



**UNIVERSITY OF NEBRASKA AT OMAHA**  
**COLLEGE OF EDUCATION**

**Program Completers' Impact on P-12 Learning and Development**

CAEP 4.1

2018-2019

2017-2018

**Report on CADRE Action Research Projects**

University of Nebraska at Omaha

Metropolitan Omaha Educational Consortium

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

## **Impact on PK-12 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 (UNO). MOEC is a collaborative organization of 12 local school districts in Iowa and Nebraska, two community colleges (Metropolitan Community College and Iowa Western Community College), two educational service units, and the University of Nebraska at Omaha (UNO) dedicated to public education and bringing metropolitan Omaha-area educators together to provide exceptional educational experiences for P-12 learners.

CADRE is a cohort project sponsored by MOEC in conjunction with UNO since 1994. 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. MOEC school districts select experienced Master-level teachers to serve as CADRE Associates who mentor one to four CADRE teachers, have specific duties at UNO in teacher education and spend 50% of their time working in a school district.

The 15-month CADRE program is completed under the direction of a CADRE director. The academic coursework takes a "theory-to-practice" approach including a capstone action research project. The capstone project centers on the Five Core Propositions of the National Board for Professional Teaching Standards and the Interstate Teacher Assessment and Support Consortium (InTASC) Standards. The CADRE project culminates with CADRE teachers presenting their action research projects with UNO faculty, district representatives, colleagues, family members, and CADRE Associates.

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

CADRE participants link capstone projects to impact goals 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, develop an action plan, collect and analyze data, and reflect on the results. All participants post their capstone project on the [CADRE website](#) which allows for stakeholder review of the results.

UNO gathers P-12 learning and development impact data through the implementation of CADRE participants' action research projects since the Nebraska Department of Education does not release student impact data specific to teacher education programs or individual teachers. Each CADRE participant completes an action research study with impact data gathered based on the implemented action research project. UNO annually collects data from CADRE participants in the program who completed an initial level UNO educator preparation program. CADRE participants are from multiple school districts and subject areas, which annually provides case study data from a range of educator

programs to assess our completers' impact on P-12 student learning and development.

CADRE projects reported in the impact report include teachers who completed an initial educator preparation program at UNO in 2017-2018 (N = 8) and 2018-2019 (N = 13). To facilitate data collection, all projects included at least one pre and post-test assessment that allowed candidates to report a percentage of change on selected measures. The plan for 2019-2020 CADRE teachers is to utilize *t*-tests and effect sizes to further demonstrate impact on student learning.

**CADRE Research Projects: Impact on P-12 Student Learning 2018-2019 (N = 13)**

Purpose Statement	Grade Level	Class Context	Pre / Post Test Results
<a href="#"><u>Teacher 1: The purpose of this study was to determine if the implementation of note taking strategies and graphic organizers will increase student understanding of social studies content.</u></a>	4th Grade	26 Students	The data showed that 23 out of 26 students increased their test scores or remained the same after the implementation of guided notes. The six students who remained the same after the implementation were students who had received a 100% on the baseline test.
Teacher 2: The purpose of this study was to determine if differentiation through the math workshop model would increase student achievement.	4th Grade	22 Students 6 High Ability Students 1 Student with an IEP	Average growth from pretest to post test was 36.5%. Before the study, the class average for unit tests was 87.1%, and post the study the class averaged 90.5% (a growth of 3.4%. Before the study the class's district capacity assessment average score was 91.1%. At the end, it was 95.4% (a gain of 4.3%).
<a href="#"><u>Teacher 3: The purpose of this study was to determine whether writing in math would increase student achievement.</u></a>	4th Grade	19 Students 5 Students with IEPs 3 ELL Students	The first post-test had more of a growth than the second. According to the Topic eleven pre-test, the average score was 4/20. The posttest average was 18/20. According to this pre-test data, the average score was 4/13. The posttest average was 8/13.
<a href="#"><u>Teacher 4: The purpose of this study was to determine whether the use of rubrics and implementation of individual conferencing during writing instruction would improve achievement in a 5th grade writing class.</u></a>	5th Grade	26 Students	Writing scores increased by 15.24% and negative attitudes decreased by 46.1% on the pre and posttests.
<a href="#"><u>Teacher 5: The purpose of this study is to determine if data-driven, differentiated planning during small group mathematics instruction will increase student achievement in math.</u></a>	1st Grade	26 Students 8 High Ability Students 2 ELL Students 1 Student with an IEP	A paired-samples t-test demonstrated the effect of data-driven, differentiated planning during small group mathematics instruction on students' math achievement. There was a significant difference in the scores prior to implementing the planning ( $M = 13.3, SD = 7.0$ ) and after implementing ( $M = 19.6, SD = 5.1$ ) the summarizing strategies; $t(20) = 5.0, p < .001$ . The observed standardized effect size is large (1.16).

**CADRE Research Projects: Impact on P-12 Student Learning 2018-2019 (N = 13)**

Purpose Statement	Grade Level	Class Context	Pre / Post Test Results
<a href="#"><u>Teacher 6: The purpose of this study was to determine if the use of word study activities in guided reading would increase reading achievement.</u></a>	Kindergarten	25 Students 8 Students with IEPs	Pretests showed that 15 students were below grade level. Posttests showed that 7 students were below grade level. A total of 14 students increased at least one reading level.
<a href="#"><u>Teacher 7: The purpose of this study was to determine if the use of research based writing process strategies would improve the quality of student writing as evaluated with the ACT Writing Test scoring rubric.</u></a>	10th Grade	26 Students 12 Students with IEPs	Pretest average was 5.23 compared to a posttest average of 6.87. This was an increase of 1.64.
<a href="#"><u>Teacher 8: The purpose of this study is to determine if the implementation of study and test-taking strategies will help improve student test scores.</u></a>	7th Grade	50 Students 12 Students with IEPs or 504 plans 5 ELL Students	First period's class average increased 13% after being taught test-taking skills. All students' test scores increased, with the exception of one student. Sixth period's class average increased 15.5% since implementing test-taking strategies, and all individual student test scores increased, besides two. Lastly, the eighth hour's test averages increased a total of 17.5%. Individual scores increased besides one student. In totaling all the data, 99.96% of my students' scores increased from their previous unit test.
<a href="#"><u>Teacher 9: The purpose of this study was to determine if a flexible seating arrangement in a foreign language classroom would increase engagement and increase the quality of instruction.</u></a>	High School French	40 Students	Preference in Seating Pre and Post Survey +18% change in preference for flexible seating. Students' attitudes towards the class as well as the classroom environment created a positive culture for learning where students felt comfortable taking risks and stayed engaged. Students were stable in their comprehension of the text and thus flexible seating did not have a negative impact on the students' academics.
<a href="#"><u>Teacher 10: The purpose of this study was to determine if targeted reading strategies (vocabulary, main idea, supporting details, and summarizing) would increase students' reading comprehension.</u></a>	10th Grade	12 Students	Eight students achieved growth from pre to post-test. The average pretest score was 41%, with individual scores ranging from 10%-90%, demonstrating the diverse abilities in this student group. The parallel form posttest was administered after two curricular units during the research period. The average score was 44% with a range of 13%-91%.

**CADRE Research Projects: Impact on P-12 Student Learning 2018-2019 (N = 13)**

Purpose Statement	Grade Level	Class Context	Pre / Post Test Results
<p><a href="#">Teacher 11: The purpose of this study was to determine if explicit math instruction in the area of number sense would increase student achievement.</a></p>	2nd Grade	2 Students with IEPs	<p>When analyzing the total accuracy of the pre- and post-tests for Students B and C (no time-limit constraint), it was clear that growth was made for each student within the six weeks of number sense instruction. Student B's pretest score was 15 out of 50 points equates to 30% accuracy. After six-weeks Student B's posttest score was 20 out of 50 points which equates to 40% accuracy. This student, who had a verified learning disability in math, gained 10% accuracy with six-weeks of number sense instruction. This data shows that the number sense intervention was beneficial for Student B. Student C scored 19 out of 50 points on his pre-test, which equates to 38% accuracy. On the posttest, he scored 23 out of 50 points, which equates to 46% accuracy. Student C gained 8% accuracy in six-weeks of intervention. This data indicated that the interventions implemented were also helpful to Student C.</p>
<p><a href="#">Teacher 12: The purpose of this study was to determine if the direct instruction of letter-sound relationships and decoding strategies such as visual imagery exercises, word collecting, and reading strategy cards would increase word decoding accuracy.</a></p>	3rd Grade	3 Students with IEPs	<p>Student A showed the most growth with a 121% increase, Student B had a 44% increase, and Student C had a 65% increase. All students showed significant growth. As a result of the posttest, Students A and C were close to reaching the average score for a third-grade student.</p>
<p>Teacher 13: The purpose of this study is to determine if increased, targeted short answer response questioning will increase students' on-demand writing proficiency.</p>	9th Grade	46 Students	<p>In reviewing the final data for the pre-test, students in the 1st hour class averaged a score of 1.88 and the 9th hour class averaged a score of 1.76. The final mean for posttest from 1st hour increased to 2.82 and 9th hour increased to 2.45. In comparison, both classes increased their on-demand writing proficiency. In further reviewing the pre and post test data, only two students' scores remained the same. The rest of the students showed between a .5 to 1.5 increase from their previous score. No students' score decreased in comparison to their first writing assessment.</p>

**CADRE Research Projects: Impact on P-12 Student Learning 2017-2018 (N = 8)**

Purpose Statement	Grade Level	Class Context	Pre / Post Test Results
<a href="#"><u>Teacher 1: The purpose of this study was to determine if the use of decoding strategies such as explicit decoding instruction, Elkonin boxes, and repeated reads will increase students' oral reading fluency.</u></a>	1 <sup>st</sup> Grade	17 Students 4 Students with an IEP	<ol style="list-style-type: none"> <li>1. 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>2. Students showed a 72% increase in the use of decoding strategies.</li> <li>3. Students showed an 87% increase in the naming of decoding strategies.</li> </ol>
<a href="#"><u>Teacher 2: The purpose of this study was to determine if inference making strategies increase reading comprehension.</u></a>	9 <sup>th</sup> Grade		<ol style="list-style-type: none"> <li>1. Correct answers on the teacher-made assessment increased from pre-test = 39.5% to post-test = 67.3%.</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>
<a href="#"><u>Teacher 3: The purpose of this study was to determine if the use of beyond the text strategies including annotating, identifying signposts, and text dependent questioning would increase student ability to comprehend text.</u></a>	6 <sup>th</sup> Grade	19 Students 4 Students with an IEP	<ol style="list-style-type: none"> <li>1. Weekly formative tests: Initially, student average steadily increased, but then seemed to follow no pattern from week to week.</li> <li>2. Summative benchmark tests: Class average increased from 67% on the pretest to 85% on the post-test.</li> <li>3. 53% of students said they enjoyed reading on the post-test (pre-test = 46%).</li> </ol>
<a href="#"><u>Teacher 4: The purpose of this study was to determine if flash card drilling methods and reading racetracks will increase students' ability to fluently read sight words.</u></a>	Kindergarten	23 Students	<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>
<a href="#"><u>Teacher 5: The purpose of this study was to determine if the implementation of choice novel units, choice projects, and a student paced unit will decrease inappropriate cell phone use and increase assignment completion in a Sophomore English class.</u></a>	10 <sup>th</sup> Grade	30 Students	<ol style="list-style-type: none"> <li>1. The number of cellphones used 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>

**CADRE Research Projects: Impact on P-12 Student Learning 2017-2018 (N = 8)**

Purpose Statement	Grade Level	Class Context	Pre / Post Test Results
<p><a href="#"><u>Teacher 7: The purpose of this study was to determine if reviewing vocabulary, breaking down the structure of word problems, and the use of schematic diagrams would increase my students' ability to solve word problems.</u></a></p>	<p>9<sup>th</sup> and 10<sup>th</sup> Grade</p>	<p>16 Students</p>	<p>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%.                  2. Unit Test Word Problems: From Test 1 to Test 3, the mean number of problems attempted decreased, and the mean number of word problems correct neither increased nor decreased.</p>
<p><a href="#"><u>Teacher 8: The purpose of this study was to determine if the use of conferencing, mentor texts, and rubrics within a writer's workshop model will improve student achievement in the area of writing.</u></a></p>	<p>2<sup>nd</sup> Grade</p>	<p>19 Students                  2 Students with Behavior Plans</p>	<p>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 posttest showed growth for 100% of my students.                  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.                  3. Students' writing identities positively increased in each writing trait except for organization.</p>