

Matific Supports Home Learning During Coronavirus School Closures

As educators around the world prepare for school closures, <u>Matific</u> is working with elementary students to support their distance learning initiatives for mathematics. We are committed to supporting Florida districts and learners during this unprecedented period, and we're offering full access to our platform for 60-days for any school impacted by Coronavirus shutdowns.

Matific's thousands of activities and worksheets cover every concept students learn in <u>K-6</u> mathematics, and is delivered native in over 40 languages on all devices, including the Web, iOS, Android and Kindle Fire. The platform also provides teachers with complete lesson plans and robust student reporting.

We are offering 60-day complimentary access to Matific for all schools impacted by, or preparing for, Coronavirus shutdowns. During this time, we are also offering free training via webinars for any teachers who need help on how to use Matific for distance learning. To get schools and students started go to this <u>link</u> to register.

About Matific: Our team includes hundreds of mathematicians, computer scientists, software engineers, gaming experts, artists, teachers, support personnel, education consultant experts, salespeople, and country and regional managers. We are excited to be able to focus this combined experience on turning mathematics into a fascinating and rewarding field of study that any child can enjoy and master. We strongly believe that quantitative competence can help children develop into rational, confident, self-reliant, and building the necessary Math knowledge for secondary education and college & career readiness. This, in essence, is the ultimate goal of Matific.

For more information for Florida educators and learners or, to receive a copy of recent research and effectiveness studies on Matific, contact Mark Miller at (954) 235-4060 or mark.miller@matific.com



AN EVALUATION OF MATIFIC USE IN GRADES TWO AND THREE

A Study of Matific Product Effectiveness

September 2017



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Executive Summary

Overview

During the 2016-2017 school year, SEG Measurement conducted a year-long study to evaluate the effectiveness of Matific, an instructional application designed to teach K to 6 math. Approximately 1477 grade two and three students enrolled in a semi Urban school district in Southeast Virginia participated in the study.

Students in classes using the Matific program improved their math skills significantly more than students in classes receiving instruction without Matific. The overall effect size was .19, the effect size for grade two was .24 and the effect size for grade three was .13.

Study Design

The study compared the growth in mathematics skills for students in classes using the Matific program (treatment group) and those in comparable classes following traditional instructional practice without using Matific (control group) using a quasi-experimental design.

Students in both the treatment and control group were administered a pretest of mathematic skills in the fall of 2016 and a posttest in the Spring of 2017. The treatment group classes instructed students using Matific, while the control group instructed students using traditional instructional practice. Students in both groups then completed a posttest of mathematic skills.

The mathematics growth for Matific users and non-users was compared statistically using Analysis of Covariance (ANCOVA). ANCOVA provides a comparison between the treatment and control group students, while adjusting for any potential differences in students' initial ability. Specifically, we examined the difference in the Spring 2017 scores (dependent variable) between the treatment and control groups (independent variable) while controlling for the initial ability of the students from fall 2016 (covariate).

Study Results

Students that used Matific showed significantly more growth in math skills than comparable classrooms that did not use Matific. Overall, students in classes using Matific showed about 4 points more growth in mathematics skills than students in classes that did not use Matific, or about a quarter of a standard deviation (effect size .19). There was no difference in Matific effectiveness among students of different genders and ethnicities.

Students in grade two classes using Matific showed about 4 points more growth in mathematics skills than students in classes that did not use Matific, or about a quarter of a standard deviation (effect size .19). In grade three, students in classes using Matific showed about 3 points more growth in mathematics skills than students in classes that did not use Matific, or less than a quarter of a standard deviation (effect size .14).

The average (mean) mathematics test scores for the treatment and control group students are shown in Figures 1, 2 and 3.

Figure 1: Comparison of Overall Posttest Scores for Treatment and Control Groups (Adjusted Means)

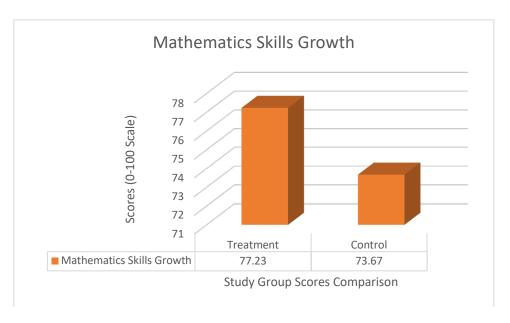


Figure 2: Comparison of Grade 2 Posttest Scores for Treatment and Control Groups (Adjusted Means)

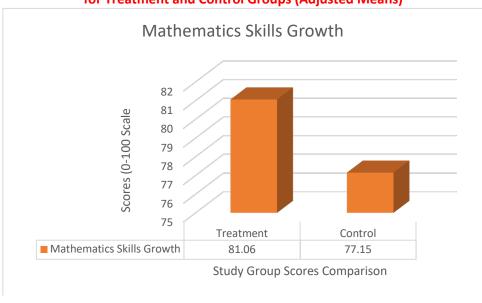
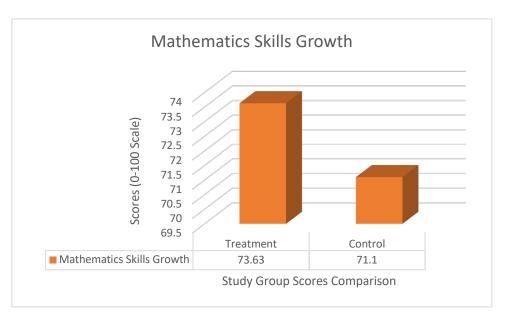


Figure 3: Comparison of Grade 3 Posttest Scores for Treatment and Control Groups (Adjusted Means)



Teacher Perceptions

Most teachers reported plans to use Matific in the future and recommend Matific to other teachers. About four out of five (78%) of the teachers who used Matific in the study indicated that they are likely to use Matific in the future and nearly all (89%) indicated that they would recommend Matific to other teachers.

Conclusion

Students in classes using the Matific program improved their math skills significantly more than students in classes receiving instruction without Matific. The results support the effectiveness of Matific use in improving grade two and three students' math skills.