Teacher Effectiveness and Impact on Student Learning:
A Case Study of UNK Teacher Education Graduates
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How School Climate and Teacher Effectiveness Impact Student Learning

Throughout the last few decades, the importance of student achievement has increased. Pressure to reduce the achievement gap in schools has derived from government policies and laws, and also from the noted benefits of increasing student learning. For example, high student achievement often leads to elevated SAT/ACT scores, success during postsecondary school, and contribution to the global economy (Gansle, Noell, & Burns, 2012). Through the years, many researchers have attempted to pin-point factors that impact student learning in schools. Several studies have noted reoccurring themes that contribute to increased student learning: teacher quality (Goldhaber, 2016; Jimerson & Haddock, 2015; Mincu, 2015), evaluation (Ndungu, Allan, & Emily, 2015; Tucker & Stronge, 2005), training (Gansle, et al., 2012), and school climate (Bernhardt, 2013; Cavrini, Chianese, Bocch, & Dozza, 2015; Hapson, Schiller, & Lawson, 2014; Morse & Allensworth, 2015). However, few studies have attempted to merge existing data about these factors. The process starts with teacher preparation and includes school climate; therefore, the best picture of student learning would include information from both areas.

Literature Review

Student learning is the degree that students are able to understand grade-level material, and their ability to cognitively process and problem solve at an appropriate level. The education system has documented student learning in a variety of ways including: classroom-level evaluation, grade point average [GPA] (Hopson, et al., 2014), scores on state standardized tests (Gansle, et al., 2012), and college preparedness examinations such as ACT or SAT. Schools are
working diligently to meet standards on state and national assessments and ultimately improve student achievement.

Despite the continual controversy about the use of standardized tests, states are widely using high-stakes assessments as a way to measure both student learning and school improvement. The data gathered from state assessments is vital information for schools. Tucker and Stronge (2005) argued that assessment data can serve two purposes; first, as a measure of student learning for schools compared to other schools at the district, state, and national level. Standardized scores are different from other measurements, such as GPA or classroom grades, because they have a standard reference point and use equal units of measure. The authors noted that secondly, data from state assessments may be used as a way to highlight deficits in curriculum effectiveness, a way to evaluate teacher instruction, a driver for professional development areas, and as a way to measure the impact of changes in the school system. For example, a school that has implemented a school-wide intervention for improving student reading might use standardized state reading scores to monitor progress over a three year period. Although using standardized scores is a helpful tool for evaluation and decision making, Tucker and Stronge (2005) discouraged using scores in isolation, but rather as part of an ecological evaluation process. Therefore, standardized assessment scores are a valuable instrument for evaluating student learning, but cannot be used solely to make decisions about schools.

One of the major areas that impacts student learning and achievement is school climate (Hopson, et al., 2014). School climate is the perceived safety, quality of education, availability and use of resources, feeling of belonging, and quality of relationships with staff (Bernhardt, 2013; Cavrini, et al., 2015; Hopson, et al., 2014). It encompasses social norms, values, and goals of a school (Hopson, et al., 2014). Research has suggested that a higher degree of positive school climate is linked to increased student learning and achievement (Bernhardt, 2013; Cavrini, et al.,
of the school, may perceive school climate differently. For example, the parents may have a
different view of quality of staff as compared with the principal. Likewise, a second grade
student’s view would differ from that of a senior in high school. Therefore, all of these views
should be considered when evaluating school climate.

Teacher quality is another area that has been found to significantly impact student
learning. In two longitudinal studies conducted by Chetty, Friedman, and Rockoff (2013; 2014),
quality teachers had a higher number of students who attended college and the students reported
higher earnings when they graduated. In addition, teachers who were of higher quality
immediately impacted the standardized test scores for their class, and when they left a school, the
test scores immediately dropped (Chetty, et al., 2013). Teacher quality can include many areas of
competency including lesson planning (Council of Chief State School Officers [CCSSO], 2011;
Ndungu, et al., 2015), crystalized and continuing knowledge (CCSSO, 2011; Chetty, et al., 2013;
2014; Goldhaber, 2016; Mincu, 2015), and understanding the needs of students (CCSSO, 2011;
Jimerson & Haddock, 2015). In the past, teacher quality has been measured using various means
such as student achievement on tests or evaluations from their building principals (Ndungu, et al,
2015; Tucker & Stronge, 2005). Thus, teacher quality has been found to impact student learning,
but it is difficult to measure because “quality” can be defined in different ways. Best practice
would suggest evaluating teacher quality by using both scores and qualitative data from
principals. In summary, previous research has focused on understanding what impacts student
learning and achievement. Hopson, et al. (2014) found that students who perceived their school
climate as positive had higher grades. In addition, students were more successful when the
school was perceived as safe. However, the authors noted that school climate is not a direct
driver of school achievement, but rather, student learning is “primarily facilitated by expert
instruction” (p. 207). In support of this, Mincu (2015) found that effective differentiated teaching impacts achievement more than class size. The author also noted that the quality of education received by the teacher was vital to school improvement and student achievement. Considered together, the research suggests that student learning is impacted by many factors; it is most directly influenced by teacher quality and secondly by the safety and climate of the school. Teacher quality can be impacted by several ways including past experiences and teacher training (Gansle, et al., 2012). With this information, it seems that gaps in the research appear where the interaction between teacher training, teacher quality, and school climate intersect to impact student learning.

Methodology
This study is a case study using a qualitative approach. According to Creswell (1994), for the quantitative researcher, the only reality is the one created by the researcher. On the other hand, the qualitative researcher reports the realities and relies on the participants for interpretation. Stake states “we (case study researchers) try not to disturb the ordinary activity of the case, not to test, not to interview, if we can get the information we want by discrete observation or examination of records” (Stake, 1995, p. 12). Consequently, this study seeks to view reality through the collection of data from a variety of information sources. The research question addressed in this study is the following: What impact do University of Nebraska Kearney (UNK) teacher education graduates have on student learning?

Sample
The school district included in this case study was a sample of convenience. However, the school district employs a greater number of new University of Nebraska Kearney (UNK) teacher education graduates than any other single school district. Surveys, achievement tests, and state accountability tests were used to collect data. The school district identified 29 new UNK teacher
TEACHER EFFECTIVENESS AND IMPACT ON STUDENT LEARNING

Education graduates who were hired in the 2013-14, 2014-15, and 2015-16 school years. 25 of these teachers, 86%, continue to be employed by the school district in 2016-17. The teachers were placed in 11, out of a total of 14, different school buildings across the district. Each of the 11 supervisors, 10 principals and 1 associate superintendent, were asked to complete a survey developed by the Nebraska Department of Education (NDE) to gather input on the effectiveness of teacher preparation programs based on their experiences with newly hired teachers. All 11 supervisors completed the survey. The table below shows the number of new UNK graduates employed by school year and level.

New UNK Graduates Employed by Level and Year

<table>
<thead>
<tr>
<th>Level</th>
<th>2013-14</th>
<th>2014-15</th>
<th>2015-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>PK</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Elementary</td>
<td>6</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Middle Level</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>High School</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>11</td>
<td>9</td>
</tr>
</tbody>
</table>

Supervisor Surveys

Surveys were collected from all supervisors who had employed new UNK Teacher Education graduates as teachers during the 2013-14, 2014-15, and 2015-16 school years. This included supervisors from 11 of the 14 buildings in the district and 29 UNK teacher education graduates. The 3 buildings not included in the surveys are all K-5 elementary schools. The survey used was developed by the Nebraska Department of Education [NDE] (n.d.) to measure teacher effectiveness in order to determine if teacher quality is contingent upon the institution from which they graduated. This survey is based on the Interstate Teacher Assessment and Support
Consortium [InTASC] values that are nationally accepted as standards for teacher quality. The University of Nebraska Kearney Teacher education program follows InTASC standards, and is accredited by both the Higher Learning Commission [HLC] and the National Council of Accreditation of Teacher Education [NCATE] (University of Nebraska Kearney, n.d.).

Responses were collected using a 4 point Likert scale: Consistent (4), Frequent (3), Occasional (2), and Rare (1). Survey respondents were also asked to provide comments regarding the preparation of the new teachers from UNK.

Climate Surveys
Climate surveys were conducted in all 14 buildings across the school district in April 2015. The survey administration was a digital survey supported through the Nebraska Department of Education and based on the work of Victoria Bernhardt (2013). As part of the process, students, parents, and faculty were surveyed with different, but similar, instruments. Results were tabulated by NDE and returned to the school district for analysis. Since the survey was conducted during the 2014-15 school year, only those buildings with new UNK teachers in 2014-15 are included in the results. These results include 6, 3 elementary schools, 2 middle schools, and 1 high school, of the 14 buildings in the district (the survey was not administered to preschool students). Responses were collected using a 5 point Likert scale with Strongly Agree (5) and Strongly Disagree (1). For the purposes of this study that focuses on student learning, only the results from the student survey are included. It is not possible to disaggregate survey results for individual teachers, so only building results are reported. However, the new UNK teachers would be responsible, at least in some part, for the survey results.

Achievement Tests
The school district administers the Measures of Academic Progress (MAP) assessment to all students in grades K-10 twice a year (fall and spring). MAP is an online, adaptive assessment
where students use a laptop or desktop computer to access the test. All students are administered the reading and math assessment appropriate for their grade level, and students in grades 3-10 are also administered the language usage assessment. Based on the students’ fall testing score, age, and grade level, each student is assigned a unique growth goal by the testing software. The growth goal is based on statistical means, so approximately 50% of students would be expected to meet their growth goal on any particular subject assessment and school year. To measure the impact of teachers on student learning, we chose to measure the percentage of students meeting their growth goal for each test. Of the new UNK teachers in 2013-14, 4 of the 9 taught in subject areas and grade levels directly measured by the MAP assessment. These areas included 1st grade, 3rd grade, and 4th grade. For 2014-15, 4 of the 11 teachers taught in subject areas and grade levels assessed using MAP. The subject areas include 1st grade, 3rd grade, 7th grade language arts, and high school English. For 2015-16, 2 of the 9 teachers taught is tested subject areas. This included 4th grade and 5th grade. The MAP results are reported by teacher.

State Accountability Tests
NDE annually requires the administration of a state accountability test (NeSA) in the areas of mathematics, reading, and science. NeSA Reading and Mathematics are administered in each grade 3-8 and also in grade 11. NeSA Science is administered in grades 5, 8, and 11. Based on the results of each subject assessment, students are assigned one of three performance levels: Below, Meets, or Exceeds standards. Students in the Meets or Exceeds levels are considered to be proficient on the state academic standards. Results of the NeSA tests are reported by the percentage of students at each performance level. Of the new UNK teachers tested using the 2013-14 school year, 2 new UNK graduates taught in grade levels and subjects tested by NeSA. This included 3rd and 4th grade reading and mathematics. In 2014-15, 3 of the 11 teachers taught in areas tested using NeSA. This included 3rd grade reading and mathematics, 7th grade
In 2015-16, 2 new teachers taught in tested areas. The teachers taught 4\textsuperscript{th} grade reading and mathematics and 5\textsuperscript{th} grade reading and mathematics.

Results

Supervisor Survey

Surveys were collected from 11 administrators who had supervised new UNK teacher education graduates who were hired in the 2013-14, 2014-15, and 2015-16 school years. The entire table to results is included in Appendix A. In general, the supervising administrators were pleased with the preparation the new teachers had received at UNK. On the question regarding the effective preparation of the new teachers, all 11 supervisors agreed that the new graduates were effectively prepared for continuing employment in their positions. The mean for each standard of the survey ranged from 2.7 to 3.7 on a scale of 1 to 4. The lowest rated standard was Standard 5.2 – The teachers use differing perspectives to engage students in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues. Two standards were rated the highest at 3.7 out of 4: Standard 9.2 – The teachers model ethical professional practice and Standard 11.1 – The teachers positively impact the learning and development of all students. Several of the supervisors made comments similar to the following quote from one of the supervisors: “I think teachers are well prepared for teaching”. Comments from the supervisors indicated that more attention to classroom management, use of assessment data to adjust instruction, and career education are areas where graduates could be better prepared. Overall, the supervising administrators were pleased with the preparation of new graduates and believed that the graduates impacted student learning in a positive manner.

Climate Survey

Climate surveys were collected in April of 2015 from all buildings in the school district.
During the 2014-15 school year, new UNK graduates were employed in 7 different buildings: high school, two middle schools, three elementary schools, and an early learning center. All buildings participated in the climate survey for students except for the early learning center. Responses were collected using a 5 point Likert scale with Strongly Agree (5) and Strongly Disagree (1). On the elementary and middle school student surveys, the following stems directly address teachers:

*My teacher treats me with respect*

*My teacher cares about me*

*My teacher thinks I will be successful*

*My teacher listens to my ideas*

The results from the two middle level and three elementary schools were very similar with all of the above stems except for one being consistently rated between a 4 (agree) and 5 (strongly agree). My teacher listens to my ideas was rated between a 3 (neutral) and 4 (agree) in all buildings except for one elementary school where it was rated between a 4 (agree) and 5 (strongly agree). From the elementary and middle level survey, it is clear that students think highly of their teachers and believe their teachers care about them.

<table>
<thead>
<tr>
<th>My teacher:</th>
<th>treats me with respect</th>
<th>cares about me</th>
<th>thinks I will be successful</th>
<th>listens to my ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Elementary (N = 1233)</td>
<td>4.37</td>
<td>4.44</td>
<td>4.36</td>
<td>3.78</td>
</tr>
<tr>
<td>Elementary A (N = 53)</td>
<td>4.49</td>
<td>4.55</td>
<td>4.55</td>
<td>4.09</td>
</tr>
<tr>
<td>Elementary B (N = 177)</td>
<td>4.34</td>
<td>4.41</td>
<td>4.30</td>
<td>3.58</td>
</tr>
<tr>
<td>Elementary C (N = 127)</td>
<td>4.28</td>
<td>4.23</td>
<td>4.14</td>
<td>3.60</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>My teacher:</th>
<th>treats me with respect</th>
<th>cares about me</th>
<th>thinks I will be successful</th>
<th>listens to my ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Middle (N = 971)</td>
<td>4.07</td>
<td>4.11</td>
<td>4.16</td>
<td>3.70</td>
</tr>
<tr>
<td>Middle School A (N = 483)</td>
<td>4.06</td>
<td>4.11</td>
<td>4.14</td>
<td>3.62</td>
</tr>
</tbody>
</table>
The survey for high school students contained 11 stems related to teachers:

**MY Teachers:**

- **Expect students to do their best**
- **Expect me to do my best**
- **Are understanding when students have personal problems**
- **Set high standards for learning in their classes**
- **Help me gain confidence in my ability to learn**
- **Know me well**
- **Listen to my ideas**
- **Care about me**
- **Make learning fun**
- **Are excited about the subjects they teach**
- **Give me individual attention when I need it**

<table>
<thead>
<tr>
<th>MY Teachers</th>
<th>Freshmen (N=274)</th>
<th>Sophomores (N=216)</th>
<th>Juniors (N=238)</th>
<th>Seniors (N=177)</th>
<th>All HS Students (N=905)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expect students to do their best</td>
<td>3.95</td>
<td>3.81</td>
<td>3.82</td>
<td>3.82</td>
<td>3.86</td>
</tr>
<tr>
<td>Expect me to do my best</td>
<td>4.04</td>
<td>3.89</td>
<td>3.87</td>
<td>3.95</td>
<td>3.94</td>
</tr>
<tr>
<td>Are understanding when students have personal problems</td>
<td>3.24</td>
<td>3.29</td>
<td>3.25</td>
<td>3.42</td>
<td>3.29</td>
</tr>
<tr>
<td>Set high standards for learning in their classes</td>
<td>3.73</td>
<td>3.69</td>
<td>3.60</td>
<td>3.64</td>
<td>3.67</td>
</tr>
<tr>
<td>Help me gain confidence in my</td>
<td>3.53</td>
<td>3.44</td>
<td>3.36</td>
<td>3.38</td>
<td>3.44</td>
</tr>
</tbody>
</table>
Students rated their teachers between a 3 (neutral) and 4 (agree) on all of the stems. The highest rated stems were “expect me to do my best” and “expect student to do their best”, while the lowest rated stem was “know me well”. While these ratings are not as positive as the middlelevel and elementary survey results, they are positive towards the teacher. Also, it’s not surprising that high school students would rate their teachers lower because of the size and class scheduling of the high school as these students are typically less positive towards education as are younger students. However, these results do show, in general, that high schools students do view their teachers in a positive manner as none of the stems had an average of less than 3.0.

Overall, the climate surveys show that students believe their teachers care about them, have high standards for learning, and are interested in helping them be successful learners. It is clear from the climate surveys that teachers, including UNK graduates, are impacting learning from the student perspective at all levels. Since all of the secondary buildings (two middle schools and one high school), were included, there is no difference when comparing to the district. However, at the elementary level, three of the ten elementary schools were included in the results reported above. Overall, these three elementary schools had similar scores to the other elementary schools and the district average on the stems related to teachers. This result demonstrates the impact of teachers, including UNK graduates, on the student surveys. Graphs of all of the student surveys are included in Appendix B.
During the 2013-14 school year, 4 of the 9 new UNK teachers taught in subject areas directly measured by the MAP assessment. Those areas included 1st grade, 3rd grade, and 4th grade. After the fall testing, the MAP assessment provided a spring growth target for each student. The test is constructed so that approximately 50% of students would meet their growth goal in a particular school year. The results of the achievement testing for these grades are reported by the percentage of students meeting their growth goal for each tested subject. The results are for students taught by the new UNK graduate in the 2013-14 school year are listed in the table below.

<table>
<thead>
<tr>
<th>2013-14 Grade Level</th>
<th>Language Usage % Meeting Goal</th>
<th>Mathematics % Meeting Goal</th>
<th>Reading % Meeting Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Grade (N=21)</td>
<td>Not administered</td>
<td>76%</td>
<td>52%</td>
</tr>
<tr>
<td>1st Grade (N=20)</td>
<td>Not administered</td>
<td>65%</td>
<td>100%</td>
</tr>
<tr>
<td>3rd Grade (N=15)</td>
<td>67%</td>
<td>67%</td>
<td>67%</td>
</tr>
<tr>
<td>4th Grade (N=22)</td>
<td>86%</td>
<td>73%</td>
<td>77%</td>
</tr>
</tbody>
</table>

Of the new UNK teachers in 2014-15, 4 of the 11 taught in subject areas and grade levels directly measured by the MAP assessment. These areas included 1st grade, 3rd grade, 7th grade English, and high school English. In 1st grade, 3rd grade, and 7th grade, students were tested in the fall and again in the spring. The results for 1st grade, 3rd grade, and 7th grade are listed in the chart below.

<table>
<thead>
<tr>
<th>2014-15 Grade Level</th>
<th>Language Usage % Meeting Goal</th>
<th>Mathematics % Meeting Goal</th>
<th>Reading % Meeting Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Grade (N=24)</td>
<td>Not administered</td>
<td>96%</td>
<td>57%</td>
</tr>
<tr>
<td>3rd Grade (N=19)</td>
<td>94%</td>
<td>78%</td>
<td>83%</td>
</tr>
<tr>
<td>7th Grade (N=95)</td>
<td>68%</td>
<td>Teacher did not teach subject</td>
<td>68%</td>
</tr>
</tbody>
</table>
The high school schedule is a term block schedule where a student would not take a class for an entire school year. Consequently, measuring a student on obtaining their growth goal for the school year would not be as applicable for the high school. For the high school teacher, the results are reported by the percentage of students scoring below the 50th percentile and the percentage of students scoring at or above the 50th percentile.

<table>
<thead>
<tr>
<th>2014-15 School Year</th>
<th>Language Usage (N=64)</th>
<th>Reading (N=64)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50th Percentile or Above</td>
<td>71%</td>
<td>63%</td>
</tr>
<tr>
<td>Below 50th Percentile</td>
<td>29%</td>
<td>37%</td>
</tr>
</tbody>
</table>

Of the new UNK teachers in 2015-16, 2 of the 9 taught in subject areas and grade levels directly measured by the MAP assessment. These areas included 4th grade and 5th grade. In both grades, students were tested in the fall and again in the spring. The results from the testing are listed in the chart below.

<table>
<thead>
<tr>
<th>2015-16 Grade Level</th>
<th>Language Usage % Meeting Goal</th>
<th>Mathematics % Meeting Goal</th>
<th>Reading % Meeting Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th Grade (N=23)</td>
<td>52%</td>
<td>43%</td>
<td>65%</td>
</tr>
<tr>
<td>5th Grade (N=14)</td>
<td>77%</td>
<td>93%</td>
<td>79%</td>
</tr>
</tbody>
</table>

The results show that the UNK graduates had a positive impact on their students’ performance as measured by the Measures of Academic Progress achievement test. Most of the results are above the expected norming data for the test, and in many instances, significantly above the expected results for this test. Only one, 4th grade mathematics in 2015-16, is below the expected norming data.
State Accountability Tests

Of the new UNK teachers in 2013-14, 2 of the 9 teachers taught in subject areas and grade levels where students were tested with the NeSA assessment. The subjects and grade levels taught by the new graduates were 3rd grade reading, 3rd grade mathematics, 4th grade reading, and 4th grade mathematics. The results are reported by percentage of students scoring at each performance level. Since there are no established norms for the NeSA tests, results are also compared to district and state results for the same subjects and grade levels.

<table>
<thead>
<tr>
<th>Grade Level/Subject (2013-14)</th>
<th>% Below</th>
<th>% Meets</th>
<th>% Exceeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Grade Mathematics (N=17)</td>
<td>6</td>
<td>18</td>
<td>76</td>
</tr>
<tr>
<td>District</td>
<td>21</td>
<td>49</td>
<td>30</td>
</tr>
<tr>
<td>State</td>
<td>24</td>
<td>49</td>
<td>27</td>
</tr>
<tr>
<td>3rd Grade Reading (N=17)</td>
<td>0</td>
<td>71</td>
<td>29</td>
</tr>
<tr>
<td>District</td>
<td>18</td>
<td>60</td>
<td>22</td>
</tr>
<tr>
<td>State</td>
<td>21</td>
<td>53</td>
<td>26</td>
</tr>
<tr>
<td>4th Grade Mathematics (N=23)</td>
<td>26</td>
<td>65</td>
<td>9</td>
</tr>
<tr>
<td>District</td>
<td>19</td>
<td>53</td>
<td>28</td>
</tr>
<tr>
<td>State</td>
<td>23</td>
<td>52</td>
<td>26</td>
</tr>
<tr>
<td>4th Grade Reading (N=23)</td>
<td>22</td>
<td>48</td>
<td>30</td>
</tr>
<tr>
<td>District</td>
<td>17</td>
<td>40</td>
<td>43</td>
</tr>
<tr>
<td>State</td>
<td>22</td>
<td>41</td>
<td>37</td>
</tr>
</tbody>
</table>

Of the new UNK teachers in 2014-15, 3 of the 11 taught in subject areas and grade levels where students were tested with the NeSA assessment. The subjects and grade levels taught by the new graduates were 3rd grade reading, 3rd grade mathematics, 7th grade reading, and 8th grade science. The results are reported by percentage of students scoring at each performance level.
Since there are no established norms for the NeSA tests, results are also compared to district and state results for the same subjects and grade levels.

<table>
<thead>
<tr>
<th>Grade Level/Subject (2014-15)</th>
<th>% Below</th>
<th>% Meets</th>
<th>% Exceeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Grade Mathematics (N=19)</td>
<td>21</td>
<td>74</td>
<td>5</td>
</tr>
<tr>
<td>District</td>
<td>19</td>
<td>49</td>
<td>31</td>
</tr>
<tr>
<td>State</td>
<td>22</td>
<td>51</td>
<td>27</td>
</tr>
<tr>
<td>3rd Grade Reading (N=19)</td>
<td>16</td>
<td>79</td>
<td>5</td>
</tr>
<tr>
<td>District</td>
<td>14</td>
<td>51</td>
<td>35</td>
</tr>
<tr>
<td>State</td>
<td>18</td>
<td>49</td>
<td>33</td>
</tr>
<tr>
<td>7th Grade Reading (N=95)</td>
<td>14</td>
<td>55</td>
<td>31</td>
</tr>
<tr>
<td>District</td>
<td>14</td>
<td>44</td>
<td>42</td>
</tr>
<tr>
<td>State</td>
<td>18</td>
<td>38</td>
<td>44</td>
</tr>
<tr>
<td>8th Grade Science (N=79)</td>
<td>19</td>
<td>63</td>
<td>18</td>
</tr>
<tr>
<td>District</td>
<td>26</td>
<td>54</td>
<td>20</td>
</tr>
<tr>
<td>State</td>
<td>30</td>
<td>47</td>
<td>23</td>
</tr>
</tbody>
</table>

Of the new UNK teachers in 2015-16, 2 of the 9 teachers taught in subject areas and grade levels where students were tested with the NeSA assessment. The subjects and grade levels taught by the new graduates were 4th grade reading, 4th grade mathematics, 5th grade reading, 5th grade mathematics, and 5th grade science. The results are reported by percentage of students scoring at each performance level. Since there are no established norms for the NeSA tests, results are also compared to district and state results for the same subjects and grade levels.

<table>
<thead>
<tr>
<th>Grade Level/Subject (2015-16)</th>
<th>% Below</th>
<th>% Meets</th>
<th>% Exceeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th Grade Mathematics (N=23)</td>
<td>9</td>
<td>48</td>
<td>43</td>
</tr>
<tr>
<td>District</td>
<td>19</td>
<td>51</td>
<td>30</td>
</tr>
<tr>
<td>State</td>
<td>22</td>
<td>54</td>
<td>24</td>
</tr>
<tr>
<td>4th Grade Reading (N=23)</td>
<td>5</td>
<td>52</td>
<td>43</td>
</tr>
</tbody>
</table>
The results indicate that the students taught by the UNK graduates had similar proficiency rates (Meets and Exceeds combined) when compared to the district and state results. However, fewer students taught by UNK graduates scored at the Exceeds level when compared to district and state averages in several years and subjects. The results demonstrate that UNK graduates do have a positive impact on student learning. However, the results also indicate that students taught by UNK graduates do not always score at the highest performance level as frequently as other students in the district and state.

Conclusion

The research question addressed in this case study is: What impact do UNK teacher education graduates have on student learning? To answer this question, we collected qualitative and quantitative data to provide us with a global view of the impact on student learning. The measures used in the study included a survey of supervisors, student climate surveys, achievement test results, and state accountability test results. All UNK graduates were included in the surveys, but only a limited number of teachers taught students who were assessed using
the achievement test and/or the state accountability test. Viewing teacher impact on student learning using a variety of qualitative and quantitative measures provides a well-rounded perspective of the impact that graduates have on classroom learning. All of the measures show that UNK graduates, to varying degrees, have a positive impact on student learning. While there may be areas where graduates need to continue to learn and grow, graduates are well prepared to enter the teaching force. This is highlighted in the supervisor survey where 11 out of 11 supervisors indicated that UNK graduates are effectively prepared for continuing employment in their positions, and where supervisors consistently agreed that UNK graduates positively impact the learning and development of all students.
References


Council of Chief State School Officers [CCSSO]. (2011). The InTASC model core teaching standards at a glance. Retrieved from http://0eds.b.ebscohost.com.rosi.unk.edu/eds/ebookviewer/ebook/ZTAwMHhuYV9fMTI5MzUxX19BTg2?sid=d5888334-d1ff-4e32-8dc0fbacb5991231@sessionmgr101&vid=0&format=EB&rid=1


Appendix A

Supervisor Focus Group

1. Student Development

<table>
<thead>
<tr>
<th>Standard</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard 1.1 – The teachers understand how students grow and develop.</td>
<td>3.5</td>
</tr>
<tr>
<td>Standard 1.2 – The teachers recognize that patterns for learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas.</td>
<td>3.4</td>
</tr>
<tr>
<td>Standard 1.3 – The teachers implement developmentally appropriate and challenging learning experiences.</td>
<td>3.1</td>
</tr>
<tr>
<td>Total</td>
<td>3.3</td>
</tr>
</tbody>
</table>

2. Learning Differences

<table>
<thead>
<tr>
<th>Standard</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard 2.1 – The teachers understand individual differences and diverse cultures and communities</td>
<td>3.3</td>
</tr>
<tr>
<td>Standard 2.2 – The teachers ensure inclusive learning environments that enable each student to meet high standards.</td>
<td>3.5</td>
</tr>
<tr>
<td>Total</td>
<td>3.5</td>
</tr>
</tbody>
</table>

3. Learning Environments

<table>
<thead>
<tr>
<th>Standard</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard 3.1 – The teachers work with others to create environments that support individual and collaborative learning.</td>
<td>3.5</td>
</tr>
<tr>
<td>Standard 3.2 – The teachers create environments that encourage positive social interaction, active engagement in learning, and selfmotivation.</td>
<td>3.4</td>
</tr>
<tr>
<td>Standard 3.3 – The teachers manage students behavior to promote a positive learning environment.</td>
<td>2.9</td>
</tr>
<tr>
<td>Total</td>
<td>3.3</td>
</tr>
</tbody>
</table>

4. Content Knowledge

<table>
<thead>
<tr>
<th>Standard</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard 4.1 – The teachers understand the central concepts, tools of inquiry, and structures of the disciplines they teach.</td>
<td>3.3</td>
</tr>
</tbody>
</table>
Standard 4.2 – The teachers recognize that patterns for learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas.  

3.4

Standard 4.3 – The teachers implement developmentally appropriate and challenging learning experiences.  

3.5

Total 3.4

### 5. Application of Content

<table>
<thead>
<tr>
<th>Standard</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard 5.1 – The teachers understand how to connect concepts across disciplines.</td>
<td>2.9</td>
</tr>
<tr>
<td>Standard 5.2 – The teachers use differing perspectives to engage students in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Total 2.9

### 6. Assessment

<table>
<thead>
<tr>
<th>Standard</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard 6.1 – The teachers understand multiple methods of assessment.</td>
<td>3.2</td>
</tr>
<tr>
<td>Standard 6.2 – The teachers use multiple methods of assessment to engage students in their own growth, to monitor student progress and to guide their teachers’ and students’ decision making.</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Total 3.2

### 7. Planning for Instruction

<table>
<thead>
<tr>
<th>Standard</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard 7.1 – The teachers plan instruction that supports every student in meeting rigorous learning goals.</td>
<td>3.0</td>
</tr>
<tr>
<td>Standard 7.2 – The teachers draw upon knowledge of content areas, curriculum, cross-disciplinary skills, technology, and pedagogy.</td>
<td>2.9</td>
</tr>
<tr>
<td>Standard 7.3 – The teachers draw upon knowledge of students and community contexts.</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Total 3.0

### 8. Instructional Strategies

<table>
<thead>
<tr>
<th>Standard</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard 8.1 – The teachers understand a variety of instructional strategies.</td>
<td>3.3</td>
</tr>
</tbody>
</table>
### 9. Professional Learning and Ethical Practice

<table>
<thead>
<tr>
<th>Standard</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard 9.1 – The teachers engage in ongoing professional learning.</td>
<td>3.5</td>
</tr>
<tr>
<td>Standard 9.2 – The teachers model ethical professional practice.</td>
<td>3.7</td>
</tr>
<tr>
<td>Standard 9.3 – The teachers use evidence to continually evaluate their practice, particularly the effects of their choices and actions on others (students, families, other professionals, and communities), and adapt practice to meet the needs of each student.</td>
<td>3.0</td>
</tr>
<tr>
<td>Standard 9.4 – The teachers model professional dispositions for teaching.</td>
<td>3.5</td>
</tr>
<tr>
<td>Total</td>
<td>3.5</td>
</tr>
</tbody>
</table>

### 10. Leadership and Collaboration

<table>
<thead>
<tr>
<th>Standard</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard 10.1 – The teachers seek opportunities to take responsibility for student learning.</td>
<td>3.6</td>
</tr>
<tr>
<td>Standard 10.2 – The teachers seek opportunities, including appropriate technology, to collaborate with students, families, colleagues, and other school professionals, and community members to ensure student growth.</td>
<td>3.4</td>
</tr>
<tr>
<td>Total</td>
<td>3.5</td>
</tr>
</tbody>
</table>

### 11. Impact on Student Learning and Development

<table>
<thead>
<tr>
<th>Standard</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard 11.1 – The teachers positively impact the learning and development of all students.</td>
<td>3.7</td>
</tr>
<tr>
<td>Total</td>
<td>3.7</td>
</tr>
</tbody>
</table>
TEACHER EFFECTIVENESS AND IMPACT ON STUDENT LEARNING

12. As a general rule, would you consider UNK graduates of Teacher Education Programs with whom you have worked effectively prepared for continuing employment in their positions? (In other words should they be retained?)

Yes: 11
No: 0

Comments:

To have student teachers take more initiative. (Be willing to go above and beyond as they are truly interviewing each day they are at a school.)

I think teachers are well prepared for teaching. I think more skill development would be good in behavior management. Teach a bag of behavior strategies that they can then apply.

I am seeing more students that have dealt with traumatizing events in their lives. What worked with “behaviors” before does not work with “trauma” students. Good read- Help for Billy.

Reflection- Our new teachers do a great job of reflecting upon the effectiveness of their lessons.

I have had a positive experience with teacher candidates from UNK. Any extra experiences they can get in classrooms would be beneficial.

I think UNK has done a good job of getting students out into a classroom. I think it would be helpful if there was more face to face interaction between UNK and the schools. Sit down and talk about the needs of the UNK student. There is a lot of educational (jargon) that one has to sort though.

I would still like the folks from UNK to come out and visit the schools to create more conversation about what you have for expectations for your students. I would welcome this dialogue.

I appreciate your classes that engage in our school at every level pf the undergraduate program. Your students are productive in their efforts to take advantage of those opportunities as well as volunteer their own time.

Both UNK students came very prepared to be teachers.

Social emotional training/ childhood trauma training is always beneficial. All teachers I have hired have been positive, work collaborating with others and are professional.

I love any opportunity to partner with UNK.

I think it would be beneficial for UNK to put extensive focus on classroom management and social/ emotional education. The students that are arriving in our classrooms today have significant issues that need to be addressed prior to learning being able to take place. This is accomplished, in part, by the relationships that teachers develop with their students. Being aware of these issues and having strategies in place to help address them will go a long way in helping new teachers find success early on in their teaching career.
Continued emphasis on data-driven instruction and how to use assessment data to modify/adjust instruction. New teachers typically don’t understand their rationale behind formative assessment or how to use the data to make changes to their instruction.

Understand that classroom management is the responsibility of the teacher first.

Not addressing behaviors and simply handing it off to administration to deal with takes a lot of power away from the teacher.

Relationships with the students trump content.

Career and Technical Education encompasses all careers and every teacher needs to know how to contextualize their content across other disciplines and make it relevant to the real world.

College, career and life readiness does not mean that every student needs to be prepared for a 4-year college pathway. Teachers need to be able to look at student career interest inventories and help coach students into the appropriate post-secondary pathway. This is not the responsibility reserved for counselors and administrators, but rather all teachers.

I feel that my new UNK teachers are confident in their instructional and engagement strategies in the classroom. They have a solid understanding of student learning. An area I see some struggle is the area of classroom management. I would encourage the college to discuss more real life parent scenarios and how to deal and manage possible situations.

Classroom management needs to be stressed much more (i.e. routines, structure). Very well versed in technology!
Appendix B

Elementary A
Student Responses
April 2015

Strongly Agree
5.00 4.00 3.00

Strongly Disagree
2.00 1.00

WHEN I AM AT SCHOOL, I FEEL: I belong
I am safe
I have fun learning
I like this school
This school is good
I have freedom at school
I have choices in what I learn
My teacher treats me with respect
My teacher cares about me
My teacher thinks I will be successful
My teacher listens to my ideas
My principal cares about me
My teacher is a good teacher
My teacher believes I can learn
I am recognized for good work
I am challenged by the work my teacher asks me to do
The work I do in class makes me think
I know what I am supposed to be learning in my classes
I am a good student
I can be a better student
Very good work is expected at my school
I behave well at school
Students are treated fairly by teachers
Students are treated fairly by the principal
Students are treated fairly by the people on recess duty
Students at my school treat me with respect
Students at my school are friendly
I have lots of friends
I have support for learning at home
My family believes I can do well in school
My family wants me to do well in school
WHEN I AM AT SCHOOL, I FEEL:

I belong
I am safe
I have fun learning
I like this school
This school is good
I have freedom at school
I have choices in what I learn
My teacher treats me with respect
My teacher cares about me
My teacher thinks I will be successful
My teacher listens to my ideas
My principal cares about me
My teacher is a good teacher
My teacher believes I can learn
I am recognized for good work
I am challenged by the work my teacher asks me to do
The work I do in class makes me think
I know what I am supposed to be learning in my classes
I am a good student
I can be a better student
Very good work is expected at my school
I behave well at school
Students are treated fairly by teachers
Students are treated fairly by the principal
Students are treated fairly by the people on recess duty
Students at my school treat me with respect
Students at my school are friendly
I have lots of friends
I have support for learning at home
My family believes I can do well in school
My family wants me to do well in school
WHEN I AM AT SCHOOL, I FEEL: I belong
I am safe
I have fun learning
I like this school
This school is good
I have freedom at school
I have choices in what I learn
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My teacher cares about me
My teacher thinks I will be successful
My teacher listens to my ideas
My principal cares about me
My teacher is a good teacher
My teacher believes I can learn
I am recognized for good work
I am challenged by the work my teacher asks me to do
The work I do in class makes me think
I know what I am supposed to be learning in my classes
I am a good student
I can be a better student
Very good work is expected at my school
I behave well at school
Students are treated fairly by teachers
Students are treated fairly by the principal
Students are treated fairly by the people on recess duty
Students at my school treat me with respect
Students at my school are friendly
I have lots of friends
I have support for learning at home
My family believes I can do well in school
My family wants me to do well in school
Elementary Schools Student Responses
April 2015

Strongly Agree

Strongly Disagree

5.00

4.00

3.00

2.00

1.00

WHEN I AM AT SCHOOL, I FEEL: I belong
I am safe
I have fun learning
I like this school
This school is good
I have freedom at school
I have choices in what I learn
My teacher treats me with respect
My teacher cares about me
My teacher thinks I will be successful
My teacher listens to my ideas
My principal cares about me
My teacher is a good teacher
My teacher believes I can learn
I am recognized for good work
I am challenged by the work my teacher asks me to do
The work I do in class makes me think
I know what I am supposed to be learning in my classes
I am a good student
I can be a better student
Very good work is expected at my school
I behave well at school
Students are treated fairly by teachers
Students are treated fairly by the principal
Students are treated fairly by the people on recess duty
Students at my school treat me with respect
Students at my school are friendly
I have lots of friends
I have support for learning at home
My family believes I can do well in school
My family wants me to do well in school
1.00
2.00
3.00
4.00
5.00

WHEN I AM AT SCHOOL, I FEEL: I belong
I am safe
I have fun learning
I like this school
This school is good
I have freedom at school
I have choices in what I learn
My teachers treat me with respect
My teachers cares about me
My teachers think I will be successful
My teachers listen to my ideas
My principal cares about me
My teachers are good teachers
My teachers believe I can learn
I am recognized for good work
I am challenged by the work my teachers ask me to do
The work I do in class makes me think
I know what I am supposed to be learning in my classes
I am a good student
I can be a better student
Quality work is expected at my school
I behave well at school
Students are treated fairly by teachers
Students are treated fairly by administrators
Students at my school treat me with respect
Students at my school are friendly
I have lots of friends
I have support for learning at home
My family believes I can do well in school
My family wants me to do well in school

Total Survey Respondents (N = 483)
WHEN I AM AT SCHOOL, I FEEL:

I belong
I am safe
I have fun learning
I like this school
This school is good
I have freedom at school
I have choices in what I learn
My teachers treat me with respect
My teachers cares about me
My teachers think I will be successful
My teachers listen to my ideas
My principal cares about me
My teachers are good teachers
My teachers believe I can learn
I am recognized for good work
I am challenged by the work my teachers ask me to do
The work I do in class makes me think
I know what I am supposed to be learning in my classes
I am a good student
I can be a better student
Quality work is expected at my school
I behave well at school
Students are treated fairly by teachers
Students are treated fairly by administrators
Students at my school treat me with respect
Students at my school are friendly
I have lots of friends
I have support for learning at home
My family believes I can do well in school
My family wants me to do well in school
I feel safe at this school
I feel like I belong at this school
I feel challenged at this school
I have opportunities to choose my own projects
I feel that I am in charge of what I learn
Teachers encourage me to assess the quality of my own work
This school is preparing me well for what I want to do after high school
My teachers treat me fairly
My school administrators treat me fairly
My campus supervisors treat me fairly
The office staff treat me fairly
Other students at this school treat me fairly
The work at this school is challenging
I find what I learn in school to be relevant to real life
I feel successful at school
This school is fun
I like this school
I think this is a good school
I like the students at this school
Students at this school like me
I like to learn
Doing well in school makes me feel good about myself
I am doing my best in school
Participating in extracurricular activities is important to me
MY TEACHERS: expect students to do their best
expect me to do my best
High School Student
Responses April 2015
continued

1.00
2.00
3.00
4.00
5.00
Strongly Disagree
Strongly Agree

- I am working in a small group.
- I am working by myself.
- I am working in a small group.
- I am working by myself.
- I am working in a small group.
- I am working by myself.

Total Survey Respondents (N = 918)