Using Data to Drive Instruction: A Comparative Study of Lexia Scores to Other Reading Assessments, Attendance, Grades, and Behavior

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Abstract:
The purpose of this study is to analyze student progress after the frequent usage of a computerized reading program that provides phonics instruction and gives students independent practice in basic reading skills. Further, the study observes and analyzes the correlation between student progress in Lexia to progress report grades, report card grades, attendance, office referrals for poor behavior, the Fountas and Pinnell Benchmark Assessment System (BAS) scores, Kindergarten Readiness Assessment (KRA) language and social scores, and the Reading Inventory scores (RI).

Keywords: Lexia, assessment, evaluation, reading, phonics, KRA, BAS, RI

Introduction:
Over the past twenty years, demographics within our society, increasing poverty, and the new demands of education have affected the educational system. Faced with increasing at risk students, schools must make major accommodations in curriculum standards to address the needs of these students. The achievement gap is quite apparent within the educational community. Research has indicated that students from lower income homes perform poorly in academics, particularly in literacy, than students in higher socioeconomic groups (Turner, 2004). The rise in the number of children in poverty has contributed in making the classroom more diverse than before (National Center for Education Statistics, 2018). How can educators address these needs in literacy, particularly with students of poverty and minorities? Is there a correlation between the following: 1.) students’ progress report grades, 2.) report card grades, 3.) attendance, 4.) office referrals for poor behavior, 5.) the Fountas and Pinnell Benchmark Assessment System (BAS) scores, 6.) Kindergarten Readiness Assessment (KRA) language and social scores, and the 7.) Reading Inventory scores (RI)?

In light of these challenges, what programs are available to address the poor achievement and progress in literacy among children of poverty and minorities? Lexia is a research proven, blended learning program that accelerates the development of fundamental literacy skills for students with diverse ability levels from grades preK-5. It provides explicit, systematic, personalized learning in the six area of reading instruction, targeting skill gaps as they emerge and provides educators with the data and student specific resources for individual or small group instruction (J. Priest, personal communication, Nov. 27, 2017). The program includes activities that focus on the following six components of reading: phonological awareness, phonics, structural analysis, automaticity/fluency, vocabulary and comprehension.
Lexia is designed for regular use, consisting of two to five weekly sessions of twenty to thirty minutes each, in a lab or classroom setting. It is compatible with a tiered model of instruction and designed to be used no more than thirty minutes per session. The program is intended for use twice per week for students reading on grade level or above. For at risk students, it gives repetition and frequent remediation with needed skills. Moreover, each student has access to a dashboard that gives the following information: a) weekly usage goal, b) total minutes completed for the week, c) minutes needed to meet weekly goal, d) total units completed for the week, e) minutes added during current session, f) units added during current session, g) logout, and h) return to activities. Students begin each session with a warm up and the goal is to promote speed of processing and automaticity for previously acquired skills. Note that the student will choose one of two warm-ups and try to beat his or her highest score.

Furthermore, Lexia Reading Core 5 is designed to meet and to exceed rigorous state standards, including Common Core State Standards. In addition, when students first log in, they complete a set of placement activities. Students will be automatically placed at their appropriate starting level in the program according to their performance. Next, students begin with their grade level skills and branch up or down to a level that is not too easy or too hard. Afterwards, students are assessed on word identification and comprehension skills at each level. Note that most students finish the auto placement session within twenty minutes. If the session is interrupted, all data is saved and stored until the next log in.

Moreover, the six components of reading are represented by color coded icons used throughout the program. Further, each grade level has a certain number of levels. Note the chart below:

| Grade Level of Material | Pre-K | K | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 |
|-------------------------|-------|---|---------|---------|---------|---------|---------|
|                         | Level 1: A Picnic in the Woods | Level 2: A Day at the Beach | Level 6: A Day in Paris | Level 10: An English Garden | Level 13: The Indian Rainforest | Level 15: The Great Barrier Reef | Level 17: A Southwest Fiesta |
|                         | Level 3: A Snow Day in the City | Level 3: The Amazon Rainforest | Level 7: The African Serengeti | Level 11: The Swiss Alps | Level 14: A Japanese Garden | Level 16: A Hawaiian Paradise | Level 18: The Ancient Greek Courtside |
|                         | Level 5: The Scottish Cliffs | Level 4: The South Pole | Level 8: The South Pole | Level 9: The Egyptian Desert | Published by Lexia 2018 |

In addition, units are adapted based on each student’s individual performance. Lexia has a three step instructional branching: standard, guided practice, and instruction. Additionally, Lexia provides teachers a class action plan that gives educators a “to-do” list to support students. It also informs teachers as to which students need more usage time on the student program. The Needs Column tells how many more minutes on Core 5 that the student needs in order to meet their recommended usage for this week (Monday-Sunday). This program indicates and identifies struggling students. Teachers can access a PDF lesson and can receive additional support. Lexia also has a program section entitled “skill builder.” Skill builders are designed for
students who have finished a program level and are ready for independent practice. Teachers can access the PDF worksheets and mark the Skill Builders as delivered to remove it from the students’ list. Periodically, students receive certificates that have they finished or completed program levels. Successful implementation is based on the following certain criteria: a) students consistently meet weekly recommended usage; b) teachers monitor student progress and plan instruction based on students’ needs; and c) students receive targeted instruction with Lexia Lessons and practice opportunities with Lexia Skill Builders.

**Targeted Instructional Materials:**

|                      | Lexia Lessons | Skill Builders | Lexia Connections | Supplemental Comprehension Lessons |
|----------------------|---------------|----------------|-------------------|------------------------------------|
| **Description**      | Scripted, explicit instruction for targeted intervention | Practice worksheets for application and generalization of skills | Activity suggestions for introduction, reinforcement, or extension of a skill | Scripted instruction to enhance reading comprehension |
| **Student Experience** | All instructional materials offer Multi-sensory activities that reinforce and extend online learning and provide opportunities for oral expression, writing, and collaboration. | All instructional materials offer Multi-sensory activities that reinforce and extend online learning and provide opportunities for oral expression, writing, and collaboration. | All instructional materials offer Multi-sensory activities that reinforce and extend online learning and provide opportunities for oral expression, writing, and collaboration. | All instructional materials offer Multi-sensory activities that reinforce and extend online learning and provide opportunities for oral expression, writing, and collaboration. |
| **Scope**            | 161 lessons | 431 pages | 144 pages | 35 lessons |
| **Delivery**         | Teacher-led | Primarily independent with opportunities for peer collaboration | Teacher-mediated with opportunities for peer collaboration | Teacher-led |
| **Grouping**         | • Individual  
• Small group  
• Whole Class | • Individual  
• Peer or adult partner | • Individual  
• Small group  
• Whole class | • Individual  
• Small Group  
• Whole class |
| **Focus**            | Students who are struggling with a skill in an online activity | Students who have completed an online activity | All students to supplement instruction | All students to supplement instruction |

Published by Lexia 2018

Lexia also recommends various implementation models which include: a) classroom (center rotations); b) computer lab; c) intervention block/special education; d) before and after school; and e) home usage. To maximize student learning, Lexia recommends using a combination of these implementation models.

Historically, Lexia, an adaptive program, is a component of Rosetta Stone. Rosetta Stone is an award winning language solution combines proven learning methods used in primary, secondary, and post-secondary levels. The directions are given in the child’s native language. Therefore, Lexia is familiar with the needs of English Language Learners. How does it make its programs compatible for other learners? Lexia addresses or accommodates gifted learners because it is and an accelerated program. Students can work at their own pace and therefore, Lexia remediates and challenges students simultaneously. Lexia addresses balanced literacy. This program gives students what they need and it aligns with RTI (Response to
intervention). For students, there are three levels of instruction to attain. Lexia does not track students, and there is no prescribed number of lessons. Students never have to wait until the lessons are not repetitive. This is one of the components that make Lexia so successful. Is Lexia more successful with male or female students? Lexia is centered on engagement and the self-determination theory, and it is universally self-engaging.

According to Ness, Couperus, and Willey, (2013), this study evaluated the efficacy of the Lexia Reading program with a cohort of 37 students in a primary school. Students were randomly assigned to experimental and control groups. The study concluded that the program’s base and efficacy is equivocal. This study was a small study limited to a single school. In the final analysis, two programs are beneficial for the learner in Lexia: computer time and direct teaching time. Teachers are provided a way to provide students with targeted one-to-one instruction in specific skills areas that are key to literacy development. In conclusion, this individualized instruction ensures that any limitations of the program are ameliorated (Ness, Couperus, and Willey, 2013).

The U.S. Department of Education conducted three studies that included 314 students in kindergarten and first grade in two states. The data reflected that Lexia Reading had potentially positive effects on alphabetic, no discernible effects on fluency, potentially positive effects on comprehension, and no discernible effects on general reading achievement (U.S. Department of Education, 2009).

Within this district, the state mandates that students take various assessments to measure and to improve literacy instruction. In the following section, the authors will give an overview of the BAS by Fountas and Pinnell, KRA, and the Reading Inventory assessments.

**Fountas and Pinnell Benchmark Assessment System (BAS):**

What is the purpose of the BAS assessment? What are educators able to observe? Using the *Fountas & Pinnell Benchmark Assessment Systems* to determine student’s independent and instructional reading levels, teachers are able to observe student reading behaviors one-on-one, engage in comprehension conversations that go beyond retelling, and make informed decisions that connect assessment to instruction.

How are the BAS assessments administered and implemented? The *Fountas & Pinnell Benchmark Assessment Systems (BAS)* assessments are conducted one-on-one. In Part 1 of the assessment, the student reads aloud and talks about the leveled fiction and nonfiction books, while the teacher observes and notes the reader’s behaviors on carefully constructed forms. In Part 2, the teacher conducts a revealing Comprehension Conversation. Optional Part 3 uses a Writing about Reading prompt to elicit response to the text. **What are the goals of the BAS assessment?** BAS identifies each student’s reading level during this one-on-one, student-teacher assessment conference. Reading levels range from Pre-A to level Z. Each assessment enables teachers to:

- Determine students’ instructional and independent reading levels
- Recommend a placement level for instruction
- Form initial groups for reading instruction
- Plan for efficient and effective instruction
- Identify students who need intervention and extra help
- Monitor and report student progress across a school year and grade levels
- Assess the outcomes of teaching
- Inform parent conferences

**Kindergarten Readiness Assessment (KRA):**

What is the KRA? The Kindergarten Readiness Assessment is a developmentally appropriate instrument that measures a child’s school readiness across multiple domains. These domains are as follows: Social
Foundations, Language/Literacy, Mathematics, and Physical Well-Being. The KRA provides a snapshot of students’ abilities at the beginning of the school year. Additionally, the KRA includes selected response items, performance tasks and observation items. It consists of 50 items, and each item is scored using a rubric.

During the test administration, all items are scripted, and the teacher reads the directions written in the Teacher Administration manual to the students. The teacher interacts directly with the child for the selected response and the performance task items. Observations can take place in a variety of naturally occurring settings. For the observation items, educators can observe students individually, in small groups, or whole groups. Note that observation items are scored using a rubric that includes specific criteria at three levels of proficiency: Proficient, in Progress, or Not Yet Evident. The interpretation of the KRA scores is as follows: 1) demonstrating readiness (270-298), 2) approaching readiness (258-269), and 3) emerging readiness (202-257).

Reading Inventory:

The Reading Inventory (RI) assessment is used to assist teachers in creating more personalized instruction. This test has been recognized as the highest rated assessment for validity and reliability by the National Center on Intensive Intervention. In Kindergarten, students take the foundational reading assessments, and it measures phonological awareness, letter-word recognition, and word-attack skills in a low pressure, developmentally appropriate manner. The test is given online for students.

Participants:

For this investigation, researchers gathered data from participants’ scores and input on the Lexia program. The participants represented various ability and cognitive levels. The charts included below give a description of the participants, demographics, grade level of material, instructional priorities, and specified students’ growth.

Located in an affluent district, Elementary A has less than five hundred students (335 in 2016), and about two teachers per grade level. Recently, there has been a few shifts in administration and high teacher turnover. In 2016, Elementary A had a principal for sixteen years. Since her retirement, there have been two other administrators. Approximately ninety-four percent of the student body are recipients of Medicaid, SNAP, or TANF, homeless, foster, or migrant social programs. Eleven percent of students have disabilities while only four percent are gifted and talented. Two percent are retained.

Over half of the faculty has advanced degrees and fifty percent are on continuing contracts. Students and teachers have a high attendance rate. Even though Elementary A serves a poor rural community, the district is affluent and diverse. It has many resources and extensive professional development opportunities for faculty and staff.

Within this study, the authors focused primarily on three students from one of the kindergarten classes. However, the dynamics and characteristics, factors and student biographies are included for all students. The class has eighteen students; only one student in the class has been retained. It is his second year in kindergarten; in addition, he is a special education student that receives pull out instruction daily for forty five minutes. The demographics of the class are explained later in the article. Please note that out of the eighteen students only ten were previously enrolled in Pre-K. For many of the students, this is their first experience in school.

As for the faculty, the teacher of this kindergarten class is a seasoned veteran of over twenty years. She has a diversified teaching background, and she has taught on every level from elementary to collegiate levels. It is her third year in this state, and her first year at this school. The former kindergarten teacher retired. The teacher assistant is a former first grade teacher and has been a faculty member of this school for several years. She has family within the community.
Participants’ Gender:

In comparing the KRA social skills scores, referrals, and behavior charts, there was a direct correlation between the three. Students AL, DM, DB, and JJ had the lowest KRA social scores, and in comparison to the other students, they had more sad faces on their behavior charts, particularly AL. AL, one of the most violent and defiant kindergarteners, had two or more referrals. The teacher believed that the administration is nonsupportive; therefore, she did not write referrals even though AL hit, slapped, and kicked other students. AL hit the teacher and even throws her I-pad on a consistent basis. In light of this, the number of referrals for AL is not a true reflection or accurate data. During calendar time, AL crawls around on feet and hands darting in and out between students while the other students and the teacher are discussing the weather, numbers, the days of the week, sight words, and other subject matter.

With the KRA social skills scores, fourteen were demonstrating readiness while three were approaching readiness (DM, JJ, and DB). One student (AL) was classified as emerging readiness with the KRA. With the overall scores, again, thirteen were demonstrating readiness, and three were approaching readiness (DM, LG, and DB). One student (AL) was emerging readiness. To reiterate, all five of these students (DM, LG, DB, JJ, and AL) were Pre-A readers in accordance to the BAS scores. They also had the lower grades on report cards and progress reports. (1s and 2s) As for the Reading Inventory scores, all students were in the kindergarten range; however, the scores are questionable due to technical errors and issues with the student i-pads during the test administration.

As for behavior, JJ, LG, and DM, are not so much defiant, but they are not focused in class. They are too talkative and demonstrate silliness for attention. On the other hand, AL and TH are violent, defiant, and mean to others. Note, these students (DM, JJ, AL, DB, and LG) were not in PreK. These students struggled all year writing their names; recognizing letters and sounds; writing simple words or sentences; and reading simple stories.

The charts below reflect the class’ behavior from August 2017 to February 2018. Students either could have a good, ok, or rough day faces. These charts were sent home daily for parent signatures. Comments from the teacher or the teacher assistant were placed on the card. The teacher and the teacher assistant worked closely together in deciding which students would receive which face. Overall, the behavior charts were a good source of data, but there are instances in which the child lost or misplaced a card or certain days were left blank.
Behavior Chart: November 2017

Behavior Chart: January 2018
Behavior Chart: February 2018

Kindergarten Tardies, Absences, and Referrals
According to the above chart, the attendance rate did not necessarily correlate with the behavior or the academics of students. For example, JJ is a low student and a moderately behavior problem at times. He has been absent about 12 days. On the other hand, SM is on grade level, and she has been absent for approximately 17 days. She is a great student who is very well behaved most of the time. NT and AM have been absent for 6 days. Both are academically on grade level, but NT is well behaved, and AM’s behavior is sporadic. PB is on grade level, and she has been absent for 10 days, and DD has been absent for 10 days. Both students have exemplary behavior and satisfactory progress in K class. However, KG has been absent for approximately 13 days; his behavior too is sporadic. His work is not consistent. DM, a special education student, suffers from asthma as well; he has been absent for 9 days.

**A Glimpse of the Students:**

**DB**

DB’s father was recently involved in a shooting; as a result, he was absent for an entire week in February 2018 with an addition of three more days. His behavior and test scores are in correlation with each other. Upon his return, the teacher is not sure how his academics, behavior and progress will be impacted negatively or positively as a result of his father’s tragedy. His progress reports and report cards are 2s. In addition, he was classified as a Pre-A in BAS. With KRA, DB was categorized as approaching readiness (266 in social foundations and 259 in language). His RI scores were low but in the kindergarten range. As of March 2018, he is on level K5 with Lexia. When DB returned his behavior changed for the worst. He has been disruptive; consequently, he has been in time out 2-3 times within a week. A neighboring foster grandparent that volunteers in the school contacted the parent on the teacher’s behalf. DB, another focal point of this study, has minor behavior problems in comparison to TH and AL, but he can be combative with adults and harassing to other students. Since March 2018, his behavior has negatively escalated.

**TH**

TH, an academically gifted student, has progressed to 2nd grade on Lexia (level 10), and he has high marks on his report card and progress reports. Another focal point of this study is that TH has had about 5 absences thus far. However, his behavior is erratic and obscure. He is the second child of a single home family. Last year, in PreK, he received services for his behavior from a psychologist. TH hits, kicks, punches, and harasses both teachers and students. He even growls. The parent denies that he acts like this at home. Two of the students, TH and AL, are subject to random tantrums, and they often fall out on the floor and refuse to move. Both have kicked and pushed furniture. All incentives, rewards, and consequences have been implemented, but none have succeeded. Behavior plans have been placed in Enrich by the teacher in hope of getting mental health assistance. The social worker observed him in the school setting as well. Finally, the teacher has also gotten first and second grade math work for the student; she tutors independently in hopes that this will challenge him and thus calm him. Students also participate in the hour of coding, as an academically gifted activity. In the last two weeks of March, the teacher designed a Google Classroom, and she included TH and NN so far.

**LL**

LL is an average student and well behaved. Her mother is very involved in her child’s education. The teacher observed the mother and LL in the local library frequently. LL’s attendance is good, and her grades range from 3’s to some 4’s. Her tardies, however, are high; eight for the year thus far. Her BAS level is C, and her writing is satisfactory. Her other assessments complement her ability level. With Lexia, she is on first grade L6.

**NN**

NN is an articulate well-behaved student. Thus, far, she has only had six absences and one tardy. She reads at and above grade level. Her BAS level is B, but she loves to read and to volunteer to read to the class often. NN was a former Pre-K student, and she is well acclimated to school. NN has 3s and 4s on her progress reports and report cards. On Lexia, she has transitioned to first grade level. Approximately, ten K
students have transitioned to first grade by mid-March 2018. Towards, the end of March 2018, the teacher created and enrolled her into Google Classroom as supplemental instruction and enrichment.

**PB**

PB is well-behaved and attentive in class. She catches on quickly in math and reading. She knows or has high letter recognition and identifies many sight words. On Lexia, she is on first grade, level eight. Note PB has no referrals, and even though she has missed several days (ten days), she has managed to maintain and to advance in this class. She, too, comes from a supportive family that visits the school. Her family is very responsive. Her KRA social score is 298, and her language score is 269. She is level B with BAS, and 7 is her RI score.

**DM**

DM, a special education student, repeated kindergarten. He is a chronic asthmatic, and he has a high absentee rate. He has had ten absences; thus, far. Every day, he receives pull out services in special education, OT and speech. DM has great difficulty sitting still, and I believe that he may have some auditory challenges. Often, during instruction, he yells out, and he has odd attachment issues with crayons. He has extreme difficulty focusing as well. In Lexia, he began on level Pre-K, but he has finally advanced to K level. (L2)

In reading, he has two’s on his progress reports and report cards. The Lexia scores, progress reports, and report cards are complementary. Every day, DM receives extra support in reading, along with AL, JJ, LG, and DB, in LLI reading groups.

**MP**

MP, the only Caucasian in the class, is a quiet reserved child. Academically, she scores 3s and 4s in Language on her progress reports and report cards. MP was a former Pre-K student. MP has a speech impediment, and the teacher has requested assistance from the speech pathologist. The speech pathologist gave the teacher a packet of interventions with lists of words to practice syllables and the sl, sm, sh blends. The teacher admitted that including time in her schedule to individually assist MP has been difficult. Therefore, the interventions have been implemented sporadically since January 2018. MP is first grade, level 7 with Lexia. KRA scores are 283 social and 272 language respectfully. MP is classified as demonstrating readiness with the KRA assessments. Note that MP is on level B with BAS.

**DA**

DA has a supportive family that frequently visits the school. It is apparent that she comes from a loving environment, even if the family lives in a poor neighborhood. DA has satisfactory attendance and behavior. Only a few incidents in which she misbehaved, but they were minor incidents. However, the teacher notes odd behavior with DA, in that she crawls around on all fours in class and refuses to walk at times.

Her progress reports and report cards are satisfactory ranging from 3s to 4s in some areas. Her reading independent BAS level is A, and her instructional level is B. The KRA scores in social foundations and language were 298 and 272, which is the normal range or demonstrating readiness for kindergarten. (See chart below)

**AM**

AM is an intelligent student, who has an older brother at the school. In the beginning of the year, AM was well behaved, but she is now experiencing some behavior issues but not to the severity of TH and AL. AM’s progress reports and report cards are 3s. Her BAS level is A. 298 is her social foundations KRA score and 269 is her KRA language score. Her social foundations are classified as demonstrating readiness; however, her language KRA is 269, and it is classified as approaching readiness. AM has had six absences, but other than that her attendance rate is good. Her attention span, along with other students, needs to improve. She is
easily distracted and she has to be monitored closely. AM does not follow directions well. There has been a digression in her behavior since the beginning of the year.

NT
NT is a quiet, reserved and well behaved student. His grades on his progress report and report cards have been exceptional, usually all 4s. KRA social foundations and language scores are classified as demonstrating readiness. His BAS score is independent and instructional level A. Due to technical difficulties on his I-pad, his scores on Lexia are not really reliable, particularly since it is believed that this student had a name mix up with another student. Overall, his attention span and focus is great. He is on the first grade level in Lexia.

KG
KG is an average student that is hindered by his lack of focus and his attention span. In comparison with the other two students with major behavior problems, his issues are manageable. He often does not listen or follow directions. Work is often incorrect or sloppy. KG has been absent for 13 days thus far, and he does not have frequent tardies. His family is supportive and frequently visits the class. In ELA, his report card and progress reports have been on level 3. KRA scores of 298 and 275 show that he is demonstrating readiness in social foundations and language. He is level B according to BAS. Since his father’s hospitalization, his behavior has deteriorated. For example, he spread feces over the toilet in mid-March.

AL
AL, a female student, did not attend Pre-K, and she is one of the focal points of this article. When AL entered Kindergarten, she could not write her name or recognize letters. AL also had difficulty logging onto Lexia using her I-pad. It took her six months to log onto Lexia independently. Moreover, she is just getting to the point of writing her name on her paper for writing workshop; however, she still has difficulty writing a simple sentence and sight words to describe her pictures. Her KRA scores of 253 and 247 are classified as emerging readiness. In addition, her BAS scores are level Pre-A. These scores are complementary along with her progress reports and report cards which were marked 1s. AL has excellent attendance; she has only been absent twice with no tardies. AL has at least two referrals for behavior. The office referrals would have been more in number, but the teacher decided that the office does not provide teachers support in the area of discipline. Students are not suspended and rarely removed. Social work referrals have been made on behalf of AL and TH due to their violent, defiant, and aggressive behavior. AL’s behavior, too, is erratic. She has a few good days. AL also often gets under the furniture. Overall, her behavior is inconsistent, and the trigger for her misbehavior is unknown. AL lives in the local housing projects. The teacher visited the home once due to unresponsive parents.

Since the end of March 2018, AL has been moved to the other K class due to unknown reasons. However, the teacher noted that the parent met with administration while she was intoxicated and under the influence. The parent conference was combative, and the parent was accusatory in regards to the teacher.

DD
DD’s BAS score is level A. Also, in KRA, her scores indicate demonstrating readiness in social foundations. The score of 263 in language demonstrate approaching readiness in reading and writing. Progress reports and report cards are marked level 3s. She has had six absences and two tardies thus far. KRA scores are 263 in language and 298 in social foundations. The language scores indicate approaching readiness (263), and demonstrating readiness in social foundations (298). DD is concerned that she has attachment issues. She cries daily when her mom drops her off. DD is a dependable, well behaved and intelligent student. With Lexia, she is L5 in the kindergarten level. Presently, she is having difficulty with ending sounds.

SM
SM, according to her mother, is having psychiatric issues at home. SM believes that a “man is in her bed telling her to do things.” The teacher was astonished by this statement because overall SM is an excellent
student and well behaved, the majority of the time. There were a few incidents in which the teacher believed that the student lied and threw away a student’s toy. The behavior charts also document that SM has great behavior.

SM’s mother is supportive; however, she appears to be very defensive with the teacher. SM, she believes, cannot do anything wrong. The teacher works hard to be diplomatic with this parent. In reference to her academics, her progress reports and report cards are 3s. Her KRA scores indicate demonstrating readiness. (298 social foundations and 275 languages) Her BAS level is A and instructional level is B. SM is Kindergarten L5 in Lexia. She, too, has problems with ending sounds. Absenteeism is a concern. She has been absent 22 days; however, her academics have not been affected. She is still an excellent student.

JJ

Because of his high absenteeism, the school counselor contacted and met with the family of JJ. JJ, another focal point, of this article, is quiet at times, but acts out at times to gain attention. He only has one referral for threatening to bring a gun to school. His parents were contacted by the principal, but he was not suspended. Moreover, he has a high absenteeism rate; fourteen days to date and two tardies. His progress reports and report cards were marked with 1s, but mostly 2s. His scores in KRA were as follows: 258 social foundations and 250 in language. 258 is classified as approaching readiness while 250 is emerging readiness.

In BAS, JJ is on level Pre-A, and he does not know or recognize all of his letters. Even at this late date, he is just beginning to write his name. It is difficult for him to write words or simple sentences. JJ has difficulty focusing in class; however, his behavior is not to the point that it is disruptive as compared to TH and AL. Just recently, the teacher learned that JJ has behavior problems on the bus, particularly in using profanity. The bus driver has indicated the parent has been non-supportive and non-responsive.

EH

EH, an average student, was also a former Pre-K student. He is on level A and level B instructional in BAS. Moreover, his progress reports and report cards are marked 3s. 292 is his KRA social foundations’ score, and 272 is marked for KRA language. EH has a supportive family that attends school events. He also has a visible presence of a father that is acknowledged on his paperwork. My other students rarely mention their fathers in class discussions except AL, EH, MM, DB, KG, and AM. How unfortunate those children are raised by single mothers or other relatives without the presence of the father. If the family structure was reinforced and re-established, what positive impact it would have on student achievement, particularly black males. EH is on Lexia first grade L7.

LG

LG, a delightful student, struggled most of the year trying to write her name; learn letters; and write sentences. LG struggles academically. She truly cannot focus, and this is her first year in school. Her progress report and report cards were scored 2s, and her BAS score level is Pre-A. Developmentally, her KRA scores of 298 social foundations and 258 KRA languages indicate she is demonstrating and approaching readiness in language particularly. LL is on Lexia level L3 in Kindergarten.

MM

MM, a delightful and independent student, is well adjusted socially and academically. He is very helpful in class. MM scores 3s on his progress reports and report cards. On his KRA scores, he is classified as demonstrating readiness. (298 Social Foundations and 272 Languages) In Lexia, he has progressed quickly, he, along with nine other students is on first grade level. MM comes from a very supportive family. He was not in Pre-K last year, but it is apparent that his family works with him at home.
Kindergarten KRA Social Foundations, Language, and Overall Scores 2018:

In the above chart, (Kindergarten KRA Social Foundations, Language, and Overall Scores 2018) the KRA scores for this kindergarten class are shared. To reiterate, the KRA is a kindergarten readiness tool that allows teachers to measure the students’ school readiness across four domains: social foundations, mathematics, language and literacy, physical well-being and motor development. This test is administered during the first 45 days of the school year. How is the KRA scored? Scores are calculated for each domain and for overall performance. The overall score determines a performance level. Note the following chart:

**Interpretation of KRA Scores:**

| Level              | Score  | Meaning                                                                 |
|--------------------|--------|-------------------------------------------------------------------------|
| Demonstrating Readiness | 270-298 | A child demonstrates foundational skills and behaviors that prepare the child for the curriculum based on K standards. |
| Approaching Readiness | 258-269 | A child demonstrates *some* foundational skills and behaviors that prepare the child for curriculum based on K standards. |
| Emerging Readiness | 202-257 | A child demonstrates *minimal* foundational skills and behaviors that prepare the child for curriculum based on K standards. |

Out of the class of eighteen students, ten students scored between 270-298: demonstrating readiness in the language test. Five students were labeled as “approaching readiness in language.” Three students are labeled as emerging readiness with language. All of the students who scored in the demonstrating domain were former Pre-K students. Of the ten students, five are females and five are male. All of the students are well to moderately behaved, except two who have extreme breakdowns and tantrums. (AL and TH) Five students have minor infractions that are expected of small school aged children. On the other hand, five students are placed in the approaching domain. Note that four of these students are female, and one student is male. The male student has been identified as a special education student; in addition, this student is in his second year of kindergarten. (DM)
Finally, three students are in the emerging domain. Two students are male, and one student is female. All three students are behavior problems with one female student with extreme tantrums. (AL, DB, and JJ) These three students also have low scores in the other assessments in addition to low grades. These results provide a measure of each child’s mastery of content and skills that have been identified as expectations for children entering kindergarten. Educators should use these results, along with other data and the teachers’ expertise, to make instructional decisions.

In reference to the KRA overall scores, thirteen students were in the demonstrating domain; while, three were in the approaching readiness category. The KRA scores were in direct correlation with the BAS scores in reading. Students, who were labeled as Pre-A readers, were also classified as either emerging readiness or approaching readiness. These were the two lower categories in the KRA. Please note that the KRA also included a math component, but the math scores were not included in this article due to the fact that this article focuses on literacy. As for the KRA social scores, fourteen students were demonstrating readiness. On the other hand, three students were classified as approaching readiness and one student was labeled as emerging readiness. In all of the students, one of my most erratic behaved, violent, and defiant students scored the lowest in every assessment: KRA, BAS, and Lexia. The report card grades and progress reports also had the lowest scores. This student is a black female student (AL) from a local housing project. The other two students are black males (JJ and DB). Overall, their report cards and progress reports are 1s and 2s; while the other female student is all 1s. Their KRA scores ranged in between the approaching and emerging categories. As for the BAS, both boys were classified as Pre-A readers.

In reference to the Reading Inventory/RI scores, 32-35 is considered as high. Most students either did not understand or finish the test according to the teacher. As stated previously, there were many technical issues during the test administration. Consequently, the scores may or may not be reliable. AM had the highest Reading Inventory score of 33, even TH did not have high score. His RI score was 16. AL scored a 3 while DB scored a 12.

Kindergarten RI Foundation Scores
**Kindergarten Progress Reports ELA  Quarters 1-3**

![Graph showing ELA Q1, ELA Q2, and ELA Q3 over quarters for different students.]

**Kindergarten Report Cards  Quarters 1-3**

![Bar chart showing grades for different students across quarters.]

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Reading Inventory and BAS Class Data Analysis Sheet Winter 2018:

| Name  | Reading Scores | Inventory Level | Winter BAS Level | Spring BAS Level | Gain |
|-------|----------------|-----------------|------------------|------------------|------|
| Student A-DA | A | 11 | B | Not available until April 2018 | Not available |
| Student B-PB | B | 7 | B | |
| Student C-DB | C | 12 | PRE-A | |
| Student D-DD | D | 4 | A | |
| Student E-KG | E | 1 | A | |
| Student F-LG | F | 4 | PRE-A | |
| Student G-EH | G | 14 | B | |
| Student H-TH | H | 16 | E | |
| Student I-JJ | JJ | 11 | PRE-A | |
| Student J-AL | AL | 3 | PRE-A | |
| Student K-LL | K | 14 | B | |
| Student L-SM | L | 2 | B | |
| Student M-AM | M | 33 | A | |
| Student N-MM | N | 16 | A | |
| Student O-DM | Illness | PRE-A | |
| Student P-NN | P | 14 | C | |
| Student Q-MP | Q | 17 | A | |
| Student R-NT | R | 7 | A | |

Focus Students – a recap

In review, the author particularly focused on students AL, TH, and DB due to their academic progress and extreme behavior. First, student DB has satisfactory attendance, and his progress reports and report cards have low inconsistent scores of 2’s. With Fountas and Pinnell, his reading instructional and independent levels are low (Pre-A). His accuracy rate was below 90%. His writing indicated limited understanding of the text. His RI (reading inventory) was a low level scored for kindergarten. The high score is between 32-35. Please note these assessments test similar skills that Lexia focuses on. Even though Student DB has one office referral, the teacher indicated that the administration was non-supportive so it was not effective or beneficial to submit office referrals. In regards to his behavior, student DB has a 64% positive rate points on Class Dojo. A chart that shows the number of happy, okay and sad faces he has earned for the year has been
included within the articles and appendices. The month of November and perhaps certain other dates are missing due to missing charts. The student did not always return the behavior chart. It is the teacher’s belief that if the student had better behavior and focused more it would positively impact his progress.

On the other hand, Student AL refused to complete certain assessments. She scored 3 on the reading inventory test and on the Fountas and Pinnell reading assessment, she is below the 90% accuracy level. Consequently, she will read level Pre-A books. This is similar to Lexia in that she was on the Prekindergarten level until very recently. Student AL’s behavior is 70% positive on Class Dojo. A chart that shows the number of happy, okay and sad faces she has earned for the year has been included within the article and appendices. The month of December and some other dates are missing because the student refused to bring the paper back to class. It is the teacher’s belief that if the student had better behavior and focused more it would positively impact her progress. It is the opinion of the authors that the tests complement each other and support the Lexia score levels for both students. Please note that on March 19, 2018, AL was moved to the other K class per administration.

Finally, the last focus student, TH, scored 16 on the reading inventory test and on the Fountas and Pinnell reading assessment; he is on levels D and E. This is complementary with his Lexia scores. He is now, as of February 26, 2018, on the second grade level. His behavior is 79% positive on Class Dojo. For TH, he mostly does not have safe hands and refuses to follow directions. A chart that shows the number of happy, okay and sad faces she has earned for the year has been included within the article and appendices. TH’s behavior is erratic and believed to be based solely on gaining attention. The teacher has implemented Hour of Code, Google Classroom, and higher levels of math activities to continue to challenge TH in hopes that this will stop the misbehavior. Overall, it has proved successful, but TH still has moments of irrational and defiant behavior and outburst of crying.

In comparison, most of the students in this class range from 81%-100% positive points with Class Dojo. The percentages for TH, DB, and AL are also more of estimation because Class Dojo points are not taken during teacher absences or necessarily for every infraction. Class Dojo also documents not only the date and time but the negative action that occurred. Note the chart below that indicates the percentile for positive Class Dojo points (bold highlighted students are at risk with behavior and students in italics for academics or both academics and behavior):

Student Percentages for Positive Class Dojo Points

| Students | Class Dojo Percentile for Positive Points |
|----------|------------------------------------------|
| DA- Student A | 95% |
| PB- Student B | 98% |
| **DB- Student C** | 64% |
| DD- Student D | 100% |
| KG- Student E | 81% |
| **LG- Student F** | 84% |
| EH- Student G | 90% |
| **TH- Student H** | 79% |
| **JI- Student I** | 84% |
| **AL- Student J** | 70% |
| LL- Student K | 95% |
| SM- Student L | 98% |
| **AM- Student M** | 83% |
| MM- Student N | 98% |
| **DM- Student O** | 91% |
| NN- Student P | 99% |
| MP- Student Q | 100% |
| NT- Student R | 100% |
Data Preparation and Analysis:

Of the total number respondents, ten are female and eight are male. The majority of students were African American or Caucasian. Most were enrolled in a Pre-K program prior to matriculation into Kindergarten. Students’ ages range from five to six years old. The school in which these students are enrolled is rural. However, the school district is affluent, and many resources are available to teachers and to students. Within this particular school, there are two kindergarten classes and one Pre-K class.

Findings:

Based on all the data, the results suggest that remediation and specified repetition improved student progress and achievement in literacy. Since December 2017, four students have moved to first grade level: TH, NN, MM, and AM. Also, students who were on the PreK level in October 2017 have moved to K level; these students are as follows: DB, JJ, LG, and DM. One student AL (Student B) remains in the PreK level, but this is primarily due to behavior and the refusal to complete or to participate in the Lexia program at a consistent level. In February 2018, AL finally progressed to K level in Lexia.

In October 2017, DB scored at level P1. By November 13, 2017, he was on level P2. Dec. 7, DB was on Kindergarten level. To progress to first grade, he must successfully complete two more levels in the Kindergarten level. At this point, he is at 37%, and he has completed 23 out of 62 units. Some of the units that he is focusing on now include: a) blending one syllable words with 1-3 sounds, b) letter to picture matching, c) advanced descriptors (vocabulary), d) sight words and picturing stories. From November 13, 2017 to December 7, 2017, he focused on units focusing on beginning sounds, blending and segmenting, picturing stories, letter names and spatial concepts. At the beginning of the year, his scripted program included focus on letter matching, rhyming, categorizing pictures, and nursery rhymes from October 2, 2017 to November 13, 2017.

With blending and segmenting, student DB scored at 50% and 44% with consonant discrimination (letters B/P). In sight words, he is at 11% and 50% with advanced descriptors. Overall, his accuracy levels are low, but he is progressing quickly from PreK to K levels now. Note within each section, DB receives a combination of direct instruction, guided practice and standard instruction. The program also reveals what types of errors that the students make in addition to his work rate and accuracy levels. DB (Student A) is at a medium instructional priority level.

In comparing the students’ progress according to the grade level of materials, on level one, males and females remained at the same level. Level Two had more females, and it remained the same in January 2018. Level Three had more females in November 2017 and January 2018.

Level Four had more males, and there were no changes in January 2018. Level Five had more females in November 2017, and there were no changes in January 2018. Level Six had more females in November 2017; however, in January 2018, there were more males. Level Seven has only one male. (Graph: Grade Level of Materials for November 2017 and January 2018)

As of March 15, 2018, one student TH, is on the second grade level in Lexia. Ten students are on the first grade level in Lexia, and six students are on the kindergarten level. Since the beginning of this study, students have made significant gains.

Instructional priorities vary throughout the year. However, in comparison to November 2017, January had more instructional areas noted as priorities. As in November 2017, beginning sounds and spatial concepts remained a priority. However, most students in January 2018, they are noted at the high level. In November 2017, more students were rated as medium. In January 2018, the following areas were added: rhyming, blending syllables, letter names, medial vowels, picture details, sight words, sounds to letters, and beginning consonant sounds.

In October 2017, AL scored at level PK1. By November 13, 2017, she was on level PK1. Jan. 23, AL finally moved on to Kindergarten level. Her behavior and refusal to complete work was the primary reason why it
took her so long to achieve. Towards the end of March, the first meeting with the parent was very combative and accusatory due to substance abuse. This resulted in the administration moving the student to the other kindergarten.

All the other three students who were at Pre-K at the beginning of the year had progressed to Kindergarten level in Lexia before Christmas 2017. To progress to first grade, AL must successfully complete fifty-two more units in the Kindergarten level. At this point, she has completed only two out of fifty-four units. Some of the units that she is focusing on now include: a) blending and segmenting, b) picturing stories, c) beginning sounds, d) letter names and e) spatial concepts. From November 13, 2017 to December 7, 2017, she focused on units focusing on beginning sounds, blending and segmenting, picturing stories, letter names and spatial concepts. At the beginning of the year, her scripted program included focus on letter matching, rhyming, categorizing pictures, and nursery rhymes from October 2, 2017 to November 13, 2017.

With rhyming, student AL scored at a low percentage. It took sixty nine attempts for her to complete this lesson. Student B struggled in the following areas in January 2018: blending and segmenting, beginning sounds, letter names, picturing stories, and spatial concepts. From October 2017 to December 2017, she completed forty two units; however, she was still rated as low in the following areas: rhyming, letter matching, categorizing pictures, and nursery rhymes.

Overall, her accuracy levels are low, and she progressed slowly from Pre-K to K levels. Note within each section, AL receives a combination of direct instruction, guided practice and standard instruction. Lexia also reveals what types of errors that the students make in addition to her work rate and accuracy levels. AL is a high risk in the instructional priority level.

**Instructional Priorities for Students As of Feb. 16, 2018**

The above chart is just a sample of instructional priorities for students. At a glimpse, most of the students need extra support and remediation dealing with beginning and ending sounds. Sight words are also usually a difficult area for students overall. How or what are some effective strategies that the teacher can implement consistently to support students?
The instructional strategies have changed throughout the year. Sometimes, students need tutoring on beginning sounds, blending or sight words. Teachers are given a list of students with the skill and lesson attached. Each lesson is composed of different sections: usually has a description, warm-up, direct instruction, guided practice, independent application. After the lesson has been printed or completed, the teacher marks the green button on the lesson.

Instructional Priorities for Students March 23, 2018
The above chart reveals the gender of students and the Lexia levels that students are on as of February 16, 2018. Many of the female students are on level six. An equal number of female students are on levels four and seven. Note an equal number of males are on levels two, three, five, and nine. By looking at this chart, it appears that females are more successful.

### Class Overview of Progress in Lexia Feb. 28, 2018:

| Name | Skill | Level | Predictor | Total minutes | Target | Time Needed | Units Gained | Other |
|------|-------|-------|-----------|---------------|--------|-------------|--------------|-------|
| DA   | 1st   | L6    | 100       | 70            | 0      | 0           | 1            |       |
| PB   | 1st   | L7    | 100       | 136           | 0      | 0           | 18           |       |
| DB   | K     | L4    | 46        | 47            | 50     | +33         | 10           | Behavior issue |
| DD   | K     | L5    | 59        | 46            | 30     | +11         | 3            | Behavior issue |
| KG   | K     | L5    | 100       | 21            | 0      | 0           | 0            |       |
| LG   | K     | L3    | 54        | 33            | 30     | +20         | 1            | Attention issue |
| EH   | 1st   | L6    | 100       | 132           | 0      | 0           | 13           |       |
| TH   | 2nd   | L10   | 100       | 92            | 0      | 0           | 11           | Severe Behavior issue |
| JJ   | K     | L3    | 45        | 26            | 50     | +46         | 0            | Attention/behavior issue |
| AL   | K     | L3    | 24        | 23            | 60     | +60         | 3            | Severe Behavior issue |
| LL   | 1st   | L6    | 100       | 70            | 0      | 0           | 4            |       |
| SM   | K     | L4    | 100       | 69            | 0      | 0           | 13           |       |
| AM   | 1st   | L8    | 100       | 41            | 0      | 0           | 5            | Attention issue |
| MM   | 1st   | L7    | 100       | 26            | 0      | 0           | 4            |       |
| DM   | K     | L2    | 9         | 0             | 60     | +60         | 0            | 2nd year in K; attention issue |
| NN   | 1st   | L7    | 100       | 29            | 0      | 0           | 2            |       |
| MP   | 1st   | L6    | 100       | 6             | 0      | 0           | 0            |       |
| NT   | K     | L5    | 32        | 16            | 50     | +34         | 5            |       |
The above chart indicates the students’ grade and Lexia level. It also shows what additional time is needed on Lexia. Units gained and predictor levels are also given. The author also noted if students had behavior issues or perhaps attention deficit issues within the class.

Class Overview of Progress in Lexia March 15, 2018

| Name | Skill | Level | Predictor % | Total minutes | Target | Time Needed | Units Gained | Other               |
|------|-------|-------|-------------|---------------|---------|-------------|--------------|----------------------|
| DA   | 1st   | L7    | 100         | 132           | n/a     | n/a         | 10           |                     |
| PB   | 1st   | L7    | 100         | 122           | n/a     | n/a         | 11           |                     |
| DB   | K     | L5    | 67          | 127           | 30      | 0           | 2            | Behavior issue      |
| DD   | K     | L5    | 95          | 30            | 20      | 0           | 0            |                     |
| KG   | 1st   | L6    | 100         | 38            | n/a     | n/a         | 7            | Behavior issue      |
| LG   | K     | L3    | 34          | 44            | 50      | +6          | 0            | Attention issue     |
| EH   | 1st   | L7    | 100         | 168           | n/a     | n/a         | 21           |                     |
| TH   | 2nd   | L10   | 100         | 77            | n/a     | n/a         | 9            | Severe Behavior issue|
| JJ   | K     | L3    | 22          | 105           | 60      | 0           | 0            | Attention/behavior issue|
| AL   | K     | L3    | 31          | 201           | 50      | 0           | 9            | Severe Behavior issue|
| LL   | 1st   | L6    | 100         | 34            | n/a     | n/a         | 1            |                     |
| SM   | K     | L4    | 100         | 0             | n/a     | n/a         | 0            |                     |
| AM   | 1st   | L8    | 100         | 106           | n/a     | n/a         | 7            |                     |
| MM   | 1st   | L7    | 100         | 130           | n/a     | n/a         | 23           |                     |
| DM   | K     | L2    | 2           | 35            | 60      | +25         | 1            | 2nd year in K; attention issue |
| NN   | 1st   | L7    | 100         | 0             | n/a     | n/a         | 0            |                     |
| MP   | 1st   | L6    | 100         | 125           | n/a     | n/a         | 18           |                     |
| NT   | 1st   | L6    | 32          | 142           | n/a     | n/a         | 20           |                     |

The second chart indicates the students’ grade and Lexia levels. It also shows what additional time is needed on Lexia. Units gained and predictor levels are given. The author also noted if students had a behavior issues or perhaps attention deficit issues within class. In comparison to the data in February, five students gained in the skill and level areas. DA progressed to 1st L7; DB progressed to K L5. Further, KG score elevated to 1st L6. EH is now on 1st L7, and NT is currently 1st L6. It is not known unto the authors which particular factors caused these four boys and one girl to progress to the next level so quickly within two weeks or less. Was it one-to-one teacher and student tutoring or peer tutoring? Was it due to certain environmental, intrinsic, or social factors?

Class Overview of Progress in Lexia March 29, 2018:

| Name | Skill | Level | Predictor % | Total minutes | Target | Time Needed | Units Gained | Other               |
|------|-------|-------|-------------|---------------|---------|-------------|--------------|----------------------|
| DA   | 1st   | L7    | 100         | 123           | 0       | 0           | 8            |                     |
| PB   | 1st   | L8    | 100         | 110           | 0       | 0           | 12           |                     |
| DB   | K     | L5    | 67          | 107           | 30      | 0           | 2            | Behavior issue      |
| DD   | K     | L5    | 95          | 14            | 20      | +6          | 0            |                     |
| KG   | 1st   | L6    | 100         | 32            | 0       | 0           | 2            | Behavior issue      |
| LG   | K     | L4    | 34          | 113           | 50      | 0           | 3            | Attention issue     |
| EH   | 1st   | L7    | 100         | 116           | 0       | 0           | 11           |                     |
| TH   | 2nd   | L11   | 100         | 91            | 0       | 0           | 10           | Severe Behavior issue|
| JJ   | K     | L3    | 22          | 42            | 60      | +18         | 0            | Attention/behavior issue|
| AL   | Moved | Moved | Moved       | Moved         | Moved   | Moved       | Severe Behavior issue |
| LL   | 1st   | L6    | 100         | 22            | 0       | 0           | 2            |                     |
Since March 15, 2018, several changes have occurred. First, student AL was moved to another kindergarten class. Secondly, a new student, SP matriculated into the school from another district school. SP is extremely high academically, and she reads on at least level H with BAS. Students, SP, NN, SM, and TH are on Google Classroom, which has more challenging work for all students in every subject area. Within two weeks, eight students have gained a level. These students are highlighted in bold print, and they are as follows: PB, LG, TH, SM, AM, MM, MP, and NT. All of these students vary in academics, behavior and social issues.

**Conclusion:**

- It may be beneficial to have more supervision over students who are in lower groups on Lexia to ensure student concentration and substantial progress.
- Student A was a struggling reader, and his progress was substantial between October and December 2017. He moved from PreK to K level in less than three months. The strategies in the Lexia program have proven effective. Students buy into the program, and they are motivated by the awards.
- It may be beneficial if teachers had assistance in implementing the scripted lessons for students on a consistent basis. It would be helpful to teachers if the scripted remediation lessons were online for students to complete.
- Student achievement may have increased more if teachers had assistance and used the scripted lessons for reinforcement on a more consistent basis.
- Lexia scores were in congruence with other assessments.
- Student enrollment in Pre-K programs impacted students’ positive achievement and growth in kindergarten. More Pre-K programs are needed in all elementary schools. Pre-K should be a requirement for all students.
- Lexia scores, overall, were in congruence with students’ progress reports, report cards, KRA assessments, BAS assessments, and the Reading Inventory.
- Attendance is an important factor in a student’s success, but it may or may not negatively impact a student’s progress. In this study, two students, PB and SM, had high absenteeism. But both students were on kindergarten level, and they progressed consistently. JJ is the only student who was a low achiever.
- Behavior is also another important factor in a student’s achievement, success, and progress. Behavior may or may not negatively impact a student’s progress. Within this study, the two most violent, disruptive, and aggressive students were classified differently academically. Student TH, academically gifted or a high achiever, had excellent progress reports, report cards, and attendance, KRA, BAS, and Reading Inventory scores. But like, AL, his behavior is erratic. Both students scream, attack students, knock over or push furniture, refuse to follow directives, and fall out on the floor. The difference between AL and TH is that TH growls and repeats statements: “I want to get in the group.” or “I want my I-pad.” repeatedly. Both students have a mean demeanor when they are angry, nor do they like to take responsibility or acknowledge their actions. Services were requested...
for both students and Enrich RTI plans are being documented. Interventions do not appear to be effective. Medical consultations may need to be suggested to parents. Counseling services are definitely needed. For TH, this behavior also occurred in Pre-K, and according to the former teacher and staff, the behavior was worse. Because AL was not in Pre-K, it is not known how the student interacted with others, but the family has a history of violence, according to the school counselor.

- How does family structure and the presence or absence of a father impact student progress? From the student bios and data, it is apparent that student family structure is imperative to student success.
- More training on online assessments, such as the Reading Inventory/RI should be available to the teachers in addition to additional support and assistance in administering these multiple assessments.
- Are females more successful than males in assessments and the school setting overall? If so, why, and what factors promote their success?
- It is noted in the research and the personal interview with Ms. Priest that females are more successful than males. Why are females more successful with online educational programs than males? Why are girls seemingly more successful in school?

**Implications and recommendations:**

The implications of this study are clear. One-on-one instruction is an effective way of supporting literacy development. Scripted lessons can be very beneficial if delivered on a consistent basis. It would be beneficial for other personnel to assist teachers in the delivery of scripted lessons, which are designed as one on one with student lessons. In the author’s opinion, the scripted lessons should be available online as well. It is difficult and sometimes unrealistic because teachers cannot always tutor individually nor do remediation.

Moreover, attendance, behavior and grades are a strong indication of a student’s progress and predicted future progress. It would be interesting to observe how student behavior would change if parents were required to sit in their child’s classes if they misbehaved, or if a behavior specialist was assigned to the students that misbehaved.

**Recommendations:**

In order to have more effective computerized reading programs, the consistency of reading programs is essential. Across the country, schools should have the same or equivalent length of time for reading on Lexia; moreover, teachers should have the opportunity and the assistance needed to deliver the individual scripted lessons to individual students as recommended by Lexia.

Other supports, with counseling, social work, and positive behavior reinforcement, are essential for student achievement, progress, and success. More consequences for students with misbehavior should be enforced. The process to enroll or to request special education services for students should be shortened. The process is too long and too tedious for teachers. Implementing interventions and completing the paperwork is too strenuous and too lengthy for educators.

State level agencies should remove the negative connotations for schools that have high discipline rates, and instead, offer services for students that exhibit aggression, violence, and defiance. Finally, more counseling services and family service oriented programs should be offered at the school to support families. These types of programs are not offered consistently in every school.

**Limitations**

Although this study is pertinent for gauging issues of programmatic structure, the study did not account for other variables (e.g. larger populations at elementary schools in other regions). Among the many possible directions for the future study of computerized reading programs include the following: the need for additional studies about Lexia on a larger scale and studies to determine the trends discovered here are consistent among this population at large. Once a larger representation is created, additional studies of the many veins of this singular study can be aptly employed.
Also, it would have been beneficial to analyze the data of the other kindergarten teacher and the first grade teachers. Other data or factors that could impact student progress or success with Lexia include the following: teacher attendance, staff morale, teacher education level, parents’ education and income levels, demographics of neighboring and current schools, and the turnover rates of administration and faculty.

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