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Literacy-Based Action Research: Strategies for Improving Student Achievement

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Can summer school with technology improve your skills to allow a student to be promoted to the sixth grade?

Abstract

The purpose of this action research study is to see if using technology such as Moby Max, Quiz Star, small groups, and one to one instruction will improve student’s skills enough to allow them to be promoted to the next grade. This program was a voluntary program offered in the summer during the month of June. The student needs to achieve a SRI score of seven hundred sixty to meet the standard for fifth grade. At the start of the four-week program, the students and parents were two given options: (1) coming four days a week, (2) come to class two days and work at home on packets and computer the other two days. The first day, all the students took a pretest on Moby Max. The small group’s make-up can change based on students’ behavior and skills needing work. Several interventions used by the students worked in stations (1) using the computer to do Moby Max; (2) working with one of the teachers doing guided reading of fiction; (3) working with one of the teachers doing guided reading of nonfiction; (5) working independently and answering the questions at the end of the book. Nonfiction articles came from NewsELA or Reading Works. The student will be asked to do the questions at the end of the article. First the student will do them by themselves. Secondly, the small group will have a discussion about the questions and support them with text-based evidence. The students could
be asked to use a graphic organizer such as double bubble to display information gathered from article. Students will read silently and read aloud both the nonfiction and fiction selections depending on the station. The students are asked to do Quiz Star daily as homework to improve the score on the SRI test. They were given time in class to work on Quiz Star. While the students are working with one of the teacher they will do pre-reading activities such as predict what the story is about based on the covers of the book. Post-reading activities with nonfiction articles are Venn diagram, or Thinking Maps. During the summer program there was limited whole group instruction. Another intervention that was used is one – to - one instruction with a teacher during guided reading of fiction, guided reading of nonfiction or Moby Max. While the students are on Moby Max, the students are monitored visually and using the software. The students pick their own books during sustained silent reading. The articles from NewsELA, Reading Work and guided fictional reading are from the school district pacing guide for fifth grade. At the end of each day the parents were given a brief report of the student’s daily progress when they came to pick them up from the program. Progress reports were sent home to the parents on a weekly basis. Progress reports address Moby Max, and behavior. Moby Max report gives information such as time on section, section covered, and score earned. Students can earn a grade of Excellent, Satisfactory, and Needs Improvement. There is a place for the teacher to make comments about the student’s progress during the week. Progress reports are to
be returned signed on Monday. During the last week of the program the students will take SRI, MAP and a Moby Max post-test to show growth or lack of growth. In conclusion, about seventy-five percent of the students had mastered enough new skills to be successful in the next grade. The student’s data will be entered in a rubric, which will determine if the student will be promoted to sixth grade.

**Introduction**

As teachers and parents we spend a lot of time finding materials to help our students remediate and master skills. As the world becomes more and more technology prevalent in schools, homes and in our lives for computer programs are available to help students. As people we have heard Practice makes Perfect.

**Area of Focus Statement**

The purpose of this action research study is to see if technology such as Moby Max will allow students to master enough new reading standards to allow them to be promoted to the sixth grade. A student needs to have a SRI score of seven hundred and sixty to meet the standard for fifth grade. The average student that is successful in the next grade has mastered at least eighty percent of the prior years’ standards. The rationale for this approach is summer school is one of the factors in the promotion or retention of the student.
Variables

The framework of this action research comes from the summer school pacing guide given by the school district during pre-planning. The differences between a students’ SRI, MAP, and score in May to the score at the end of June. The student choice of method of summer school attending four days a week or two weeks is a variable in this action research. The students will be given their IEP accommodations.

Research Questions

➢ Does one on one instruction, Moby Max instruction, and small group instruction impact the student mastery of standards, impacting promotion to the 6th grade?

➢ Can a program such as Moby Max be used successfully for remediation?

➢ Can growth in literacy achievement be achieved in a four week, four day a week program given two hours of instruction?

Review of Related Literature

All primary – grade teachers intuitively know that if young children begin with a foundation, they rarely stumble along the path of academic progression. On the other hand, if they do not, these young learners often struggle throughout their school careers (Reutzel, 2015 p.14). Focusing early phonemic awareness instruction on blending, segmenting and manipulating phonemes has been shown to produce greater
improvements in phonemic awareness and future reading achievement in the young child than time spent on rhyming and alliteration (Reutzel, p. 16). Research has shown the phoneme-level skills account for unique variance in students’ future reading scores, after controlling for the effects of rhyming ability in children (Reutzel, p.16). There is no reason to delay the teaching of reading comprehension strategies such as text structure until can read fluently (Reutzel, p. 21). Prensky in 2001 argued that 21st century technologies transform literacy; because technology is now ubiquitous in the developed world, children read, write and learn in ways not imagined just two decades ago (Steckel, 2015, p. 42). In order to guide our thinking about exemplary technology integration within the literacy curriculum, we embrace a conceptual model widely referred to as Technological Content Knowledge (TPACK) (Steckel, p. 42). As a teacher I have used this plan to guide evaluating to technology tools for classroom use. Effective integrators make the most the digital tools and resources available to them- that is, artistic technology- integrated instruction is not necessarily the use of cutting-edge technology. Rather, in most cases observed teachers using available tools in sophisticated ways to differentiate instruction, create opportunities to build language and literacy, and build bridges between the classroom and the global community (Steckel 47). Gradual release of responsibility is similar to the relationship of a parent and child. Intervention. The
Building Educated Leaders for Life (BELL) middle school program is a full-day academically oriented summer program that serves rising sixth- through eighth-graders who are identified by their school as performing one to two years below grade level, on average. The program operates five days a week for approximately five weeks during the summer. Its day is a traditional “full day” (6.5 hours), in which the morning is devoted to math and reading instruction and the afternoon provides enrichment through activities in science, physical education, the arts, and other creative subjects — except on Fridays, when there are guest speakers or field trips (Somers).

What was BELL’s impact on middle school students’ reading achievement when they returned to school in the fall? In the average study district in fall 2012, BELL students did not have higher reading test scores than non-BELL students (effect size = 0.01; p-value = 0.929). These results are consistent across reading subtests. Thus, it cannot be concluded that BELL had a positive impact on students’ reading scores. In one of the three study districts, the effect on reading scores is negative and statistically significant, which further supports the hypothesis that the program (Somers).

“Moby Max filled in all those gaps to make him truly believe he could do the work, and through that new-found confidence, self-led education, and motivation, he mastered the skills he needed in order to advance to the regular classroom.” This is a quote on
Moby Max website from Karen Townsend a special education instructional specialist.

Newell and Rosenbloom (1981) and Anderson (1995) found that students must receive focused practice to achieve mastery of skills and that it takes more than 24 practice sessions before students reach 80 percent mastery. They also found this practice must occur over a span of days or weeks. This is from the Moby Max under the tab Moby Max Research Based Pedagogy.

**Language**

2016
This chart is from Moby Max website. This is from a press release from June 13, 2017. Moby Max, innovator of award-winning personalized and blended learning curriculum for K-8 students, has been named a 2017 SIIA CODiE Award finalist in two prominent categories: Best Cloud-Based Solution and Best PreK/Early Childhood Learning Solution. The award nominations recognize Moby Max’s unique achievements in developing groundbreaking educational software, digital content, online learning services, and related technologies across the PreK-20 sector. “It is gratifying to be commended for our success in helping teachers easily find and fix learning gaps in all K-8 subjects,” said Moby Max co-founder Glynn Willett. “Tens of thousands of teachers have told us how much they love the differentiation and individualization Moby Max makes possible for every student. This nomination acknowledges how critical it is for teachers to have this capability.” Moby Max recently expanded its early elementary curriculum by adding seven new phonics skills and reading modules to an already comprehensive suite of tools. For early learning, Moby Max now includes for Phonics and Spelling Rules, Alphabet, Phonic Sounds, Phonics Blending, Phonics Spelling, Foundational Reading, Early Reading Trio, Sight Words, Early Math, Number Sense, Fact Fluency, Early Science, and Early Social Studies. These innovations are helping
Moby Max achieve its ambitious mission to “enable children everywhere to learn twice as fast, any time, on any device.” This is from Moby Max website.

**Interventions**

Students will be given the following interventions: one on one instruction, Moby Max instruction, and small group instruction. I will collect student work samples of work during small group instruction and whole group instruction. I will take anecdotal notes while students are reading and while students are using Moby Max.

**Membership**

Membership of this action research group consists of nine fifth graders. Two students have an IEP. Three of the students in the group although had already met the Lexile score for the fifth grade and, where in summer school for mathematics. These students and there parents wanted them in reading class for the summer program. One student only came to class two days a week and worked at home the other two days, also in summer school for mathematics. Four of the students were in summer school for reading; these students were also in summer school for mathematics. The students were enrolled in summer school based the mutual decision of the parents and the school.
Negotiations

Prior to the conclusion of the 2017 school year, their student’s classroom teacher contacted parents of identified students via phone and letter. As more details from the action research project emerge, parents will be contacted with a letter describing the project details. Work samples, pictures, anecdotal notes, and running records will be used for research purposes only. Students’ names will not be included (rather recorded as Student 1, Student 2, Student 3, etc.) in order to maintain confidentiality.

Timeline

The research will last for four weeks during summer school.

Data Collection

During the course of four weeks, I will use four different sources to collect data on my nine students. These data sources include:

1. **Pre- and Post-Test from Moby Max**- The pre-test will be given the first day of summer school. The post-test will be given during the last week of summer school. The results will given in grade equivalent such as 3.5

2. **Moby Max Reports**- The report will contain the minutes on task, the percent of correct answers, and topics.
3. **Student Samples**- The student work samples will be collected during individual assignments, one on one assignment, small group assignments, and whole group assignments.

**Data Sources**

**Moby Max**- The website mobymax.com is going to be used for a pre and post test created by the school district and for mastering standards and skills in reading.

**SRI**- I will compare the testing data from the school year with the test data during the last week of the program.

**Anecdotal Notes**- To jot down the thoughts, words and actions, I used Word application on my MacBook Pro.

**Graphic Organizers**- During the program students will be exposed to several graphic organizers such as: double bubble thinking map, Gist, and Venn Diagrams.
**Quiz Star** - This website will be used to help students prepare for the SRI retest at the end of the program.

### Data Analysis and Interpretation

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<th>Student</th>
<th>Highest SRI Score</th>
<th>Reading final grade</th>
<th>ELA final grade</th>
<th>End of summer school SRI</th>
<th>Moby Max pretest</th>
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One student had growth on the pre and posttest in Moby Max. One student improved his SRI score. Three of students SRI scores at the end of the program as compared to their highest score from the school year. The results of the research are not what I expected from the information on the Moby Max website. Students nine to twelve were not in the reading class during the summer program.

**Action Plan**

The school district has established a score of seven hundred and sixty as the needed Lexile score to be met by the end of the fifth grade. A student needs to have a MAP score of 215 on the Math section of this test. My plan was developed using the pacing guide, which is full of recommended activities for students. A typical day in summer school looks like (1)
five to ten minutes to go to restroom and or eat snack; (2) ten to fifteen minutes silent reading and answering questions at the end of the book, these books are self selected; (3) approximately twenty minutes small group reading nonfictions, or small group guided reading; (4) twenty minutes working on Moby Max or Quiz Star, (5) twenty minutes whole group instruction.

**Final Thoughts**

This action research project has been beneficial to me a since it was an opportunity to practice doing action research. I enjoyed working with elementary students, which is not of my typical age group of students to work with as a high school. It was interesting to see how students acted differently in small group, one on one, and whole class instruction in a class of less than ten. This research did not show what the Moby Max website suggested; although my research has left me with more questions than before I started. **Students who have spent just 40 hours using Moby Max average one full grade- level increase in both math and language.** These results are due largely to Moby Max’s pedagogy, which incorporates multiple research-based techniques that have proven highly effective in increasing student achievement. Moby Max’s pedagogy and curriculum system incorporate the most effective practices for increasing student
outcomes as identified by Professor John Hattie's exhaustive research of over 800 meta-
analyses. This information is from the Moby Max website.

**References**

Keys to Reducing Summer Regression: e Reader, Routine, and Relationship Morgan V.
Blanton Cleveland County (NC) Schools, blantoncrew@gmail.com published in Journal of
Organizational & Educational Leadership

Reutzel, D. Ray. (2015). *Early Literacy Research: Findings Primary-Grade Teachers will
want to know.* The Reading Teacher.

Analysis of the effects of an academic summer program for middle school students.*

Technology Integration: Stories from Primary and Elementary Classrooms.* The Reading
Teacher.

**Statement of Resources**

Pacing Guide from district

End of year promotion appeal rubric for elementary/K8 (Math and Reading)
2017 Summer School Program Elementary/K8 On-Site Parent Notification Form

Data from school year: final grades in all subjects, SRI tests from the entire year, MAP from the entire year, date of birth, age, special needs if so area of exceptionality and if SLD academic area of concern

Additional Texts

Forms about summer school including promotion and retention

Examples of Articles Used from NewsELA