

Completer Impact on K-12 Student Learning Analysis using Transformed Mean Value-Added Scores (VAS) provided by the Arkansas Department of Education (ADE)

Addresses CAEP Standards 4.1, 5.4

Overall scores include the subjects of English Language Arts (ELA), Math, and Science (if available) and is a weighted mean. The ADE transforms this mean score for ease of interpretation. The following explanation is provided – “A score of 80 equals the value-added score of 0. A standard deviation of 35 is used to spread the scores around 80 so that school means scores will typically range from 65-95.” The formula used in Arkansas School Ratings is: $\text{Transformed Mean VAS} = (\text{Mean VAS} \times 35) + 80$.

The ADE has provided the following guide to make meaning of the VAS.

Transformed Score = 80 On average, your completers' students met expected growth.

Transformed Score greater than 80 On average, your completers' students are exceeding expected growth. The higher the score above 80, the greater the magnitude with which students of your completers exceeded their growth expectation.

Transformed Score less than 80 On average, students of your completers are not meeting expected growth in achievement. The lower the score below 80, the greater the degree to which students, on average, failed to meet expected growth.

The ADE provides three years of three cohorts of data (as it becomes available). Due to the privacy agreement signed by Harding University with the ADE and Harding University's respect for privacy of our completers and their K-12 students, the following are simply observations from the actual report received from the ADE. **NOTE:** One limitation of analyzing the data that should be considered is that the data provided is based on where the teacher prepared for licensure and what area he or she was teaching in the K-12 school – not necessarily that he or she is teaching in the area for which they initially were trained with the EPP.

What conclusions have been made from reviewing the data?

2015 Completer Cohort

Over the three-year period for our 2015 Completer Cohort, the calculated VAS for the three subjects ranged from 79.92 to 100. (The EPP considers the 100 to be an outlier for that subject and that year.) The mean VAS for the three years and three subjects is 82.96 (80.52 with the outlier removed). Based on this information, the EPP completers' students are meeting expected growth rates.

The Average VAS by all state providers for three years and for the three subjects for 2015 Completers ranged from 77.94 – 85.69. (The EPP considers the 85.69 to be an outlier for that subject and that year.) The mean of the calculated average VAS for the three years and three subjects is 79.98 (79.17 with the outlier removed). Based on this information, the EPP is slightly above the average for all state providers for completers in the 2015 cohort.

In addition, it is important to note is that the number of teachers whose scores were included in the calculation dropped 11% over the three year period. Since access to this data is new, the EPP will continue to look at this calculation to see if there is a trend in the coming years.

2016 Completer Cohort

Over a three-year period for our 2016 Completer Cohort, the calculated VAS for the three subjects ranged from 76.9 to 81.88. The mean VAS for the three years and three subjects is 80.12. **Based on this information, the EPP completers' students are meeting expected growth rates.**

The Average VAS by all state providers for two years and for the three subjects for 2016 Completers ranged from 78.66 – 87.74. (The EPP considers the 87.74 to be an outlier for that subject and that year.) The mean of the calculated average VAS for the three years and three subjects is 80.26 (79.32 with the outlier removed). Based on this information, the EPP is just slightly above the average for all state providers for completers in the 2016 cohort (when removing the outlier); however, there is no significant difference between the EPP and the average of all state providers in expected student growth.

In addition, it is important to note that there was 3.7% increase in the number of teachers from the cohort of completers from the first year to the third year included in the calculations for VAS. The EPP will look at the report next year to see if these teachers remain in the classroom in the areas for which scores are calculated for VAS (ELA, Math, and Science).

2017 Completer Cohort

No data were provided for the 2017 Completer Cohort for Harding University.

2018 Completer Cohort

No data were provided for the 2018 Completer Cohort for Harding University.

Wilbur D. Mills Educational Service Cooperative 2019-2020 Student Impact Data (Year II) Responses

Harding University does not know the total number of surveys sent from the Co-Op or what the response rate was for this survey. Harding received the data that were gathered from sending the survey and attributed to Harding as the university for which they completed their program for initial licensure. Harding University was named in thirteen responses as the EPP although it is unclear which initial teacher preparation program the novice teachers completed - traditional or alternate route. Regardless, the EPP is thankful to receive any data from our completers in their second year in the field.

The Impact on Student Learning information asked in the survey include the number of students tested, the Pre-test class average before the chosen unit and the Post-test class average after the chosen unit. The survey respondents are given choices based on 5% point category spreads (examples include, below 60%, 60-64%, 75-79%, and 95-100%) for both the pre- and post-test questions.

In order to interpret the data as provided to us, we categorized the average class scores of the K-12 students.

Coding Information

- 1 = below 60%
- 2 = 60-64%
- 3 = 65-69%
- 4 = 70-74%
- 5 = 75-79%
- 6 = 80-84%
- 7 = 85-89%
- 8 = 90-94%

We created tables once we categorized the data.

Frequencies

| | | Statistics | |
|---------|---------|-------------------|----------------|
| | | Pretest Class | Posttest Class |
| | | Performance | Performance |
| | | Range | Range |
| N | Valid | 13 | 13 |
| | Missing | 0 | 0 |
| Median | | 5.00 | 7.00 |
| Minimum | | 1 | 6 |
| Maximum | | 7 | 8 |

Frequency Table

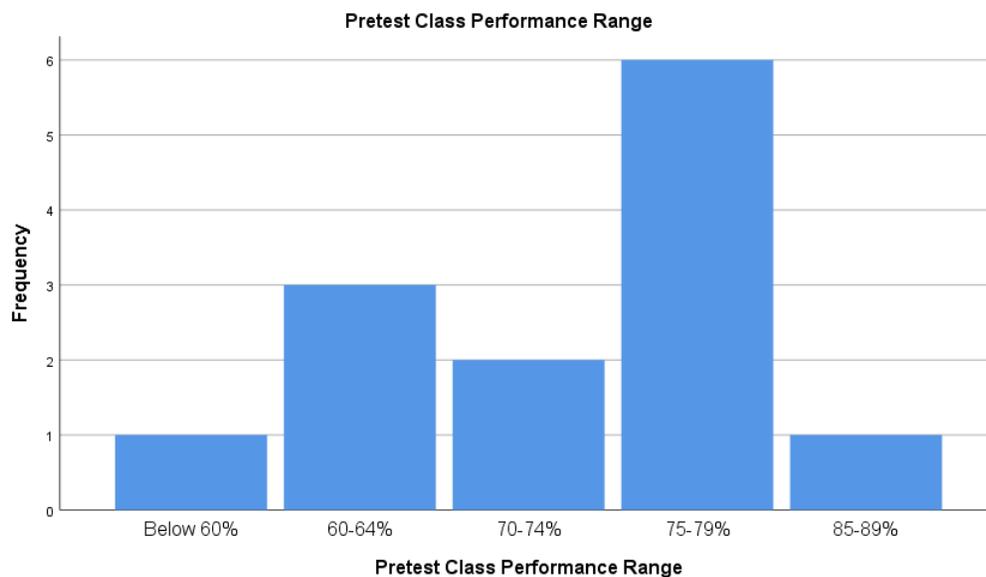
Pretest Class Performance Range

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----------|---------|---------------|--------------------|
| Valid | Below 60% | 1 | 7.7 | 7.7 | 7.7 |
| | 60-64% | 3 | 23.1 | 23.1 | 30.8 |
| | 70-74% | 2 | 15.4 | 15.4 | 46.2 |
| | 75-79% | 6 | 46.2 | 46.2 | 92.3 |
| | 85-89% | 1 | 7.7 | 7.7 | 100.0 |
| | Total | 13 | 100.0 | 100.0 | |

Posttest Class Performance Range

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | 80-84% | 1 | 7.7 | 7.7 | 7.7 |
| | 85-89% | 9 | 69.2 | 69.2 | 76.9 |
| | 90-94% | 3 | 23.1 | 23.1 | 100.0 |
| | Total | 13 | 100.0 | 100.0 | |

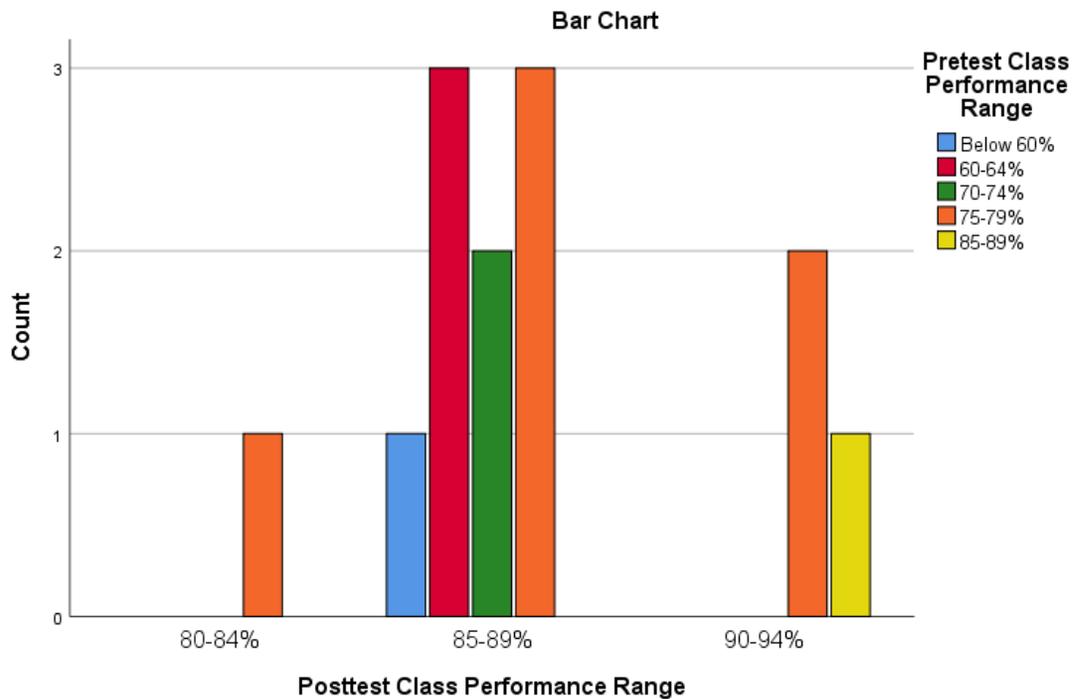
Bar Chart





The following two charts will show that our alumni all had a positive impact on K-12 learning. This first chart places the initial pre-test average categories into a bar chart with the post-test average category outcomes. Compare this to the chart directly above to see pre-test performance range.

Crosstabs



The second chart shows the comparison between pre-test (blue) and post-test (red) for each teacher's student class average. In each case, there was a positive impact on student learning.

Graph

