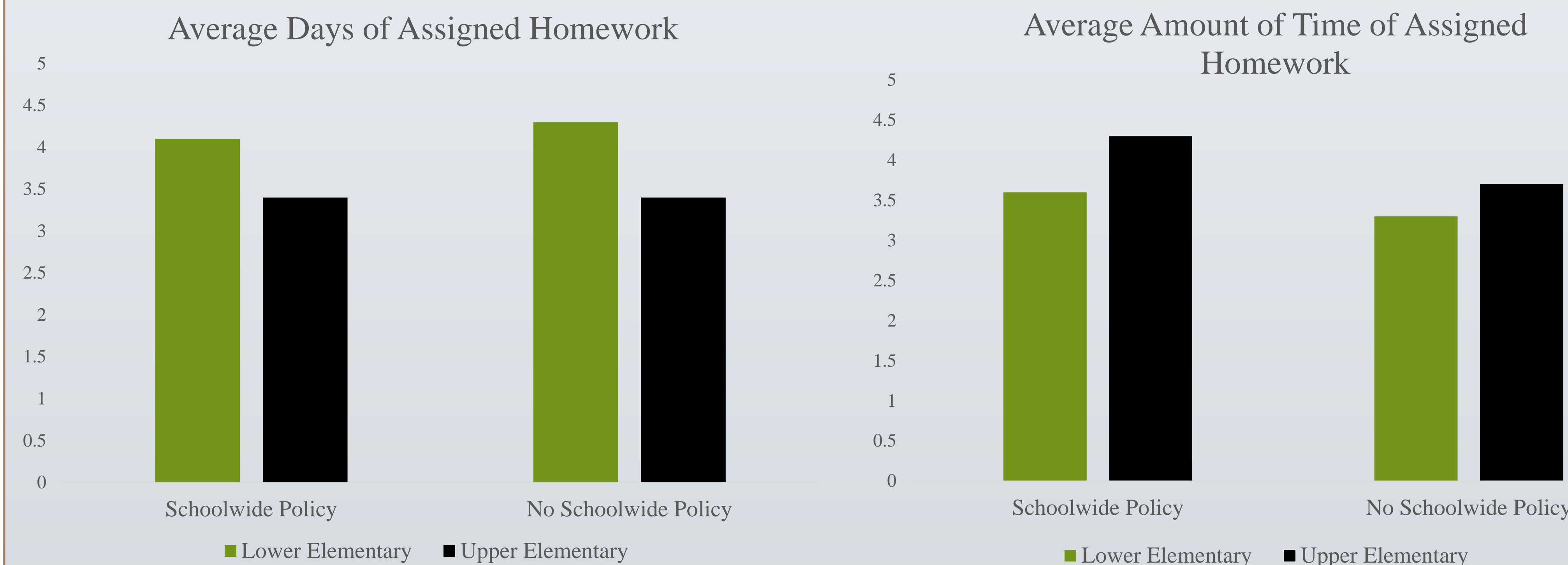
Homework may create disharmony in the home when a child is resistant to completion of homework either because the homework is too difficult or the assignment is too long. Evidence also indicates that older students benefit from homework more than younger students (Cooper, Robinson, & Patall, 2006; Hattie, 2009). This is perhaps due to the shorter attention span of younger children or that older students have developed stronger study strategies. This also may be related to level of parental involvement needed for homework to be effective (Hattie, 2009; Eren & Henderson, 2011; Maltese, Tai, & Fan, 2012).

Research Questions

Do homework practices differ in schools with and without a written homework policy for Lower Elementary? Upper Elementary?

Analysis

The graphs display the descriptive statistics associated with all variables. Each graph shows one outcome variable – either number of days or time – for schools with and without a schoolwide homework policy for Upper and Lower Elementary. Mann Whitney tests were used to assess the differences between schools with and without a written, schoolwide homework policy on four outcome variables. These variables included: the number of days homework is assigned at Lower Elementary and Upper Elementary levels and the amount of homework that is assigned at Lower Elementary and Upper Elementary levels



Results

Table 2
Results of Mann Whitney Tests for Schools With and Without a Written Schoolwide Homework Policy

Question	Group	Results	Effect Size
How many days per week should a teacher assign homework?	Lower Elementary	$U = 865.00, p = .70$	$r = 0.04$
	Upper Elementary	$U = 887.50, p = .92$	$r = 0.10$
How much time on average should a student spend on assigned homework?	Lower Elementary	$U = 801.00, p = .73$	$r = 0.04$
	Upper Elementary	$U = 686.50, p = .17$	$r = 0.14$

Note. Analysis conducted in SPSS v.23. Results are from Mann Whitney test. Effect sizes are interpreted as small. Bonferroni correction was used to control for familywise error.

Method

A survey with closed and open-ended questions was distributed through Qualtrics to 200 Montessori classroom teachers through the AMS Teacher Research Panel and to AMS heads of school. The closed-question results were analyzed using SPSS. Of the 172 surveys returned, 70% were complete.

Conclusions

- Most schools did not have a written, formal homework policy at the school level. Visual inspection of the graphs shows schools with and without a written, schoolwide homework policy appear to assign more days of homework to Lower Elementary students. Schools in both categories appear to expect students in Upper Elementary to spend more time on homework.
- The results of the Mann Whitney tests between schools with and without a written, schoolwide policy were not significant for either of the outcome variables (time or days) for Lower Elementary or Upper Elementary levels. It appears the existence of a written, schoolwide homework policy many not significantly impact practices with respect to the amount of homework assigned or the number of days of homework assigned.

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