

# Impact Measures on P-12 Learning and Development for Initial Licensure UNO for 2017-2018

Report on Purposed Action Research Studies

University of Nebraska at Omaha (UNO)

Metropolitan Omaha Educational Consortium (MOEC)

Career Advancement and Development of Recruits and Experienced Teachers (CADRE)

## Plan for Assessing Impact on Student Learning

### Introduction:

The Career Advancement and Development of Recruits and Experienced Teachers (CADRE) is a joint project between the Metropolitan Omaha Educational Consortium (MOEC) and the College of Education at the University of Nebraska at Omaha. MOEC is a collaborative organization of area school districts dedicated to public education and bringing Omaha-area educators together to provide exceptional educational experiences for P-12 learners in the metropolitan Omaha area. The consortium consists of 12 local school districts in Iowa and Nebraska, two community colleges (Metropolitan and Iowa Western Community College), two educational service units, and University of Nebraska at Omaha (UNO).

CADRE is a cohort project sponsored by MOEC in conjunction with UNO since 1994. The CADRE project intends to provide support to newly certified teachers in local school districts. The project provides an opportunity for entry-level teachers to complete an accelerated master's program while receiving support from UNO faculty, veteran teachers, and other first-year teachers. Experienced teachers from MOEC school districts who hold a master's degree are selected to serve as CADRE Associates. The CADRE Associates each mentor two CADRE teachers, have specific duties at UNO in teacher education and spend 50% of their time working in a school district.

The CADRE project is completed over 15 months under the direction of a CADRE coordinator. The academic coursework takes a "theory-to-practice" approach including a capstone experience. The capstone experience centers on the Five Core Propositions of the National Board for Professional Teaching Standards and the National Standards for Effective Educators. The CADRE project culminates with presentations at the CADRE Conference in which the CADRE teachers share their action research with UNO faculty, district representatives, colleagues, family members, and CADRE mentors. Complete information on the CADRE project can be found at <https://www.unomaha.edu/college-of-education/moec/projects/cadre/capstone.php>

### Capstone Project: Impact on P-12 Learning and Development

CADRE capstone projects are linked to impact goals set by CADRE participants that include the implementation of specific teaching strategies. Each CADRE participant designs a research project based on the implementation of a teaching strategy or strategies and gathers impact data based on both quantitative and qualitative sources to include triangulation of data collected. The capstone project requires participants to develop a purpose statement, provide a rationale for the selection of strategies, review relevant research literature, collect and analyze data, develop an action plan, and reflect on the results. All participants post their capstone project on the CADRE website which allows for public review of the results. The link is: <https://www.unomaha.edu/college-of-education/moec/projects/cadre/capstone.php>

Since the Nebraska Department of Education will not release student impact data specific to teacher education programs in the state or linked back to specific teachers, UNO will use CADRE participants to gather impact data on P-12 learning and development through the implementation of action research projects. Each CADRE participant will be treated as an action research study with impact data gathered specifically on an implemented action research project. UNO will annually collect data from 24 to 36 action research projects using CADRE cohorts. Over time, this should provide a rich and nuanced picture of UNO teacher education graduates impact on P-12 learning and development.

Some participants in CADRE already report MAP (Measures of Academic Progress) data. MAP tests are interim assessments constructed to measure student achievement from grades K to 12 in math, reading, language usage, and science. MAP assessments are vertically scaled across grades, a feature that supports direct measurement of academic growth and change. Currently, Nebraska only has MAP scores for reading and math through 8<sup>th</sup> grade. A study of MAP reading and math tests for Grades 3 to 8 allowed the state to produce cut scores on MAP to correspond to each Nebraska State Accountability (NeSA) performance level. The Nebraska study used the 2015 Northwest Evaluation Association (NWEA) norming study results to project a student's probability of meeting proficiency-based NeSA levels on that student's prior MAP scores. Any reporting of MAP scores will be voluntary on the part of CADRE participants.

Every 15 months a new cohort starts the process and reports data back to UNO. Since CADRE participants are from multiple school districts and subject areas, UNO will have sample data across a range of programs to assess our graduates' impact on K to 12 student learning and development. This time frame will allow for a collection of three cycles of data before the scheduled CAEP site visit.

The first CADRE group that could elect to include MAP assessments into their action research project began in the fall of 2018 with a cohort of 36 participants. To facilitate data collection, all projects included at least one pre and post-test assessment that allows candidates to report a percentage of change on selected measures. Many of the CADRE candidates elected to use MAP data as part of their analysis along with other assessments specific to student progress. On the next page of this report is a summary chart that provides the name of the action research project, the grade level, class context, pre-assessment measures used to set a baseline, and results reported in percentage of change. All of the CADRE projects can be reviewed in their entirety at:

<https://www.unomaha.edu/college-of-education/moec/projects/cadre/capstone.php>

Based on the collection of data for 2017-2018 on CADRE candidates, UNO will add TRIPOD data to the required action research project moving forward. This will give UNO one more data point to review as evidence of impact on P-12 learning and strengthen the overall project.

The summary of results for each CADRE project is provided below.

**CADRE Impact on Student Learning Research by Grade Level and Topic**

<b>Topic</b>	<b>Grade Level</b>	<b>Class Context</b>	<b>Pre-assessment Measures</b>	<b>Assessment Measures</b>	<b>% of Change</b>
Inferencing Skills	Elementary 3rd Grade	15 out of 20 students (75%) ELL	<ol style="list-style-type: none"> <li>1. NWEA MAP scores included: 10 students at low percentile and 3 at low average percentile (MAP Fall 2017)</li> <li>2. Pre-test on Inferencing skills</li> </ol>	<p>Data Collection Included:</p> <ol style="list-style-type: none"> <li>1. Growth scores on Storytown End-of-Selection weekly tests</li> <li>2. Teacher created pre and post assessment</li> <li>3. Daily morning task assessed using a 4 level rubric</li> <li>4. Weekly teacher anecdotal notes</li> <li>5. Student self-reflection at the end of unit</li> </ol>	<p><u>Pre and Post Results:</u></p> <ol style="list-style-type: none"> <li>1. 72% of the students scored at the Advanced level (from 0% for pre-assessment);</li> <li>2. 2 students were at the Proficient level (3 students at pre);</li> <li>3. 2 students at the progressing level (2 students at progressing pre);</li> <li>4. 1 student at Beginning level (12 students at beginning pre)</li> </ol> <p><u>End of Selection Quiz</u></p> <ol style="list-style-type: none"> <li>1. 55% at the beginning level before Inference Instruction and 22% after</li> <li>2. 22% at Progressing level before Inference Instruction and 11% after</li> <li>3. 22% at proficiency level before Inference Instruction and 11% after</li> <li>4. 0% at an advanced level before Inference Instruction and 44% after</li> </ol>

Letter-Sound Relationships	Elementary 1st Grade		<p>1. NWEA MAP scores: 9/19 scored 62% or below on Manipulation of Sounds skill test; 50% of students below passing on Final Blends skill test; 58% below passing on Decoding Patterns and Word Families;</p> <p>2. Words Their Way spelling Assessment: 9 out of 19 students below 66% in beginning blends and 17 out of 19 below 66% on common vowel patterns</p>	<p>Date Collection Included:</p> <ol style="list-style-type: none"> <li>1. MAP Skills Checklist</li> <li>2. Words Their Way Spelling Inventory</li> <li>3. Running Records</li> <li>4. Sentence dictation tests</li> </ol>	<p><u>Pre and Post Results MAP Tests</u></p> <ol style="list-style-type: none"> <li>1. 4% growth across all students from winter MAP measures to Spring (7-week intervention between winter and spring) on Word Families;</li> <li>2. 42% pass rate in winter to 79% in spring on Manipulation of Sound by substitution;</li> <li>3. 47% pass rate in winter to 79% in spring on Manipulation of Sound by deletion;</li> <li>4. 21% tested low during winter on Final Blends and 5% in spring; 36% scored at the high level in winter with 63% in spring at a high level.</li> </ol> <p><u>Words Their Way Pre and Post</u></p> <ol style="list-style-type: none"> <li>1. 52% scored below 66% at the pre-level to 89% at post level above 66%'</li> <li>2. Common vowel patterns had 10% of students scoring above 66% pre and post had 41% scoring above the 66% benchmark.</li> </ol> <p>Running Records on Reading Accuracy All students improved their word per minute score by 4 words with some students improving by as much as 30 words per minute.</p> <p>Sentence Dictation Scores Students average between 94% and 99% on weekly sentence dictation test over the 7 weeks (retention measure).</p>
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Math Achievement	Elementary 4th Grade	Title I school	<ol style="list-style-type: none"> <li>1. 40 questions, one minute timed multiplication test: 100% of students were unable to finish.</li> <li>2. Small group study: 88.23% of students rely on a times table chart to find the product of a multiplication problem and 11.76% of students immediately were able to give the product for multiplication problems.</li> <li>3. Pre-assessment on multiplication, division, addition, and subtraction.</li> </ol>	Data collection Included: <ol style="list-style-type: none"> <li>1. MAP scores</li> <li>2. Time on task</li> <li>2. Teacher made tests</li> <li>3. Likert scale</li> </ol>	<u>Pre and Post Results:</u> <ol style="list-style-type: none"> <li>1. From prior to the study to the end of the study there was a 4% increase of time on task behavior with one student showing a 39% increase.</li> <li>2. 82.83% showed growth from their pre-test score to their post-test score. 12.12% scored below their pretest score. 5.05% scored the same as their pre-test.</li> </ol>
Math Fluency	Elementary 5th Grade	22 students, 2 with IEPs and 1 with a 504 plan.	<ol style="list-style-type: none"> <li>1. MAP scores: 9% performed at a 12th-grade level, 13.6% performed at a 3rd-grade level.</li> <li>2. MAP Math Assessment: 54% performed in the low and low average range.</li> <li>3. Assessment related to number sense and multiplication facts that were 20 questions long with 40 points total.</li> </ol>	Data collection Included: <ol style="list-style-type: none"> <li>1. Post-assessments related to number sense and multiplication facts that were 20 questions long with 40 points total.</li> <li>2. Daily numerical logs of questions answered correctly</li> </ol>	<u>Pre and Post Results:</u> <ol style="list-style-type: none"> <li>1. 100% of the students improved their results</li> <li>2. 100% of the students improved their results in the numerical logs from week 1 to week 5</li> </ol>

Math Fluency	Elementary 1st Grade		1. Math topic tests 2. AIMSWeb One-Digit Math Fact Fluency assessment: 86.3% students did not meet the benchmark	Data collection Included: 1. Topic tests 2. Fact checks 3. AIMSWeb 4. Questionnaire	<u>Pre and Post Results:</u> 1. Average scores on the topic tests increased by 8%, to a 91.5% class average. 2. Class averages on the fact checks decreased as the weeks went on; however, this may be attributed to the increasing difficulty level of the facts that the students were asked to complete. 3. Students meeting the benchmark on the AIMSWeb increased from 9% to 63%.
Math Fluency	Elementary 1st Grade	24 students	1. AIMSWeb test: 50% of students were proficient on the math fact fluency test. 3. Topic tests: Class average of 76%	Data collection included: 1. AIMSWeb math fact fluency (quantitative) 2. Topic math tests (quantitative)	<u>Pre and Post Results:</u> 1. 83.33% of students were proficient on the AIBSWeb math fact fluency test (50% in the pre-assessment). 2. 100% of students showed improvement on the topic tests with a 29% increase in scores in the first topic to a 52% increase in scores in the last topic.
Math Fluency	Elementary 1st Grade	24 students	1. 8% of students were proficient on the Common Building Math Assessment 2. 29% of students showed proficiency in addition facts and 33% showed proficiency in subtraction facts on their Focus 1 test.	Data collection included: 1. Fact check test 2. Fact check interview	<u>Pre and Post Results:</u> 1. Class average on fact checks grew by 23% on the post assessment 2. Percentage of students that were proficient on the fact check interview increased by 34%

Math Problem Solving	Elementary 1st Grade	21 students: 6 receiving enrichment and 1 receiving Title I services	AIMSWeb one digit math fluency: 1. 71.4% did not meet the benchmark 2. 9% qualified for monthly progress monitoring	Data collection included: 1. Timed Tests 2. AIMSweb 3. Topic Tests and DCA (District Common Assessments)	<i>Pre and Post Results:</i> 1. 100% of students in the sample set increased scores from pre-test to post-test 2. Only 19% did not meet the AIMSWeb one digit math fluency in the post-assessment 3. Class average on the topic tests increased from the pre-test to the post-test
Number Sense	Elementary 3rd Grade	21 students	AIMSWeb Math results: 1. 57.14% of students met or exceeded the NSF benchmark 2. The class scored an average of 89.76%, 82.04%, and 66.9% on the addition, subtraction, and multiplication math computation tests respectively at the end of the 2nd quarter.	Data collection included: 1. AIMSWeb Math - Number Comparison Fluency-Triads (NCF-T) and Mental Computation Fluency (MCF) 2. Timed Math Computation Assessments	<i>Pre and Post Results:</i> 1. 90.48% of students met or exceeded the NSF benchmark 2. The class scored an average of 96.71%, 83.33%, and 81.33% on the addition, subtraction, and multiplication math computation tests respectively at the end of the 3rd quarter.
Number Sense	Elementary 3rd Grade	24 students; 8 on an I.E.P.	1. NWEA MAP assessment: 45.8% scored in the low category for numbers, 25% performed in the low-average category. 2. 40% of students did not pass the NeSA in fourth grade.	Data collection included: 1. Pre/post test of basic multiplication facts 2. NWEA MAP assessment	<i>Pre and Post Results:</i> 1. Basic multiplication facts pre-test: 6 students scored 80% or higher 2. Basic multiplication facts post-test: 16 students scored 80% or higher



Oral Reading Fluency	Elementary 1st Grade	17 students; 4 on an I.E.P.	<ol style="list-style-type: none"> <li>52.9% of students did not meet the Fall AIMSweb plus benchmark score of 29 words per minute (wpm).</li> <li>7 students qualified to work with the school's reading specialist.</li> <li>Students were able to use strategies to decode words that they did not know 23% of the time.</li> <li>Comprehension scores were at 68%.</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>AIMSweb Plus Oral Reading Fluency Assessments.</li> <li>Fresh reads were used weekly and focused on the first and last reads for the week.</li> <li>Weekly Reading Street High-Frequency Words and Phonics Assessment were given at the end of each week.</li> </ol>	<p><i>Pre and Post Results:</i></p> <ol style="list-style-type: none"> <li>AIMSweb Plus Oral reading fluency: Percentage of students who did not meet the goal of 70 wpm decreased from 82% in the Fall, 53% in the Winter to 24% in the Spring.</li> <li>Students showed a 72% increase in the use of decoding strategies.</li> <li>Students showed an 87% increase in the naming of decoding strategies.</li> </ol>
Reading Achievement	Elementary 2nd Grade Title I building	15 students; 2 on an I.E.P.	<ol style="list-style-type: none"> <li>73.3% of students were proficient or above in reading, 26.6% of students were below the 2nd-grade reading level target.</li> <li>40% of students scored below the 50th percentile on the AIMSweb oral reading test.</li> <li>60% of students scored progressing or below on a reading comprehension test.</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>Guided Reading Level assessment</li> <li>Reading Comprehension Test</li> <li>Student Reading Interest Survey</li> </ol>	<p><i>Pre and Post Results:</i></p> <ol style="list-style-type: none"> <li>Guided Reading Level Target: 30.77% below grade level, 69.23% above grade level on the pre-test. 35.71% on grade level, 64.29% above grade level.</li> <li>Reading Comprehension Test: 8% of students scored beginning, 46% students scored progressing, and 46% scored proficient or better on the pre-test. 29% students scored progressing, and 71% scored proficient or better on the post-test.</li> </ol>

Reading Achievement	Elementary 2nd Grade	22 students	<ol style="list-style-type: none"> <li>1. 18% of students reading below grade level, 27% of students at the second-grade level, and 54.5% above the second-grade level.</li> <li>2. AIMSweb Assessment for fluency: 50% of students reading under the goal of 100 words per minute</li> <li>3. MAP assessment test: 31.8% of students scored below the national average</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>1. Reading Street End of Selection test</li> <li>2. Fountas and Pinnell reading levels: Texts organized from A-Z in difficulty, with a proficient level in spring of second grade in the M-N range.</li> <li>3. Fluency Folders that targeted seven students.</li> </ol>	<p><i>Pre and Post Results:</i></p> <p><i>Student guided reading level</i></p> <ol style="list-style-type: none"> <li>1. 18.18% of students were reading below level at reading levels G, I, and J, 27.27% were at reading level K, and 54.55% were reading above level at reading levels L and above on the pre-test.</li> <li>2. 9% of students were below level, 50% were on level, and 40.9% were above level on the post-test.</li> </ol>
Reading Achievement	Kindergarten	23 students 7 receiving literacy intervention services	<ol style="list-style-type: none"> <li>1. Fountas and Pinnell text levels: 30.4% non-readers, 17.4% reading at text level A, 30.4% were B's, 8.7% were C's, and 17.4% were D's.</li> <li>2. Fountas and Pinnell progress monitoring chart: 48% of students not on track to meet the goal of reading level D by the end of kindergarten</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>1. Pre/Post Reading interest Surveys</li> <li>2. Running Records</li> <li>3. Text Levels</li> </ol>	<p><i>Pre and Post Results:</i></p> <ol style="list-style-type: none"> <li>1. Pre-Reading Interest Survey: 22% of students liked to read, 30% thought they were good readers.</li> <li>2. Post-Reading Interest Survey: 61% of students liked to read, and 87% thought of themselves as good readers.</li> <li>3. Running record data: The overall trend is that throughout the action research, students' reading fluency increased.</li> <li>4. Text levels: Of a sample of 5 students from different reading groups, each showed growth in text levels.</li> </ol>

Reading Achievement	Elementary 1st grade	17 students; 2 students part of the Student Assistance Team (SAT) program	<ol style="list-style-type: none"> <li>1. Fountas &amp; Pinnell levels: 58.8% of students reading below grade level</li> <li>2. MAP Reading Test: 41.18% below level</li> <li>3. Reading weekly benchmark test: 52.9% of students missed one or more phonics questions</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>1. Words Their Way Spelling Inventory</li> <li>2. Fountas and Pinnell Text Levels</li> <li>3. Reading Street weekly phonics tests</li> </ol>	<p><u>Pre and Post Results:</u></p> <ol style="list-style-type: none"> <li>1. Words Their Way: The class average for the feature points (total points earned on the inventory) was 35.07 pre-test and 38.99 on the post-test.</li> <li>2. Fountas and Pinnell Text Levels: The growth ranged from one to three reading levels.</li> </ol>
Reading Comprehension	Elementary 3rd grade	22 students	<ol style="list-style-type: none"> <li>1. Reading Street curriculum third-grade baseline reading assessment: 59% of students scored below an 80% on the comprehension subsection</li> <li>2. NWEA MAP assessment: 22.7% of students scored in the Below Average range</li> <li>3. Fountas &amp; Pinnell levels: 31.8% of students were below grade level</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>1. Reading Street End of Selection test comprehension questions (excluding vocabulary)</li> <li>2. Fountas and Pinnell reading levels</li> <li>3. Teacher made Mid-Year and End of Year assessment</li> </ol>	<p><u>Pre and Post Results:</u></p> <ol style="list-style-type: none"> <li>1. End of Selection tests: The average score on the pre-test was 5.5 out of 8 correct, an average score on the post-test was 7.3 out of 8 correct.</li> <li>2. Fountas and Pinnell reading levels: On the pre-test, 31.8% of students were below the proficient level for third grade, 27.27% were on level, and 40.9% were above the proficient level. On the post-test, 13.6% of students were below the proficient level for third grade, 31.8% were on level, and 54.55% were above the proficient level.</li> <li>3. Teacher made Mid-Year and End of Year assessment: 86.36% of students increased their scores, 9% of scores stayed the same, and 4.5% of students' score decreased.</li> </ol>

Reading Comprehension	Elementary 1st grade	19 students; 3 on an I.E.P.	<ol style="list-style-type: none"> <li>1. Reading benchmark exam: 63% of students incorrectly answered at least one comprehension question</li> <li>2. Unit one end of selection test: 42% of students also scored lower than 80 percent</li> <li>3. MAP test: 26.3% of students had below grade level score in the comprehension sections</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>1. Weekly Selection Tests</li> <li>2. Weekly Whole Group Questioning Log</li> <li>3. Biweekly Running Record Samples</li> <li>4. Fountas and Pinnell's Self- Assessment for Guided Reading</li> </ol>	<p><i>Pre and Post Results:</i></p> <ol style="list-style-type: none"> <li>1. Selection Test: All of the groups except the extremely above grade level group showed a positive trend with mostly improving scores as targeted questioning was being conducted.</li> <li>2. Biweekly Running Record Samples: On the pre-test, sample students' comprehension scores were less than 70%. Each group finished the last running record comprehension check with a score at or above 90%.</li> </ol>
Reading Comprehension	High School Sophomores		<ol style="list-style-type: none"> <li>1. 34.44% scored above the 21st percentile on the MAP test</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>1. Teacher-Made Assessments</li> <li>2. Online survey</li> <li>2. MAP test</li> </ol>	<p><i>Pre and Post Results:</i></p> <ol style="list-style-type: none"> <li>1. Correct answers on the teacher-made assessment increased from 39.5% pre-test to 67.3% post-test</li> <li>2. The number of students who initially felt uncomfortable finding the main idea dropped from 15% to 8% from the pre-test to the post-test.</li> </ol>
Reading Comprehension			<p>MAP reading test</p> <ol style="list-style-type: none"> <li>1. Less than 10 percent of students were able to draw conclusions based on their grade level</li> <li>2. About 20 percent of students were able to use relevant text details to support their view</li> <li>3. 60% of students were reading below grade level</li> </ol>	<p>Data Collection Methods:</p> <ol style="list-style-type: none"> <li>1. Pre and post-reading comprehension test</li> <li>2. Likert survey of their confidence with reading before and after the study</li> <li>3. Language arts reading comprehension essay questions</li> </ol>	<p><i>Pre and Post Results:</i></p> <ol style="list-style-type: none"> <li>1. Students average score on the reading comprehension post-test increased to 52 from their pre-test average of 41.</li> <li>2. Significantly more students strongly agreed or agreed that they were comfortable when they read and are more aware if they are confident when reading challenging texts on the post-survey.</li> </ol>

Reading Comprehension	Middle 6th grade	19 students; 4 on an I.E.P.	<ol style="list-style-type: none"> <li>52.6% of students entered sixth grade below reading level</li> <li>21% of students scored below grade level on the first quarter MAP data</li> <li>31.5% of students scored below 75% on their reading comprehension</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>Weekly formative tests</li> <li>Summative benchmark tests</li> <li>Student reading attitude survey</li> </ol>	<p><u>Pre and Post Results:</u></p> <ol style="list-style-type: none"> <li>Weekly formative tests: Initially, student average steadily increased, but then seemed to follow no pattern from week to week.</li> <li>Summative benchmark tests: Class average increased from 67% on the pre-test to 85% on the post-test</li> <li>53% of students said they enjoyed reading on the post-test (46% on the pre-test)</li> </ol>
Reading Fluency		26 students	<ol style="list-style-type: none"> <li>53.8% of students scored proficient on the Formative Assessment System for Teachers (FAST), which measures words per minute (WPM).</li> <li>36% of students scored proficient on the Scholastic Reading Inventory (SRI) measuring comprehension.</li> <li>33% of students were on target for meeting end-of-year grade level benchmark on Lexia</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>Words per minute (WPM)</li> <li>Student's rating on the National Assessment of Educational Progress (NAEP) fluency scale</li> </ol>	<p>Pre and Post Results:</p> <ol style="list-style-type: none"> <li>80% showed growth in WPM during the six weeks</li> <li>Class average grew 13 words per minute from Week 1 to Week 6.</li> <li>50% of students hit 125 WPM, showing they are on track for the end of the year goal</li> <li>57.7% scored proficient according to the Winter standard (116 or above) with their final passage</li> <li>NAEP scale: 7.69% students read at level 1, 23.08% students read at level 2, 46.15% students read at level 3, 23.08% students read at level 4. Some students fluctuated throughout this time period, but no true or substantial growth was noted. This is due to the fact that it is much easier to achieve growth in WPM than it is on the NAEP scale.</li> </ol>

Reading Fluency	Kindergarten	23 students	<p>1. Fountas and Pinnell reading level benchmark: During the sight word test, the majority of students were not able to read more than 25 sight words fluently.</p> <p>2. 13% of students could read 100 sight words</p> <p>3. 63% of students were reading below a level D book; this is considered below grade level</p>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>1. Fountas and Pinnell reading levels</li> <li>2. Sight words reading ability</li> </ol>	<p><i>Pre and Post Results:</i></p> <ol style="list-style-type: none"> <li>1. On the pre-test, 21.74% students were above grade level, 21.74% were 1 level below, and 56.5% students were below grade level</li> <li>2. On the post-test, 30.43% students were above grade level, 13.04% were 1 level below, and 56.52% students were below grade level</li> </ol>
Social Stories	Elementary Grades 3-5	7 students enrolled in a district specialized program in a self-contained classroom.	<ol style="list-style-type: none"> <li>1. Overall weekly totals for students and their appropriate interactions with peers was 54% in week 1</li> <li>2. The baseline data collected showed 54% of transports and seclusion time outs were due to students having a conflict with a peer or with an adult.</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>1. Videotaping</li> <li>2. School Generated Report Cards</li> <li>3. Passive Observations</li> </ol>	<p><i>Pre and Post Results:</i></p> <ol style="list-style-type: none"> <li>1. Overall weekly totals for students and their appropriate interactions with peers increased to 86% in week 8</li> <li>2. 23% of the seclusion time outs were due to conflict with an adult or peer on the post-observation (54% on the baseline data)</li> </ol>

<p>Social-Emotional Learning</p>		<p>15 students, 3 students severely lacking executive functioning skills, and two of the three students having severe trauma backgrounds</p>	<ol style="list-style-type: none"> <li>1. Major/minor behavioral referral forms</li> <li>2. Classroom behavioral incident tallies</li> <li>3. Specific behavior plan data for two students</li> <li>4. Student self-rating scales</li> <li>5. Two teacher-completed self-regulation rating scales</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>1. Zones of Regulation Student Questionnaire</li> <li>2. Zones of Regulation Teacher Questionnaire</li> <li>3. Self-Regulation Assessment: Basic Foundational Skills, Emergent Understanding, and Functional Confidence</li> </ol>	<p><u>Pre and Post Results:</u></p> <ol style="list-style-type: none"> <li>1. Zones of regulation Student Questionnaire: 22.6% of students gave the ideal responses on the baseline test. On the post-assessment, 62% of students ideal responses.</li> <li>2. Zones of Regulation Teacher Questionnaire: Teacher rated 20% of students ideally on the baseline and 54.6% students on the post-assessment.</li> </ol> <p><u>Self-Regulation Assessment:</u></p> <ol style="list-style-type: none"> <li>1. Basic Foundational Skills: Pre-assessment, an average of 8 students landed within the concerning range for all questions. Post-assessment, all 15 students were within the emerging and functionally independent range in four areas: recognizing simple emotions in others, participating in calming activities, accepting minor changes in schedules, and accepting endings and transitions.</li> <li>2. Emergent Understanding: Pre-assessment, an average of 11 students were within the concerning range for all questions. Post-assessment, all 15 students were in the emerging and functionally independent range in three areas: accepting unexpected changes in plans, communicating anger, frustration, or disapproval appropriately, and accepting assistance from adults to aid in regulation.</li> <li>3. Functional Confidence: Pre-assessment, an average of 9 students</li> </ol>
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					<p>were within the concerning range for all questions. Post-assessment, 11 or more were within the emerging or functionally independent range in five areas: proactively clearing hurdles to maintain regulation, regulating voice and body to match the environment, ability to tolerate new demands, and ability to generate solutions to positively solve problems.</p>
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Spelling Accuracy		19 students	<p>MAP test scores:</p> <ol style="list-style-type: none"> <li>1. Ranged from 13/30 to 29/30</li> <li>2. Average class score was 17/30, which is just above 50% accuracy</li> </ol> <p>Phonics test</p> <ol style="list-style-type: none"> <li>1. Average score was 18/34, which is just above 50% accuracy</li> <li>2. Ranged from 7/34 to 31/34.</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>1. Weekly phonics test</li> <li>2. MAP test</li> </ol>	<p><i>Pre and Post Results:</i></p> <ol style="list-style-type: none"> <li>1. Weekly phonics test: Pre- and post-test score averages increased each week</li> <li>2. MAP test: On the pre-test, 21.05% of students achieved the highest scores of 87% or higher, 52.63% of students scored between 50% and 86% accuracy, and 23.32% of students scored below 50% accuracy.</li> </ol> <p>On the post-test, 40% of students achieved the highest scores of 87% or higher, 25% of students scored between 50% and 86% accuracy, and 35% of students scored below 50% accuracy.</p>
Student Engagement in Math		17 students	<ol style="list-style-type: none"> <li>1. According to anecdotal notes, over 50% of the students were off task during whole group math instruction.</li> <li>2. Many students had difficulty focusing for more than 20 minutes</li> <li>3. 25% of students were unable to finish a topic test with the amount of time given</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>1. Attitude surveys</li> <li>2. Formative Topic Math Tests</li> </ol>	<p><i>Pre and Post Results:</i></p> <ol style="list-style-type: none"> <li>1. On the pre-attitude survey, 64.7% of students agreed to liking math, 47% of students agreed that math was their favorite subject, and 76.5% of students agreed that math was interesting. On the post-attitude survey, 70.5% of students agreed to liking math, 58.8% of students agreed that math was their favorite subject, and 94% of students agreed that math was interesting.</li> <li>2. Formative Topic Math Tests: Implementing engagement strategies did not overall improve student achievement on tests.</li> </ol>

Student Engagement in Reading	High School Sophomores	30 students	<ol style="list-style-type: none"> <li>1. 27% of students showed a completion rate of tasks that are deemed formative.</li> <li>2. 93% of students' cell phones can be observed in use at various times of a typical lesson in English class.</li> <li>3. 23% students were scoring below a 3 on the recent collections summative test.</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>1. Cell Phone Usage In Class</li> <li>2. Assignment Completion</li> <li>3. Assignment Grades</li> </ol>	<p><u><i>Pre and Post Results:</i></u></p> <ol style="list-style-type: none"> <li>1. The number of cellphones increased as the unit progressed into week 2 and then drastically jumped to 23 cell phones during week 3.</li> <li>2. The percentage of assignments completed decreased from 83% in week 2 to 62% in week 6</li> <li>3. In week 2, 34% of students scored above average, and 14% of students scored below average. In week 6, 27% of students scored above average, and 21% of students scored below average.</li> </ol>
Target Language Comprehension		23 students	<ol style="list-style-type: none"> <li>1. 52% of my students in both Spanish 1 and Spanish 2 have retaken their respective course at least 1 time</li> <li>2. 46% of my Spanish 1 students scored below a 70% on the reading section of their chapter test</li> <li>3. 17% of my 180 students maintained a 4 or 5 (D or F) prior to the study</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>1. Benchmark assessments</li> <li>2. Open-ended questions</li> </ol>	<p><u><i>Pre and Post Results:</i></u></p> <ol style="list-style-type: none"> <li>1. The three benchmark assessments (below) revealed a steady increase in student performance from an average of 73% to 77%.</li> <li>2. The average overall growth percentage was 4.46% including the pre-, post, and benchmark assessments.</li> </ol>

Word Decoding	Elementary 3rd grade	1 student verified to receive special education instruction	<ol style="list-style-type: none"> <li>1. Student averaging 60% on reading tests</li> <li>2. Student struggles daily to decode words to be successful in the third grade classroom</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>1. Interest Survey</li> <li>2. General education teacher's guided reading instruction</li> <li>3. Running records</li> <li>4. Words per minute (WPM)</li> </ol>	<p><u>Pre and Post Results:</u></p> <ol style="list-style-type: none"> <li>1. Interest Survey: On the pre-reading survey, the student had negative feelings towards reading. The student's mindset shifted into gaining self-confidence and willingness to read around other peers and adults after the intervention was implemented.</li> <li>2. General education teacher's guided reading instruction: The student progressed from having six errors the first week to then decreasing the number of errors in the last couple weeks of the study.</li> <li>3. Running records on special education instruction: Percentage of accuracy increased from 15% in week 1 to 98% in week 8</li> <li>4. The student started the year reading 14 correct words per minute and is now able to read 96 words per minute with 98% accuracy</li> </ol>
Word Problems	High School Freshmen and sophomores	16 students	<ol style="list-style-type: none"> <li>1. 50% of students in the class were performing below average for both math and reading on their MAP test</li> <li>2. Only half of the class attempts word problems on tests of which only a few were able to set up and complete the problems correctly.</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>1. Likert Scale Survey</li> <li>2. Unit Test Word Problems</li> </ol>	<p><u>Pre and Post Results:</u></p> <ol style="list-style-type: none"> <li>1. Between Test 1 (Equations) and Test 2 (Square roots), the combined percentage of students who answered ideally rose from 15.38% to 25% while the combined percentage of students who answered most unfavorably dropped from 38.46% to 33.33%. After Test 3 (Equations) the ideal responses rose again slightly to 27.27%.</li> <li>2. Unit Test Word Problems: From Test 1 to Test 3, the mean number of problems</li> </ol>

					attempted decreased, and the mean number of word problems correct neither increased nor decreased.
Writing Achievement		17 students	<ol style="list-style-type: none"> <li>1. 71% of my students enjoy writing</li> <li>2. 61% of my students are on task during independent writing time</li> <li>3. Students lacked advanced and proficient scores in the areas of focus/ideas, voice, and word choice.</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>1. Attitude scale</li> <li>2. Pre-test and post-test</li> <li>3. Time on task</li> </ol>	<p><i>Pre and Post Results:</i></p> <ol style="list-style-type: none"> <li>1. Students' positive attitudes toward writing increased from the beginning to the end of the Capstone project.</li> <li>2. The number of students who scored at an advanced level increased in most categories from the pre-test to the post-test. Consequently, the number of students scoring at a progressing level generally decreased.</li> <li>3. Students time on task increased by 21% from the beginning to the end.</li> </ol>

Writing Skills	Elementary 2nd grade	19 students, 2 on behavior plans	<p>1. Baseline writing test: 5% of students writing at proficiency, 42% one level behind at progressing, and 47% two levels behind at the beginning.</p> <p><i>Anecdotal observations:</i></p> <p>2. Students did not have a structure to organize their writing or know how to incorporate the different traits of writing.</p> <p>3. They were not confident writers, did not like writing, and did not know what made good writing.</p> <p>4. My students did not have the stamina to write independently for a long period of time.</p>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>1. District Common Summative Assessments (CSA)</li> <li>2. Anecdotal Conferencing Notes</li> <li>3. Student Writer Identity Self-Rating Scale</li> </ol>	<p><u><i>Pre and Post Results:</i></u></p> <ol style="list-style-type: none"> <li>1. District Common Summative Assessments: 67% scored below proficient for second grade on the informative writing pre-test, leaving only 34% who were on grade level or above. The number of students who scored proficient or above on the post-test increased substantially to 83% of students, 17% writing below a second-grade level. The data from the post-test showed growth for 100% of my students.</li> <li>2. In the first week, 100% of conferencing conversations were focused on choosing focused ideas that could give their reader information. The second week's conferences progressed to conversations about focusing on those topics, finding facts, and organizing those facts in a way that helps the reader. The third week showed conversations surrounding all four traits as students were far into their research reports. The last week's conferencing conversations had more focus on conventions due to students editing and revising.</li> <li>3. Students' writing identities positively increased in each writing trait except for organization.</li> </ol>
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Zones of Regulation	Elementary K-2	Structured Behavior Skills classroom.	<ol style="list-style-type: none"> <li>1. Student one has an IEP goal of keeping his hands and feet to himself and will self-monitor his emotions.</li> <li>2. Student two has an IEP goal of recognizing and identifying different feelings such as happy, sad, mad, upset, and scared.</li> <li>3. Student three has an IEP goal to follow directions even when he does not want to and keep his hands and feet to himself when upset.</li> </ol>	<p>Data collection included:</p> <ol style="list-style-type: none"> <li>1. Behavior Cards (Frequency Data)</li> <li>2. Daily Check-In and Check-Out (Zones of Regulation Data)</li> <li>3. Verbal Behavior Data</li> </ol>	<p><i>Pre and Post Results:</i></p> <ol style="list-style-type: none"> <li>1. Behavior Cards (Frequency Data): Student 1 exhibited expected behavior 70% of the time on the pre-assessment and 93% of the time on the last assessment. Student 2 exhibited expected behavior 68% of the time on the pre-assessment and 90% of the time on the last assessment.</li> <li>2. Daily Check-In and Check-Out (Zones of Regulation Data): Students began by identifying in the green zone and felt happy during the beginning of the research period, but began to pinpoint emotions more clearly as the research progressed.</li> <li>3. Verbal Behavior Data: Students ability to sort and label emotions and pictures improved across each operant.</li> </ol>
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