

**University of Nebraska Kearney Teacher Education
Completer Action Research Project 2016F**

Description of Project and Methodology

Action research projects were conducted during fall, 2016 by a purposive sample of completers. Teachers conducting the research were completers from 2014-15 and 2015-16, representing an array of endorsements. These completers were chosen by their advisors because they 1) were known to have P-12 teaching positions, and 2) were likely to participate in the project based on their participation in classes. Completers were told that if they completed the project, they would be entered into a raffle for a \$50 Amazon gift card, and that their principals would receive a letter of commendation from the associate dean of the EPP. Of the completers who were contacted (34), 47% (16) completed the action research project.

The completers were asked to choose a teaching unit that they were currently doing or would be able to complete by the deadline. Once the unit was finished, they were to complete the action research template (see Appendix), which mirrors the new unit template for pre-service teachers, including:

1. Learning goals for the unit
2. Pre- and post-assessments (describe or attach)
3. Assessment data (pre- and post-test scores for each P-12 student and the percent difference)
4. Reflection, including specific suggestions to improve the unit based on the data gathered.

Action Research Project Results Table

| Completer | Endorsement | # Yrs. Teaching | Unit Name, Grade and Learning Goals | Number of Students | % Student Learning Increase | Completer's Reflection |
|-------------|------------------|-----------------|---|--------------------|-----------------------------|---|
| Completer 1 | Wld Lang Spanish | 2 | Grammar, HS Spanish 1 All students in the group will be able to correctly replace any subject of a | 96 | 46% | Through this process, I have noticed a substantial gap in ability among the general population in my classes. When I say general population I refer to the students who are generally on-task and turn in daily work. |

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| | | | <p>sentence with a subject pronoun. All students will be able to conjugate any regular present tense -ar verb. All students will be able to use ordering numbers in response to context clues and blanks within a paragraph of text in the target language.</p> | | | <p>Reasoning for this can be chalked up to a few possible explanations: not all students are asking questions they have or know what questions to ask, students are not being given opportunities to show their knowledge through the use of checks for understanding, and students are completing activities incorrectly without my knowledge. Suggested action for me in the upcoming semester is to put into place at least 3 different ways for kids to ask questions about what they don't know apart from raising their hands in class. Checks for understanding need to be used more frequently throughout my teaching. I also need to do more to reach each student and check in with individuals to pull questions out of them. There is one student in particular that says he understands, but when I look at his work he has numerous wrong answers. I had this student come in to retake the test and instead sat down and reviewed his test answers and walked through the notes with him again. He said it helped him and he understood better, but we will see when he comes in to retake the test. This pointed at the lack of note taking involved in lessons and the need for some students to visualize the process more than once with multiple examples.</p> |
| Completer 2 | ELED K-6 | 1 | <p>Addition Strategies 1st Grade</p> <p>All Students given an addition sentence will be able to identify if the problem is a doubles,</p> | 20 | 15% | <p>I noticed that I had some students who already mastered or have a good grasp of addition strategies and using them. I would make this unit longer if I had more time. Some of my students could use more time working on each strategy individually before adding an additional strategy. I also noticed</p> |

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| | | | doubles plus one, counting on, or a number plus 10. Then the students will be able to correctly add the problem to come up with the correct answer with 95% accuracy. | | | that my students who struggled to apply the strategy were the same students who struggle with their addition facts and could use a visual added to the pre- test as well as the post- test. |
| Completer 3 | SPED K-6 | 1 | Resource for Behavior Students 1 st -5 th Grade Students will tell time to the nearest 5 minutes. | 2 | 100% | I am pretty pleased with these two students they are hard workers but come from a bad background. They are sponges and honestly like to learn. One thing that I would change is that I would have moved on faster with them. I think they understood the concept before I tested them I just wanted them keep practicing it to make sure they really got it. |
| Completer 4 | Sec Eng 7-12 | 1 | Animal Farm 10 th Grade Students can evaluate the meaning, reliability, and validity of a text, considering the author’s purpose, perspective, and contextual influences. Students can analyze, evaluate, and synthesis the themes and main ideas of a text Students can build background knowledge and activate prior knowledge to clarify a text, deepen understanding, and make connections while reading a complex text. Students can respond to what they read in a variety of ways. | 14 | *NAD | I actual really liked the reforming a text idea. I think that next time I do this, I’ll use a different media such as hard copies because some students seemed to struggle with this aspect of the assignment and, after I gave the assignment, I felt the need to have student samples of this assignment in a hard copy. I printed presentations, but It doesn’t have the same impact. |

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| Completer 5 | Eng. 7-12 | 2 | <p>The Crucible 12th Grade</p> <p>Students will understand how <i>The Crucible</i> is an allegory for the McCarthy hearings of the 1950s and how the play illustrates the concept of the tragic hero. Students will also be able to identify character(s), plot, setting, and conflict.</p> | 22 | *NAD | |
| Completer 6 | Eng. 7-12 | 2 | <p>Comprehending Non-fiction Text 9th Grade</p> <p>By the end of the unit, each student will improve to halfway between his or her baseline score and 100% on the pre-test. Students will correctly identify the main idea of the passage as well as supporting details of that main idea. Students will effectively summarize a passage using the main idea and supporting details.</p> | 17 | 49% | I spread this unit out over a long period of time, interspersing instruction on this specific content with other units. I think students would have done better on their tests if this unit had been more concentrated. The main weakness illustrated across the board by the posttest was in the area of summarizing. During the unit, I put a lot of emphasis on being able to answer the multiple-choice questions, but I did not include much practice with summarizing. In the future, I would expand the unit to include specific practice writing and revising summaries. |
| Completer 7 | Health and PE K-12 | 2 | <p>Volleyball 9th Grade</p> <p>The student will be able to successfully perform an overhead serve in the game of volleyball at a success rate of fifty percent when given ten attempts.</p> | 19 | 21% | Overall, my 6th period freshman physical education class surprised my expectations with the volleyball unit. Even before teaching the proper mechanics for the overhand serve in volleyball, 47% of my class had met my learning goal of getting half (5/10) of their serves in and with correct form. |

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| | | | | | | <p>At the end of my twelve-day unit, we did a post test to see if we could get the whole class to fifty percent. However, it ended with just 68% of my class reaching that learning goal.</p> <p>Pre-Test 9 out 19 students had a 50% success rate out of 10 attempts = 47% Post-Test 13 out 19 students had a 50% success rate out of 10 attempts 68%</p> <p>I was able to get 4 more students to successfully reach the learning goal which is why we saw a 21% increase in my class!</p> |
| Completer 8 | ELED K-6 | 1 | <p>Continents and Oceans 3rd</p> <p>All students will identify and label four oceans and seven continents on a blank map.</p> | 18 | 35% | <p>Some students got the continents that began with A confused and mixed up. I would come up with a creative way for them to remember those continents. When we were making our flipbook, students worked at different paces. I would create small groups so that students could work on learning the continents and oceans at their own pace with more individualized help.</p> |
| Completer 9 | Music K-12 | 2 | <p>So-Mi (High and Low Sounds) 1st</p> <p>All students in the group will be able to recognize So-Mi on a basic music staff.</p> | 18 | 6% | <p>Some of the students did not take their time with the test. In addition, I would add additional questions on the test. I would also change the color of the circles I used on the staff: from grey to black.</p> |
| Completer 10 | SPED 7-12 | 1 | <p>Learning Styles SPED 9-12</p> <p>Students will be able to define learning styles in general. Students will identify how the three major learning styles.</p> | 12 | 40% | <p>In the future, I want the lessons to be more interactive and challenging. I cut a few activities I had planned due to time constraint. Unfortunately, some students seemed bored at times.</p> <p>In the future, I plan to do these activities instead of some of the less interactive lessons. I also want to make formative</p> |

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| | | | <p>Students will identify how each of the three main learning styles learn best. Students will identify their learning style after taking numerous learning style inventories.</p> | | | <p>assessments more fun. I plan to do so in the future by giving students more variety and choice.</p> <p>In addition to these improvements I also want to add a triad of lessons in which each will be taught solely geared toward a learning style. At the end of each of these lessons, students will have a chance to reflect on how well they liked being taught that way. At the end of the three days, students will compile their reflections and decide which way they learned best. They will then participate in a self-advocacy activity where they will have an opportunity to discuss which activities aided them in the learning process. I am a firm believer in the power and purpose of self-advocacy in the classroom. In combining these activities with this unit, a clearer connection to the real world can be made for students.</p> |
| Completer 11 | PE K-6 and 7-12 | 1 | <p>Jump Roping 3rd</p> <p>Students will review the basic skills of long rope jump rope (how to time their jump, how to twirl) Students will learn how to enter and exit in a long rope twirl</p> <p>*All students will be able to jump 10 times in a row in the long rope *Advanced students will be able to enter, jump 10 times, and exit without the long rope stopping</p> | 23 | 19% | <p>Smaller class size would be very helpful in this unit as most of my groups had to work in groups of 4-5 meaning 1-2 people had down time. Groups of 3 are ideal to maximize practice time, and decrease off task time. In the future, I will break this unit into different stations (i.e. long rope station, single rope station, long jump station) to ensure that there is little to no down time, but the critical skills of jumping are still being taught.</p> <p>This is a test that district uses for 3rd grade report cards. The students are given a rank based on a rubric that all district teachers use for Long Rope as follows: Beginning -- does not attempt or try Developing -- cannot get to 10 jumps in a</p> |

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| | | | | | | row Proficient -- Jumps 10 times in a row |
| Completer 12 | Art K-12 | 1 | Shapes Kindergarten All students will be able to identify all simple shapes and incorporate them in art. | 49 | 9% | As I look back now I would have added more shapes that would have been more difficult. as a group many of them knew their basic shapes. The more advanced students were still very engaged in the activities we did. We talked briefly about other shapes such as trapezoids, hexagons, pentagons and ovals. They mentioned that they have been learning about some of those shapes in their homeroom classrooms. So next time planning with the homeroom teachers, so students could be learning more advanced shapes in two places rather than one. |
| Completer 13 | ESL K-12 | 1 | Egypt (ELL History) 9-12 Students will learn vocabulary about Egypt in the Present and the Past Students will be able to compose complete sentences and read information about Egypt in the Present and the Past Students will be able to analyze the information and compare Ancient Egypt to Present Egypt. | 27 | 36% | If I got another chance to teach this unit to my students I think I would make some of the questions more complex. Or differentiate a little more for the students that are at a higher level of language. Some of the students just flew through the activities so I think I need to add and make them a little more challenging. |
| Completer 14 | BMIT | 2 | Accounting 11 th Grade Students will be able to define the accounting terms, concepts, and practices related to a | 6 | 60% | Overall, I think the lesson went very well. The students had a little trouble understanding the adjustments, but once I retaught it they understood it much better. I would take a little more time the next time to focus on adjustments. |

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| | | | worksheet. Students will be able to correctly prepare a heading, plan adjustments, and correctly complete a worksheet. | | | |
| Completer 15 | Math 7-12 | 1 | <p>Geometry 9-12</p> <p>Prove theorems about triangle congruence theorems. MA 11.3.1.b Prove geometric theorems about angles, triangles, congruent triangles, similar triangles, parallel lines with transversals, and quadrilaterals using deductive reasoning. Use SAS, ASA, SSS to work with congruent triangles. MA 11.3.1.c Apply geometric properties to solve problems involving similar triangles, congruent triangles, quadrilaterals, and other polygons. Use SAS, ASA, SSS to work with congruent triangles MA 11.3.1.e Create geometric models to visualize, describe, and solve problems using similar triangles, right triangles, and trigonometry. Graph triangles in the</p> | 27 | 27% | Given another opportunity, I would like to add in an activity day where the students utilized the SAS, AAS, and SSS congruence theorems to solve real-world problems. I also would like to encourage them more to try their best on a pre-test. |

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| | | | coordinate plane to show congruence. MA 11.3.2.e Use coordinate geometry to prove triangles are right, acute, obtuse, isosceles, equilateral, or scalene. | | | |
| Completer 16 | BMIT 6-12 | 2 | Information Technology 10 th Grade Students will gain knowledge and understanding of MS Excel through various activities. Focus will be on using formulas to compute data and using the data to insert charts. | 19 | 90% | Many students had little to no experience using Microsoft Excel. We used the software daily and covered all of the major points in regards to standards and FBLA requirements. During the pretest, most of them had not even opened Excel on their computers, but by the time we were done, they were much more efficient. I used a lot of modeling in class which was very beneficial since we do not have textbooks for this class. To test their knowledge on a deeper level, I may try a different capstone project adding more criteria. |

* Not able to be determined.

Results

There were two completers who did not use the same pre- and post-test assessments in their units, therefore it could not be determined if there was learning growth from these experiences. Both of the students were high school English teachers teaching about a particular piece of literature. After discussing the project with the secondary English program director, she could see how they would miss the pre- post-test concept. For these types of units, English teachers typically use post-assessments to test students on their knowledge of the new piece of literature, not on the general concepts presented through studying the literature. There was one secondary English teacher who did understand the process and used it to teach and assess concepts relating to comprehending non-fiction texts.

All of the P-12 student classes/groups of the 14 completers who correctly used the pre- and post-assessment process showed learning growth. Growth percentages ranged from 6% (Recognizing So-Mi) to 100% (learning to tell time). Statistically speaking, among students taking the pre-test and post test administered by the teachers involved in the action research, there

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was a statistically significant difference between the two tests, pre-test ($M = 181, SD = 9.86$) and post-test ($M = 181, SD = 13.57$), $p .0029$. In other words, teachers' intervention helped improve students' performances measured by their test scores.

| | Pre-Test | Post-Test |
|------|----------|-----------|
| Mean | 10.27 | 13.57 |
| SD | 9.86 | 11.03 |
| N | 181 | 181 |

An interesting component of the project was the Completer's Reflection section. The template indicates that this was optional; however, all but one student chose to complete it. The reflections show insight and a willingness to learn and revise instructional strategies based on the data the completers gathered.

Additionally, completers reached out during the project to discuss and clarify the processes, and also to share results. There was a sense of relationship that built between the associate dean and the completers, that was enjoyable to all.

While this project is simply a snapshot of the impact our completers have on P-12 learning, it does affirm that most of the completers in this project understand how to use research and evidence to inform instruction and to measure P-12 student learning. The EPP plans to share these results with faculty and P-12 partners, and to continue doing this project every 2-3 years in order to compare results, monitor our education programs, and make continuous improvement.

Appendix
**University of Nebraska Kearney Teacher Education
 Completer Action Research Template Fall 2016**

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| Name: | Grade Level/Subject: |
| Learning Goals: | |

| Impacting Student Learning Through Assessment | |
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| Pre-and Post-Assessments Describe or attach (whichever is easier) the pre- and post-tests you used for the unit. | |
| Assessment Data Type or attach the pre- and post- test scores for each individual student (DO NOT USE NAMES), and the percent difference in the two scores. Then give the mean score on the pre- and post-tests for the group, and the percent difference. | |
| Reflection Given another opportunity to construct and teach your unit, what specific suggestions for improving the unit would you make based on the data as well as your experience? | |