

## UAM EDUCATION PREPARATION PROVIDER GROWTH REPORT

### Contents of Report:

This report provides a summary of the value-added growth scores for the Educator Preparation Provider for three years of Completer Cohorts. Tables and charts are provided for review of the value-added growth scores of students associated with Completers in each Cohort.

- Overview of Value-Added Growth Scores
- Summary Table of Growth Scores by Completer Cohort
- Trend Charts of Average Value-Added Scores by Completer Cohort
- Confidence bands around the mean scores are included to aid interpretation of change over time
- Charts of Distribution of Teachers' Average Value-Added Scores by Subject/Year

### Overview of Value-Added Growth Scores (VAS)

A simple value-added model is used to assess student growth relative to the student's individual score history and the student's expectation of growth (predicted score). This model is often called a residual gain model. It reflects the difference between observed achievement and expected (predicted) achievement for each student. A student value-added score of 0 indicates the student met expected growth in achievement.

Teacher and Education Preparation Provider (EPP) VAS are the mean of student growth in each subject: English language arts (ELA), math, and science (if available). An Overall VAS is obtained using a weighted mean of all available subjects. The Arkansas Department of Education transforms mean VAS to ease interpretation of the score. 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 mean scores will typically range from 65 to 95. This formula was used in the Arkansas School Ratings starting 2015.

$$\text{Transformed Mean VAS} = (\text{Mean VAS} \times 35) + 80.00$$

Mean teacher growth scores typically range from 60 to 100 with most scores falling between 70 and 90. Averaging over higher levels of aggregation results in less variation among the Mean VAS and the values must be interpreted in this narrower range. Confidence intervals are provided to assist interpretation in the detailed sections of this report.

#### VAS: Making Meaning from the Scores

- **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 scores 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.

\*A detailed description of the value-added growth scores used by the Arkansas Department of Education can be found in the Appendix of the Rules Governing the Public School Rating System on Annual School Performance Reports and the School Recognition Program.

## Summary Table for UAM Growth Scores by Completer Cohort

### Questions for Reviewing the Table

- **Each Completer Cohort is a different group of teachers.** Completer Cohorts may differ in number of teachers in the cohort over time.
- **Review the number of teachers in each Completer Cohort.** The larger the number of teachers, the more stable the mean VAS will be.
- **Review the Mean VAS for each Completer Cohort across subjects and over time.** Note the trends (over time) for each cohort and any patterns (across subjects) within or across a cohort.

### UAM - 2016 Completer Cohort (Year 1 = 2016-17)

	2016-17		2017-18		2018-19	
	VAS	N	VAS	N	VAS	N
ELA	79.35	12	78.17	14	77.8	14
MATH	79.67	9	79.09	12	76.88	11
SCIENCE	N < 5	4	80.15	6	N < 5	3
			<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	
NUMBER OF COMPLETERS WITH GROWTH DATA			21	23	21	
PERCENT OF COMPLETERS WITH GROWTH DATA			42	46	42	

### UAM - 2017 Completer Cohort (Year 1 = 2017-18)

	2017-18		2018-19		2019-20	
	VAS	N	VAS	N	VAS	N
ELA	77.75	14	78.97	14		
MATH	78.51	10	81.5	11		
SCIENCE	79.11	11	79.47	12		
			<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	
NUMBER OF COMPLETERS WITH GROWTH DATA			27	29		
PERCENT OF COMPLETERS WITH GROWTH DATA			38.03	40.85		

### UAM - 2018 Completer Cohort (Year 1 = 2018-19)

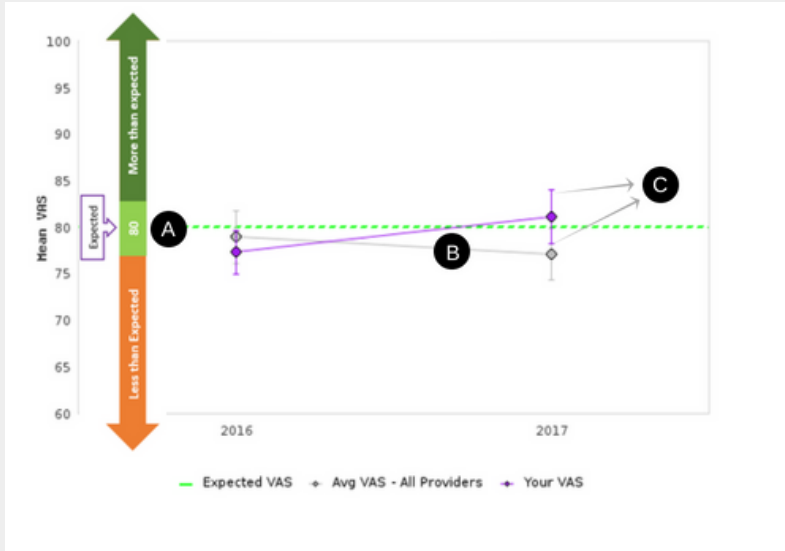
	2018-19		2019-20		2020-21	
	VAS	N	VAS	N	VAS	N
ELA	79.43	20				
MATH	77.95	16				
SCIENCE	80.11	21				
			<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>	
NUMBER OF COMPLETERS WITH GROWTH DATA			41			
PERCENT OF COMPLETERS WITH GROWTH DATA			44.57			

*N: Total number of teachers*

**NOTE:** Each cohort starts out as same group of teachers. Changes in N are due to changes in the subjects - for which a teacher has students assigned and/or attrition of teacher(s) from a cohort.

## Trend Charts By Provider

### Understanding Trend Charts



**A:** The green line is a reference line to show that a value-added score of 80 indicates, on average, students met expected growth in achievement.

**B:** The gray points and line indicate the average EPP VAS across ALL PROVIDERS for a particular subject or the overall score.

**C:** The vertical line is the confidence band around each score. See below for more information on how to interpret these bands.

### Information for Reviewing the Trend Charts

Completer Cohorts may differ in number of teachers within the cohort and over time. 95% confidence bands are provided to support interpretation of differences in mean Completer Cohort VAS.

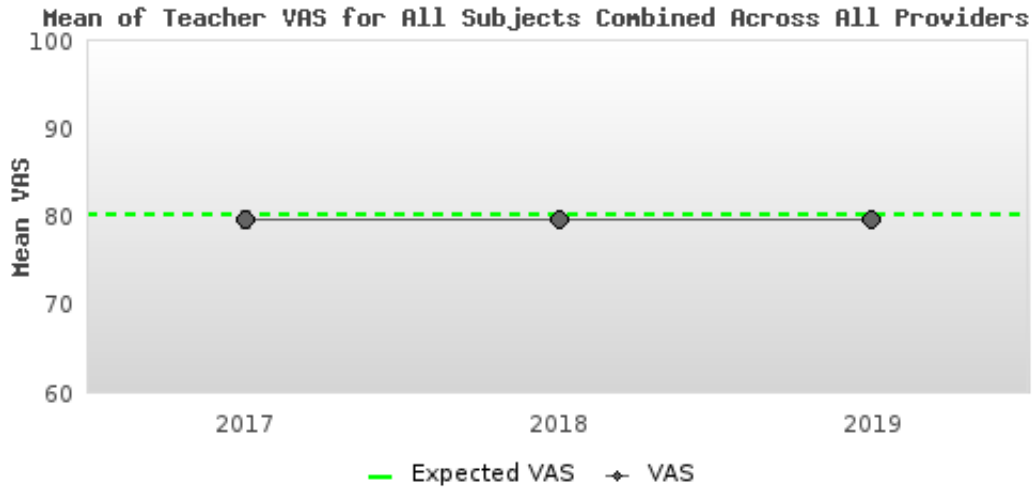
When the confidence band does not overlap, the differences between scores are likely significant and may be meaningful depending on the N size for the group.

When the confidence band overlaps, the differences between scores may not be significant nor meaningfully different—more information may be needed such as a statistical test and effect size.

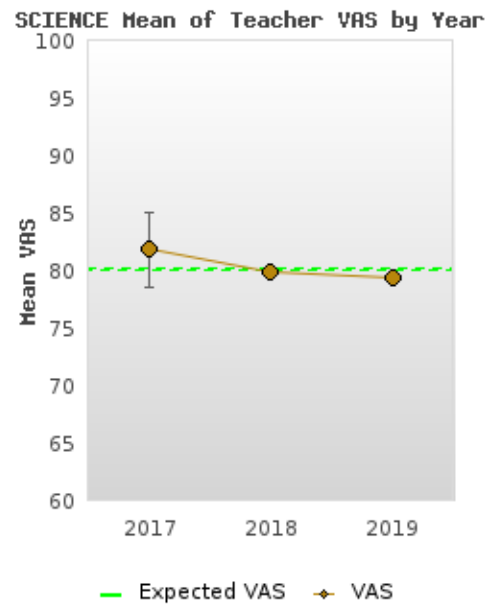
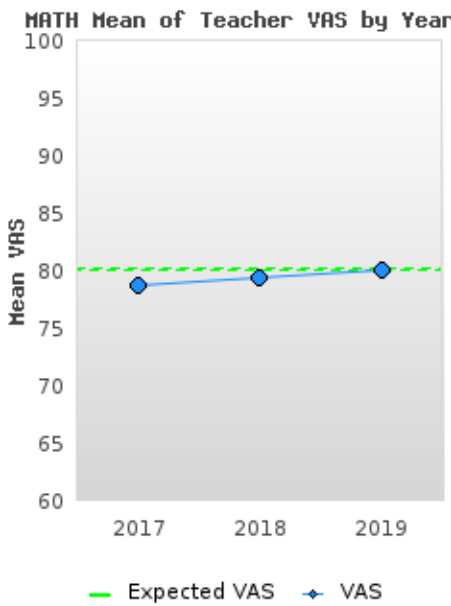
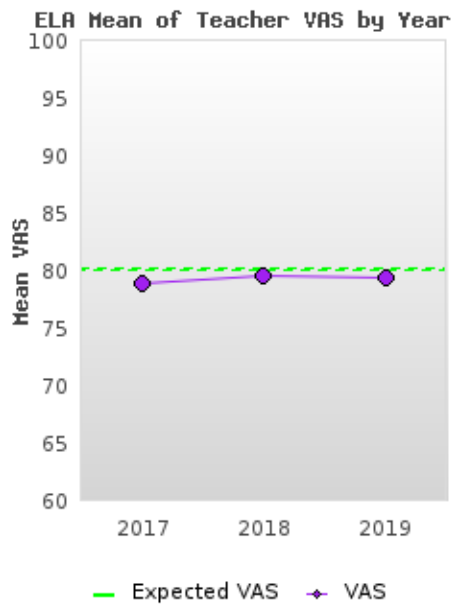
**Review the charts of Mean VAS for a Completer Cohort for each subject over time.**

- Note the trends (over time) for each cohort and any patterns (across subjects) within or across cohort.

**Average Value-Added Growth Scores (VAS) by All Providers For 2016 Completers**



**Average Value-Added Growth Scores (VAS) by All Providers & Subject For 2016 Completers**



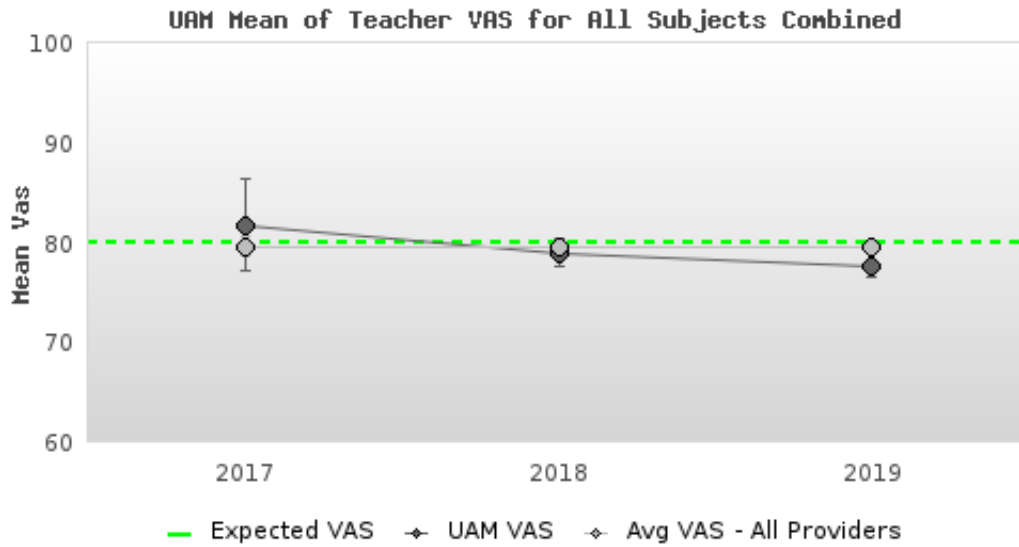
**Average Value-Added Growth Scores (VAS) With Confidence Band by All Providers**

	2016-17			2017-18			2018-19		
	VAS	Confidence Band	N	VAS	Confidence Band	N	VAS	Confidence Band	N
ELA VAS	78.84	78.39 - 79.29	635	79.43	79.03 - 79.83	607	79.29	78.87 - 79.71	556
Math VAS	78.66	78.14 - 79.18	646	79.28	78.82 - 79.74	642	79.91	79.46 - 80.36	583
Science VAS	81.74	78.52 - 84.96	236	79.83	79.45 - 80.22	218	79.34	78.86 - 79.83	219

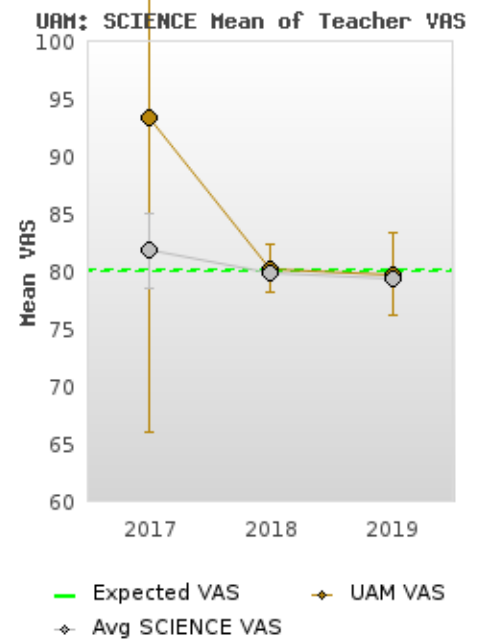
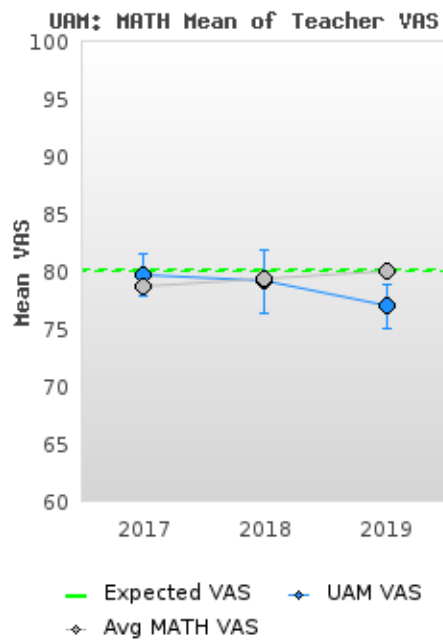
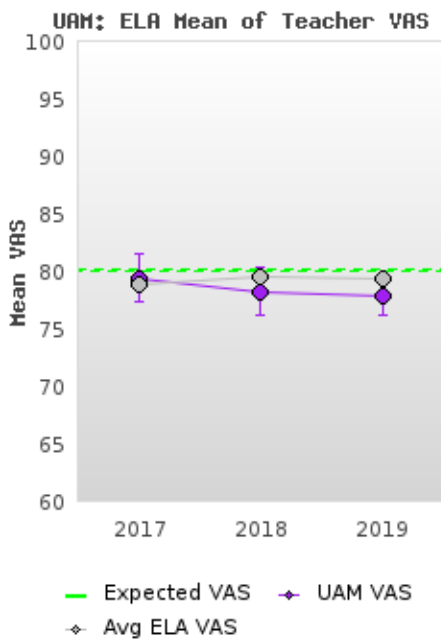
*N: Total number of teachers*

**NOTE:** These charts are included to provide each Education Preparation Provider with the average across all providers for reference when reviewing individual EPP scores.

## Trend Charts By Provider For 2016 Completer Cohort - UAM



## Value-Added Growth Scores (VAS) by Subject & Year

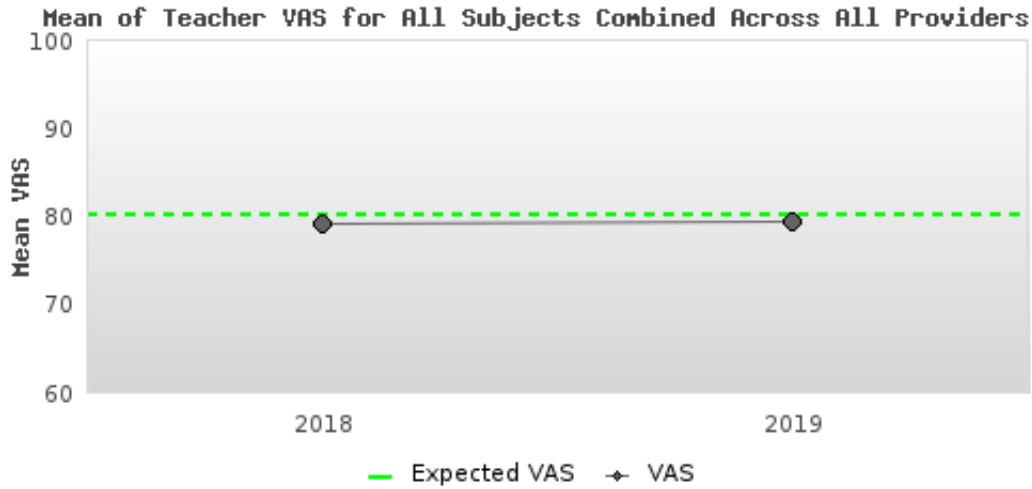


## Value-Added Growth Scores (VAS) With Confidence Band

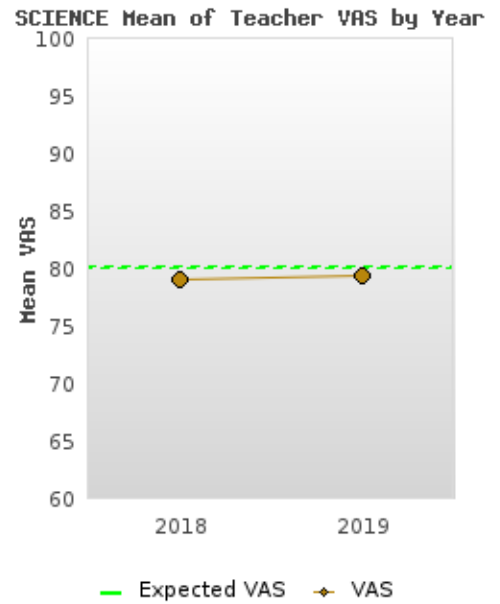
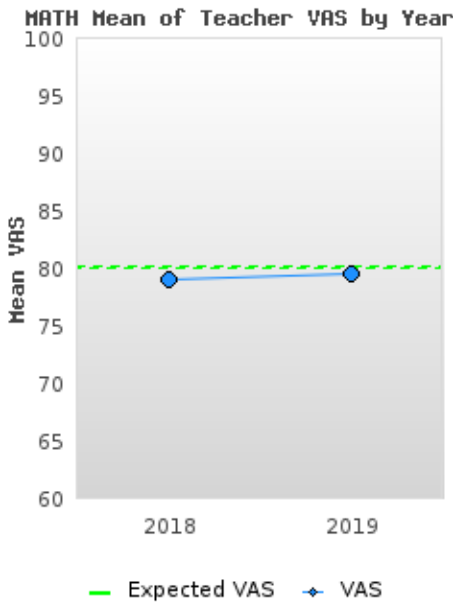
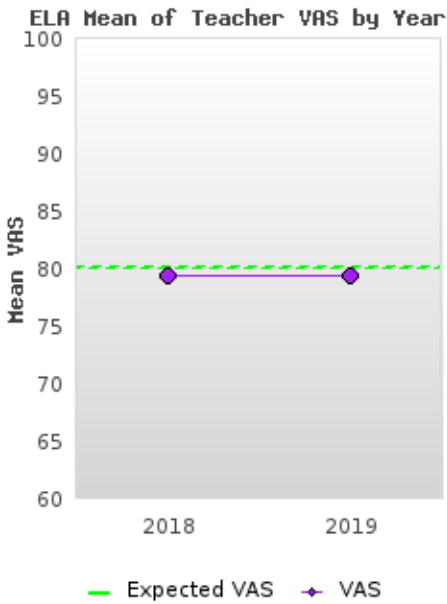
	2016-17			2017-18			2018-19		
	VAS	Confidence Band	N	VAS	Confidence Band	N	VAS	Confidence Band	N
ELA VAS	79.35	77.3 - 81.4	12	78.17	76.09 - 80.25	14	77.8	76.04 - 79.56	14
Math VAS	79.67	77.8 - 81.54	9	79.09	76.32 - 81.85	12	76.88	74.99 - 78.77	11
Science VAS	N < 5	N < 5 - N < 5	4	80.15	78.07 - 82.22	6	N < 5	N < 5 - N < 5	3

*N: Total number of teachers*

## Average Value-Added Growth Scores (VAS) by All Providers For 2017 Completers



## Average Value-Added Growth Scores (VAS) by All Providers & Subject For 2017 Completers



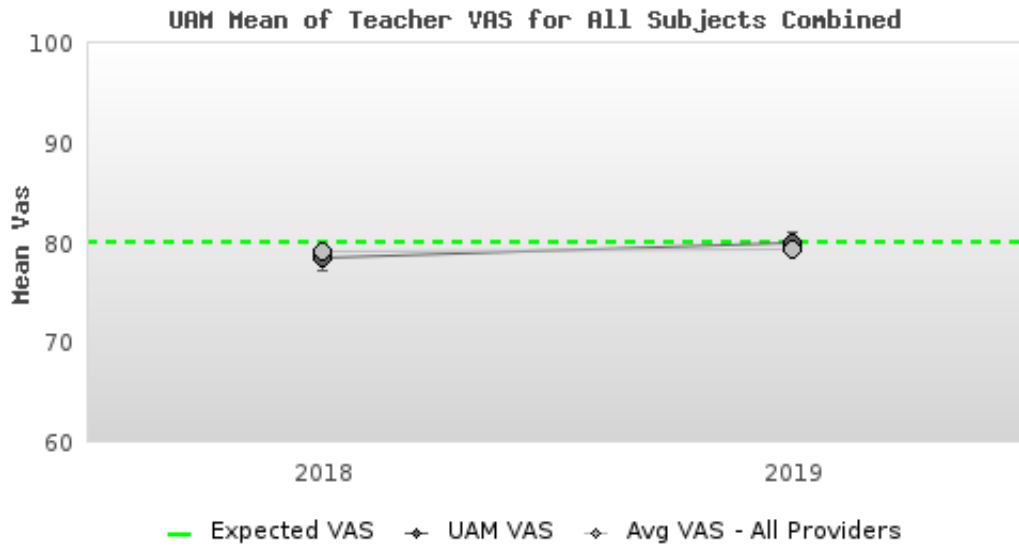
## Average Value-Added Growth Scores (VAS) With Confidence Band by All Providers

	2017-18			2018-19			2019-20		
	VAS	Confidence Band	N	VAS	Confidence Band	N	VAS	Confidence Band	N
ELA VAS	79.35	78.93 - 79.76	537	79.27	78.82 - 79.72	508	-	-	-
Math VAS	78.95	78.46 - 79.44	506	79.48	78.94 - 80.02	483	-	-	-
Science VAS	78.95	78.52 - 79.38	397	79.25	78.84 - 79.67	391	-	-	-

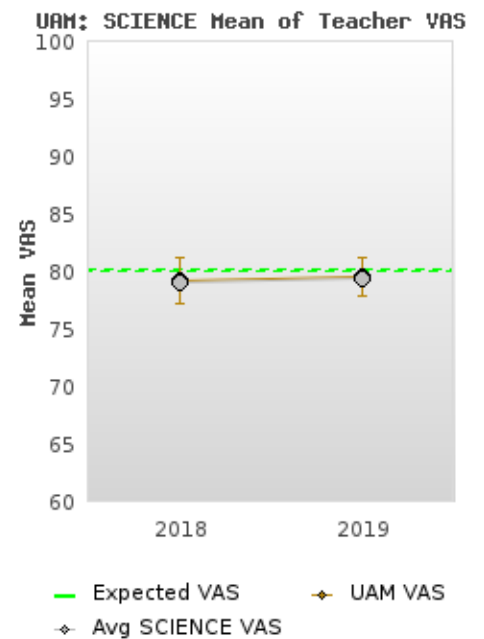
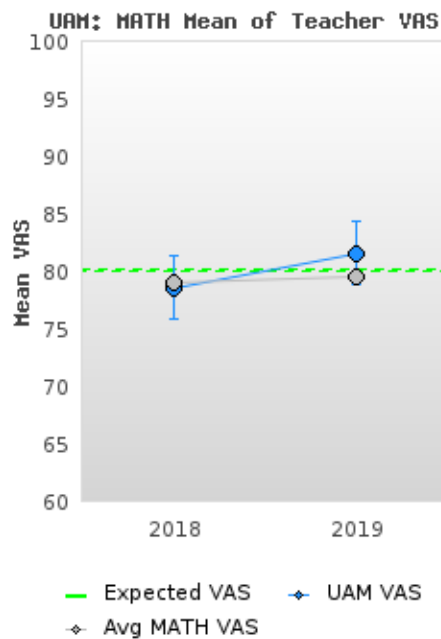
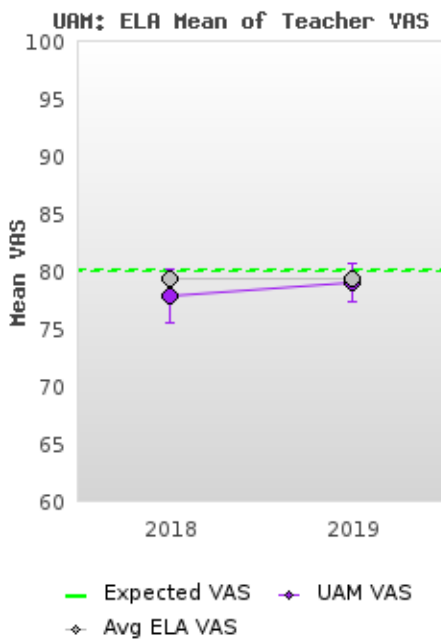
*N: Total number of teachers*

**NOTE:** These charts are included to provide each Education Preparation Provider with the average across all providers for reference when reviewing individual EPP scores.

## Trend Charts By Provider For 2017 Completer Cohort - UAM



## Value-Added Growth Scores (VAS) by Subject & Year

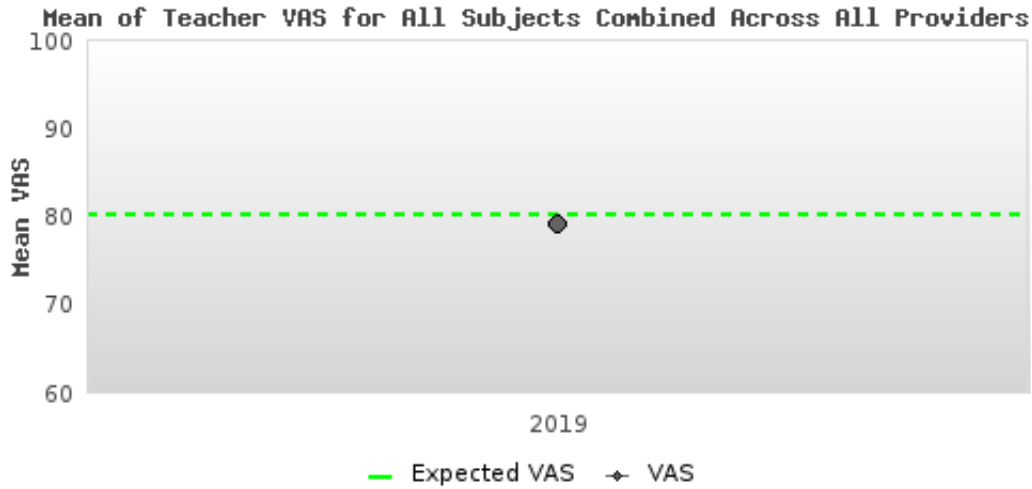


## Value-Added Growth Scores (VAS) With Confidence Band

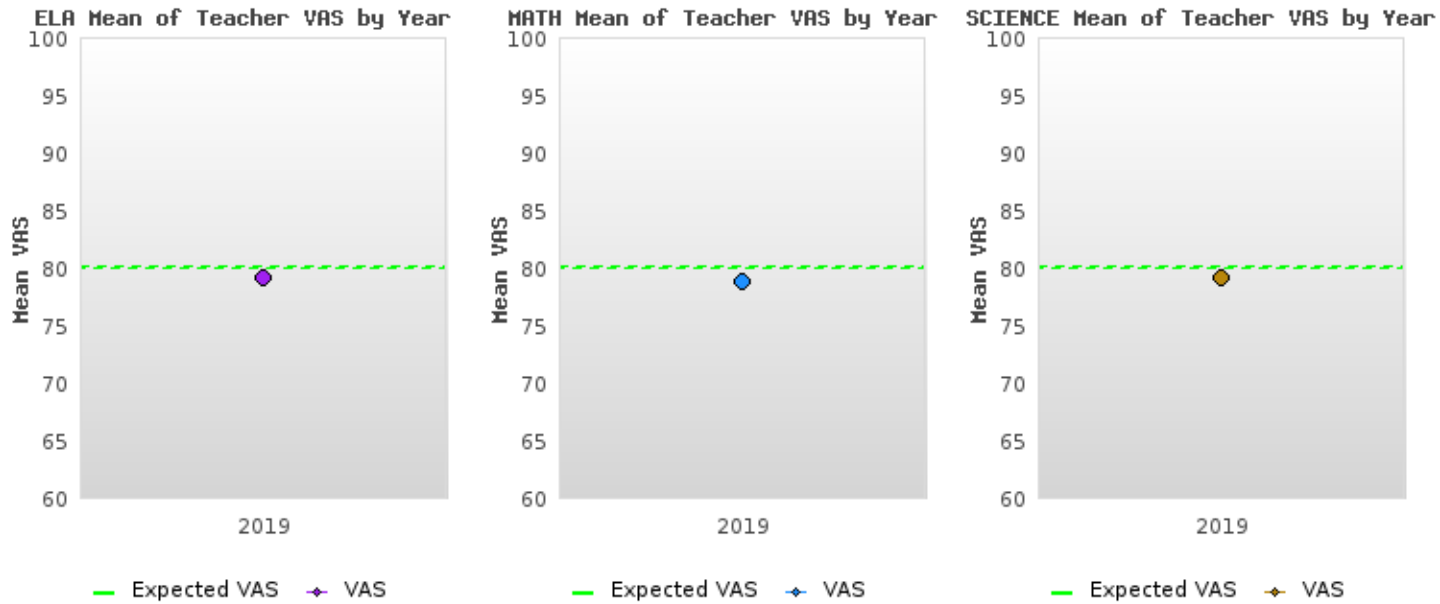
	2017-18			2018-19			2019-20		
	VAS	Confidence Band	N	VAS	Confidence Band	N	VAS	Confidence Band	N
ELA VAS	77.75	75.38 - 80.13	14	78.97	77.29 - 80.64	14	-	-	-
Math VAS	78.51	75.74 - 81.28	10	81.5	78.76 - 84.25	11	-	-	-
Science VAS	79.11	77.09 - 81.14	11	79.47	77.81 - 81.13	12	-	-	-

*N: Total number of teachers*

**Average Value-Added Growth Scores (VAS) by All Providers For 2018 Completers**



**Average Value-Added Growth Scores (VAS) by All Providers & Subject For 2018 Completers**



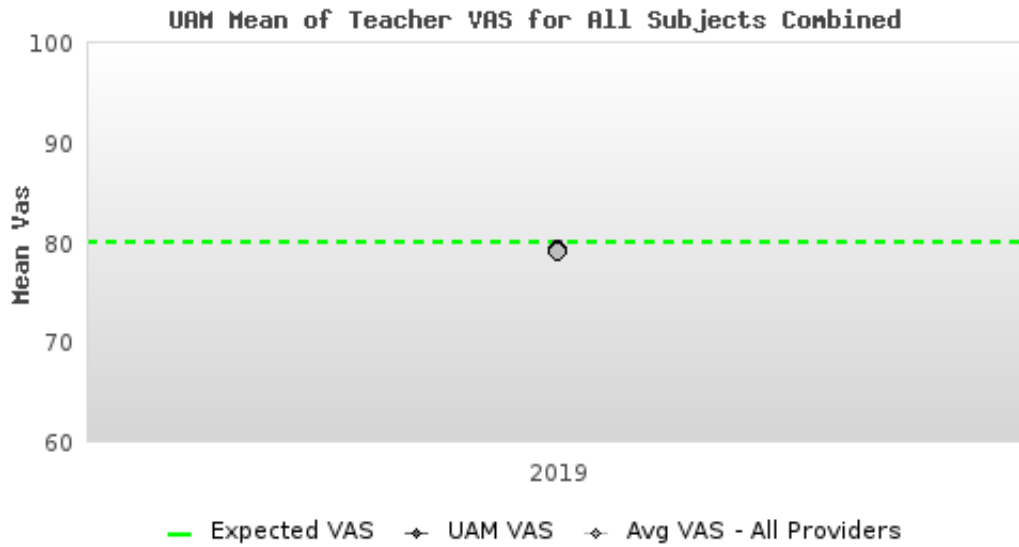
**Average Value-Added Growth Scores (VAS) With Confidence Band by All Providers**

	2018-19			2019-20			2020-21		
	VAS	Confidence Band	N	VAS	Confidence Band	N	VAS	Confidence Band	N
ELA VAS	79.19	78.83 - 79.55	309	-	-	-	-	-	-
Math VAS	78.84	78.35 - 79.34	556	-	-	-	-	-	-
Science VAS	79.04	78.59 - 79.49	428	-	-	-	-	-	-

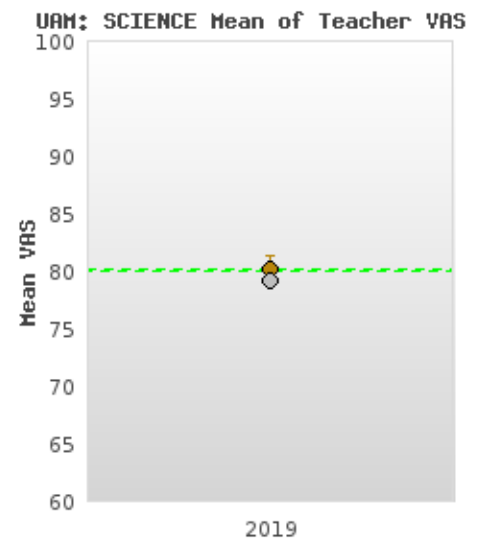
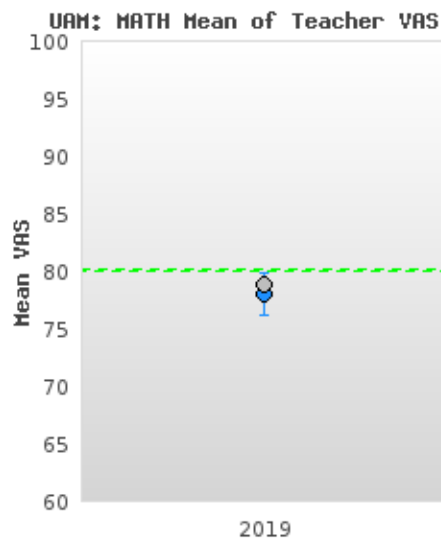
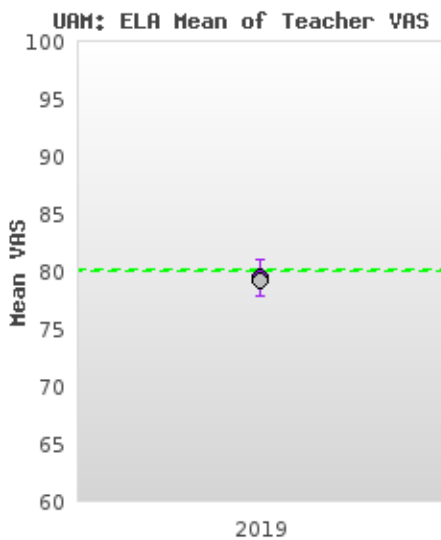
*N: Total number of teachers*  
**NOTE:** These charts are included to provide each Education Preparation Provider with the average across all providers for reference when reviewing individual EPP scores.



## Trend Charts By Provider For 2018 Completer Cohort - UAM



## Value-Added Growth Scores (VAS) by Subject & Year



## Value-Added Growth Scores (VAS) With Confidence Band

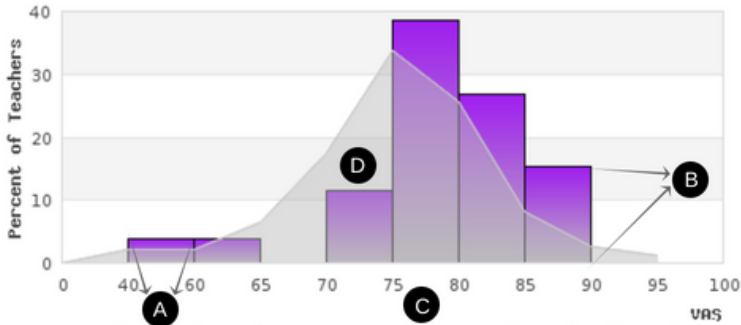
	2018-19			2019-20			2020-21		
	VAS	Confidence Band	N	VAS	Confidence Band	N	VAS	Confidence Band	N
ELA VAS	79.43	77.86 - 81	20	-	-	-	-	-	-
Math VAS	77.95	76.17 - 79.72	16	-	-	-	-	-	-
Science VAS	80.11	78.87 - 81.34	21	-	-	-	-	-	-

*N: Total number of teachers*



## Distribution of Completer Scores By Subject and Provider - UAM

### Understanding Histograms



**A:** The width of the bar indicates the score range on the horizontal axis of the chart which is the mean value-added score achieved by students for a teacher.

**B:** The height of each bar in the histogram indicates the percentage of teachers in the program whose students mean value-added score fall within that score range.

**C:** The horizontal axis indicates the range of mean teacher value-added scores for each bar.

**D:** Gray indicates the distribution of mean teacher value-added score (VAS) across all providers.

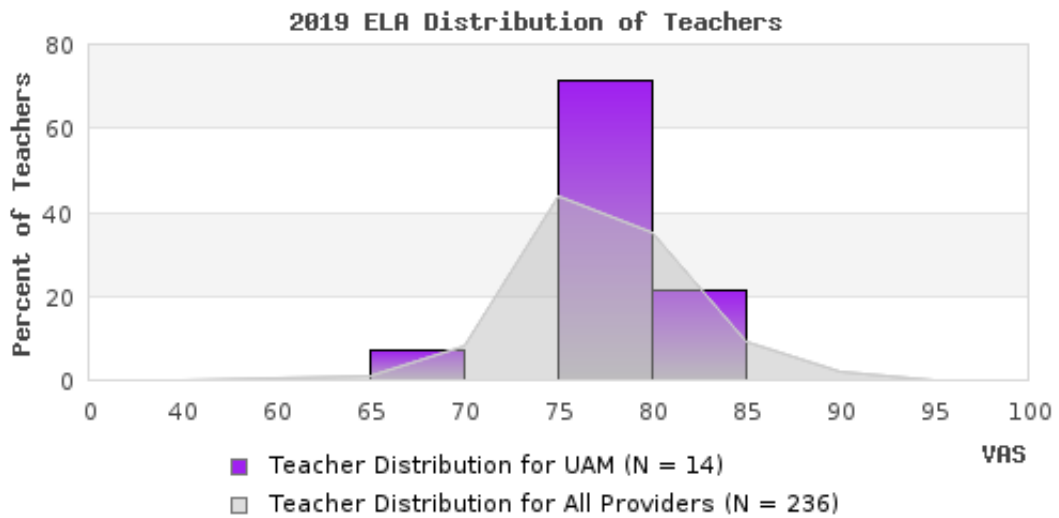
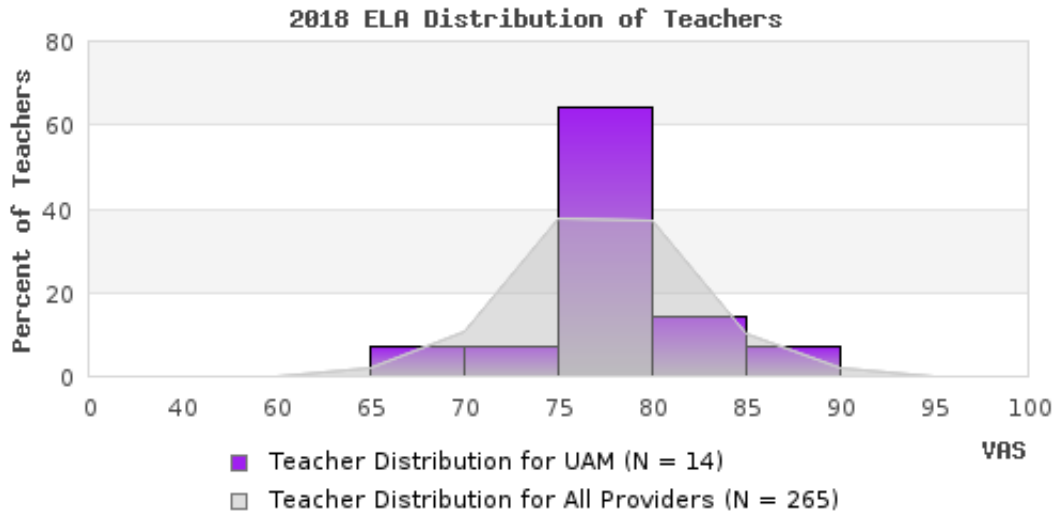
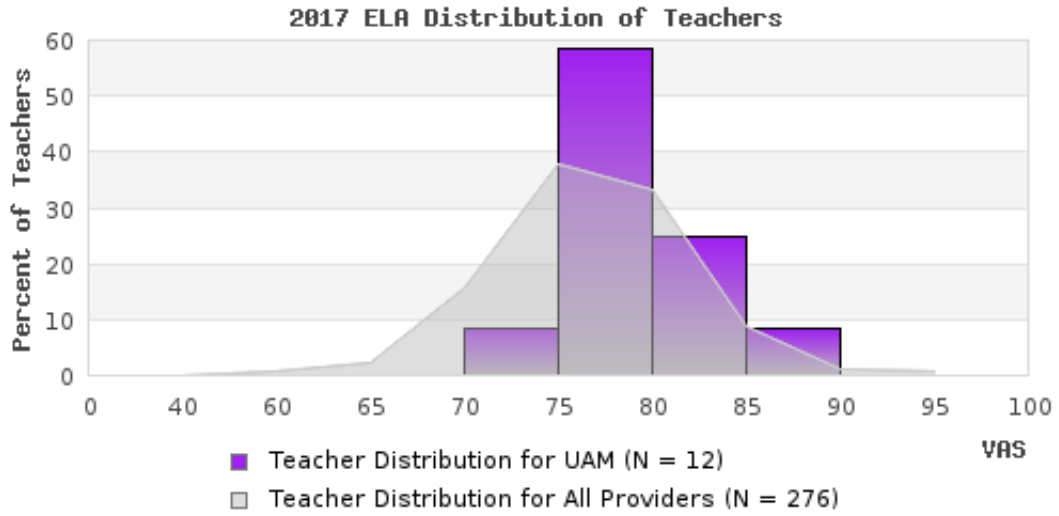
### Information for Reviewing Teacher Mean VAS Distributions

These charts show the distribution (spread and concentration) of teachers' mean VAS. Each bar indicates the percentage of teachers whose mean VAS for a particular subject fell within the score range of the bar. For example, if the bar interval on the x-axis runs from 75 to 80 and the height of the bar reaches 35 on the y-axis, then 35% of teachers in this Completer Cohort had mean VAS between a 75 and 80 for the subject represented in the chart.

- **Review the shape of the distributions.**
- **Look at how spread out or concentrated teachers' scores are for each subject. Compare your teacher VAS distribution to the statewide EPP VAS (all providers) distribution.**

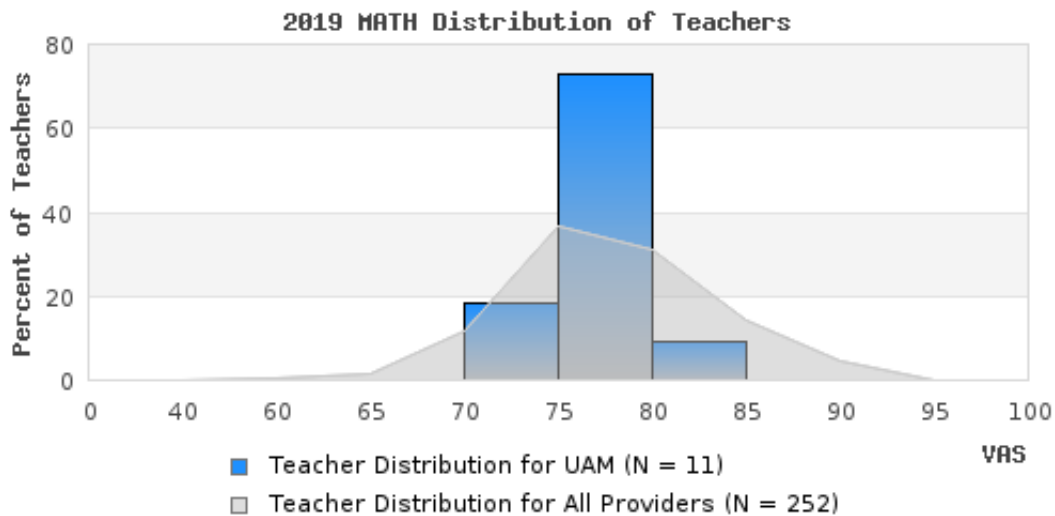
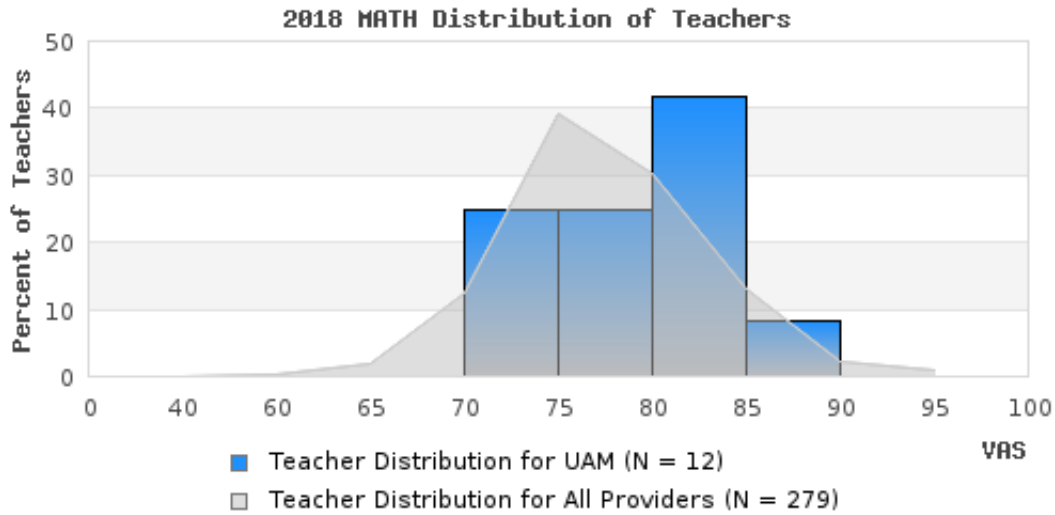
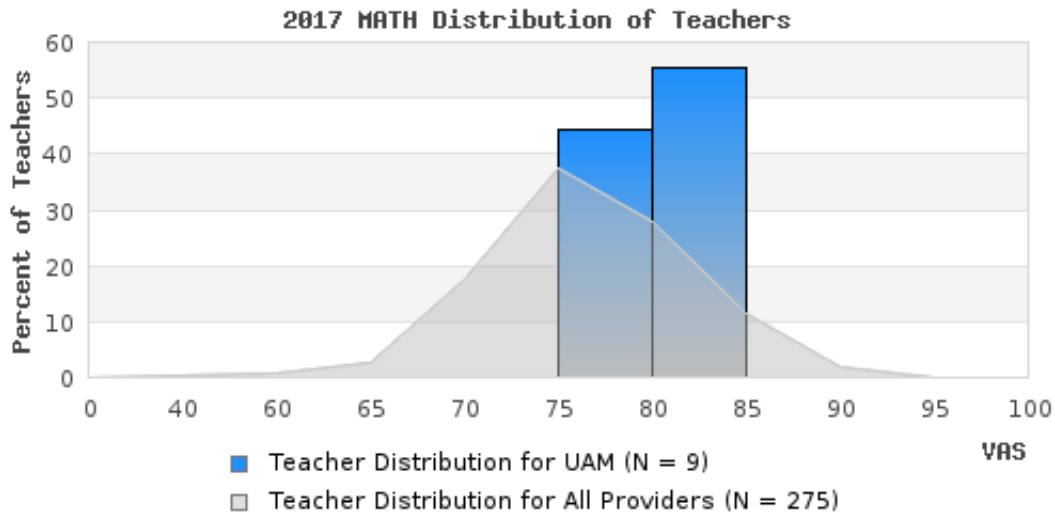


## Distribution of 2016 Completer Scores By ELA and Provider - UAM



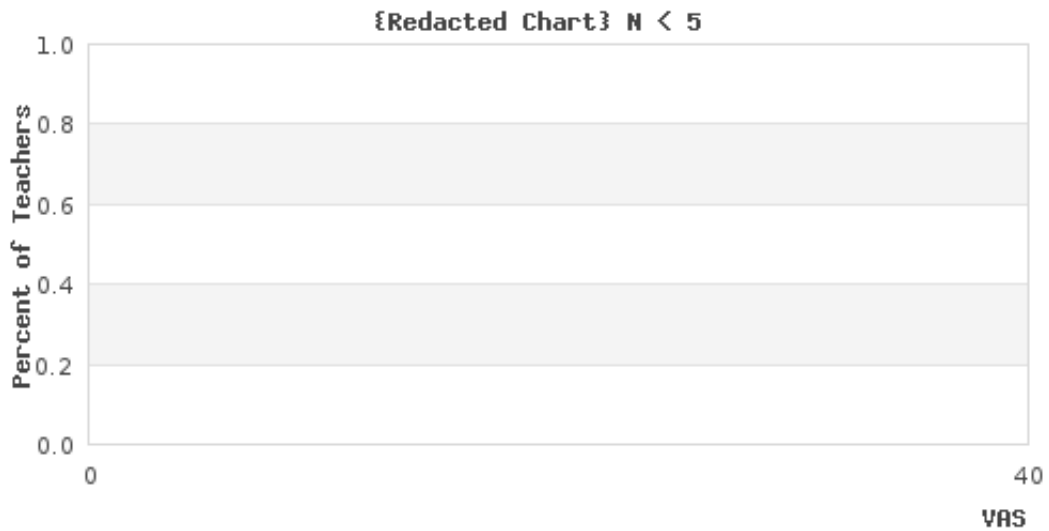
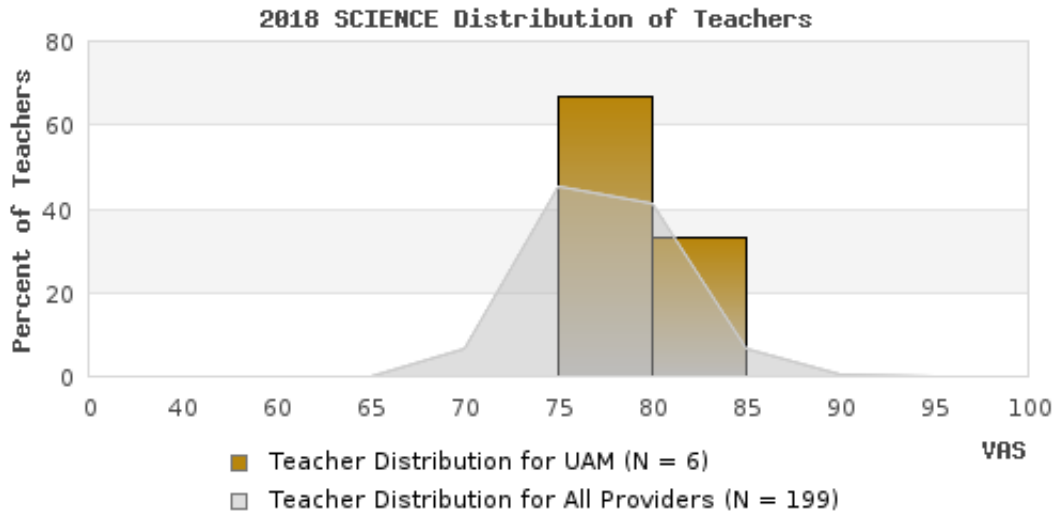
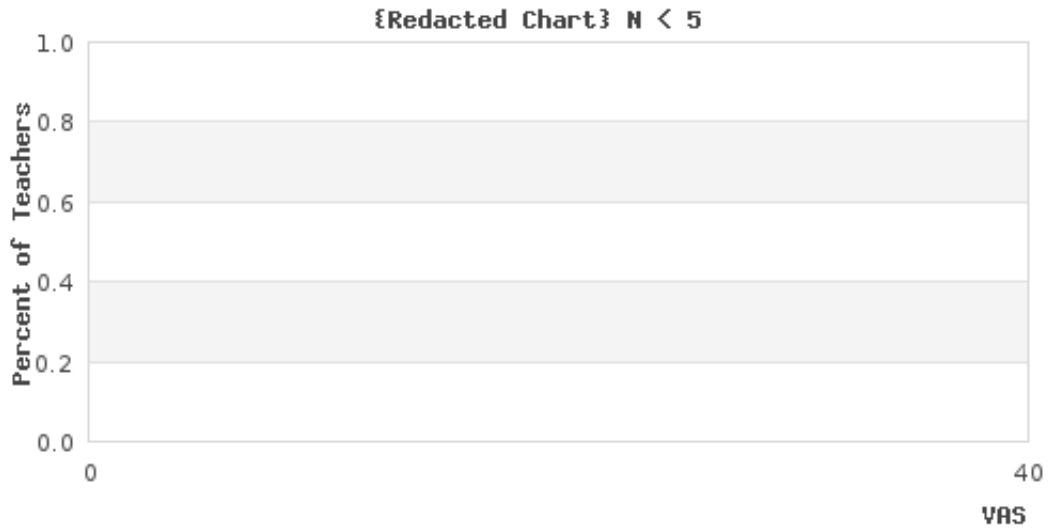


## Distribution of 2016 Completer Scores By Mathematics and Provider - UAM



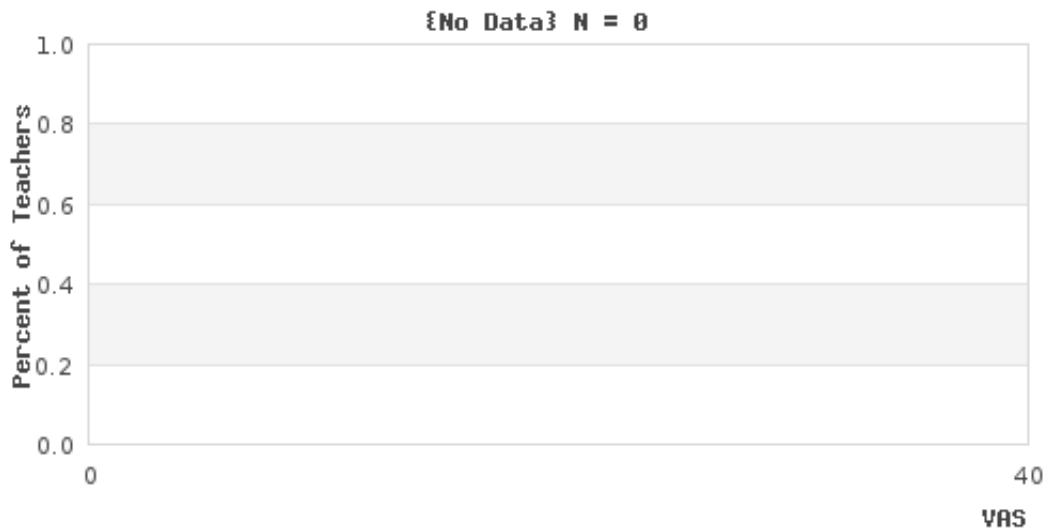
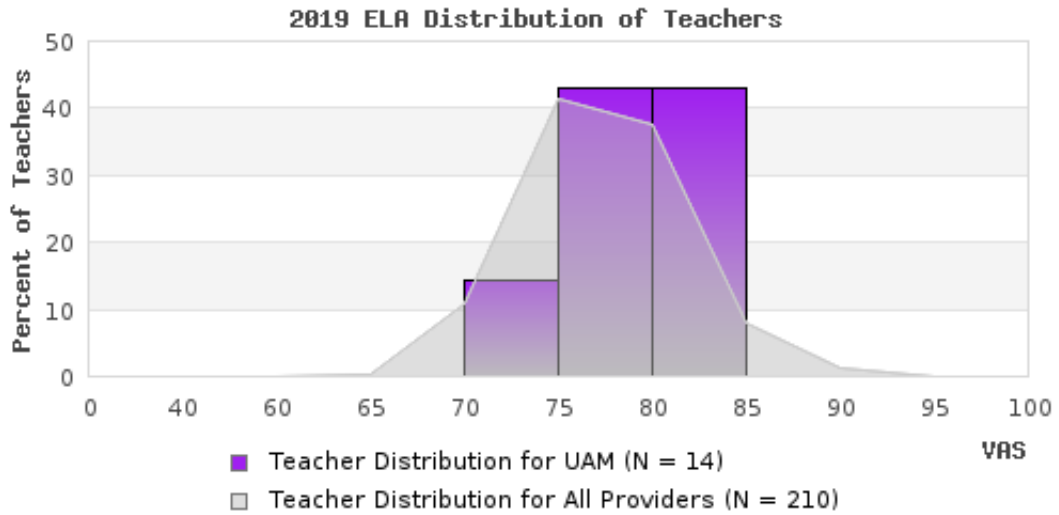
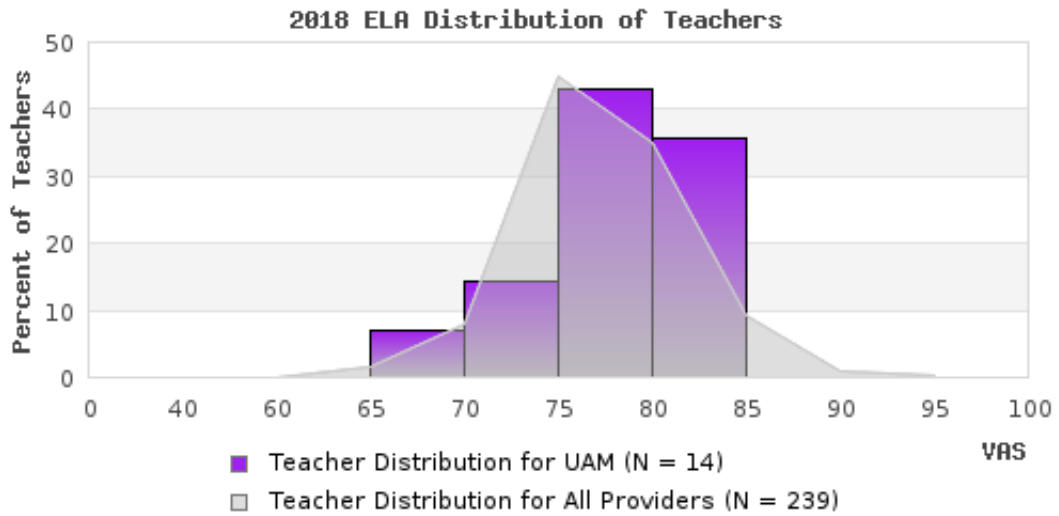


## Distribution of 2016 Completer Scores By Science and Provider - UAM



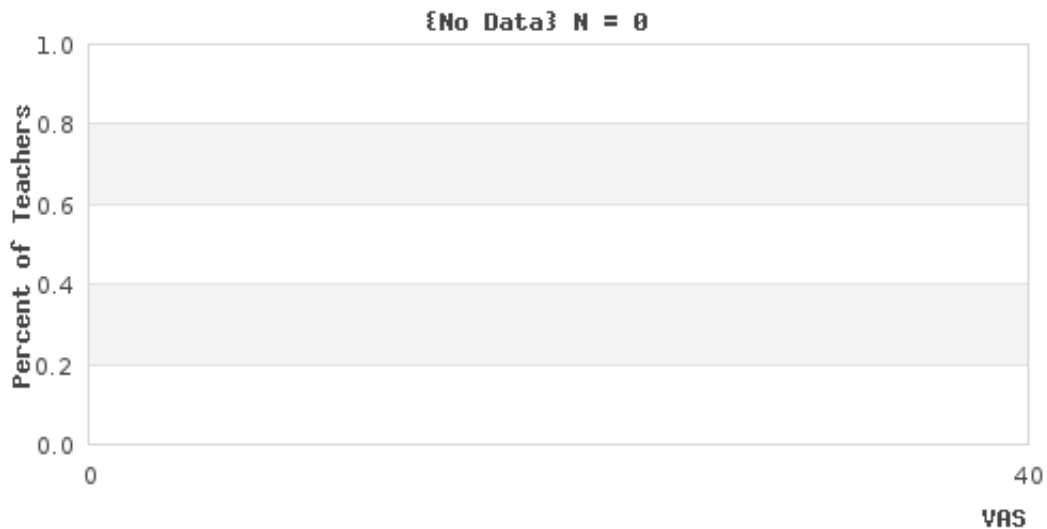
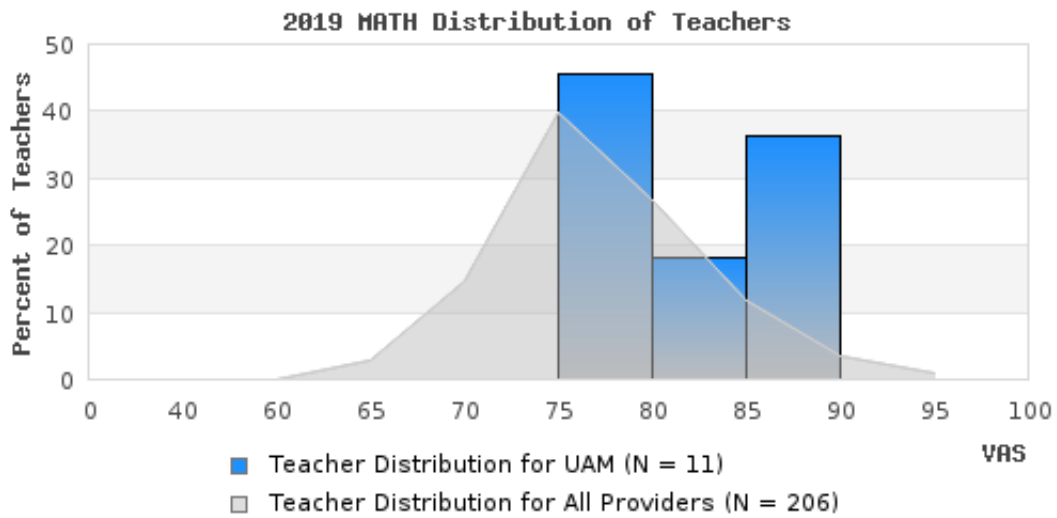
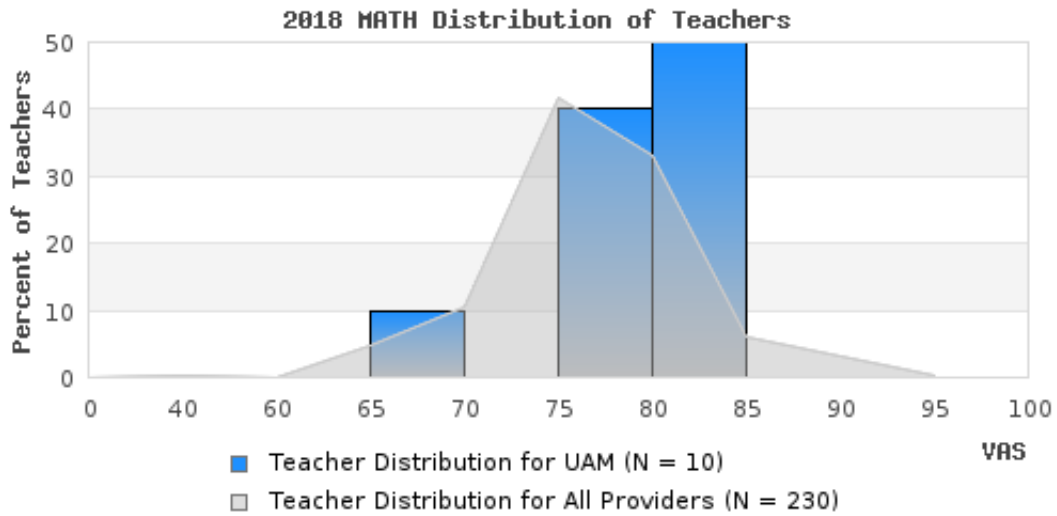


## Distribution of 2017 Completer Scores By ELA and Provider - UAM



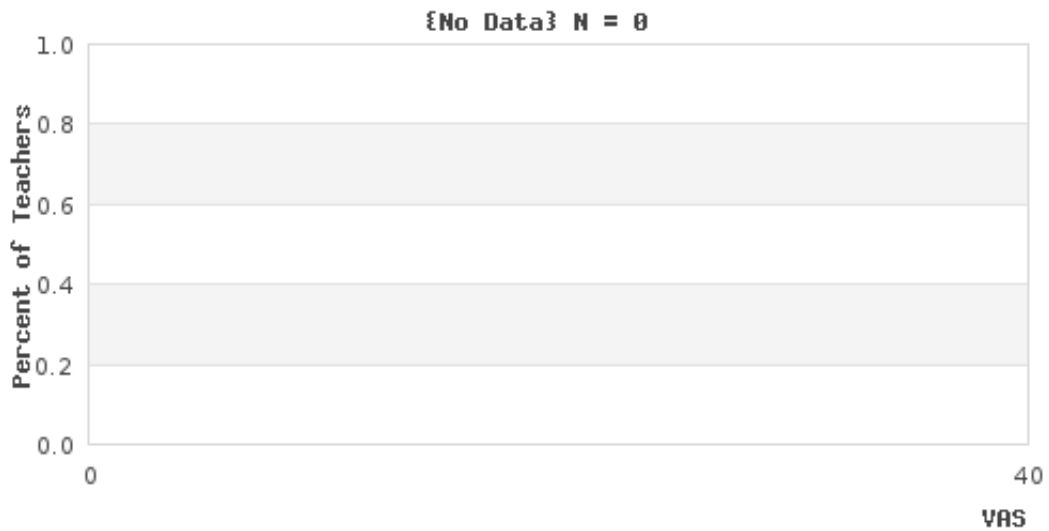
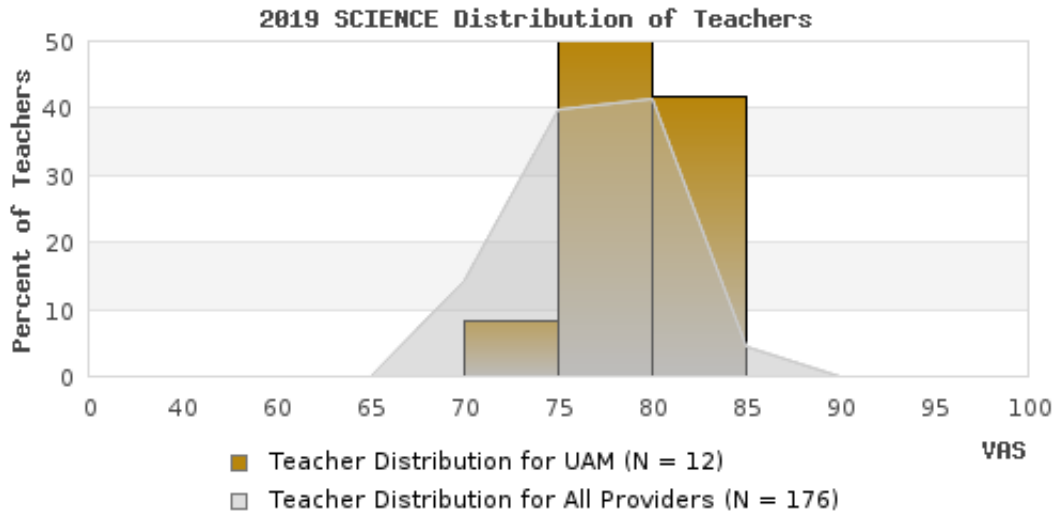
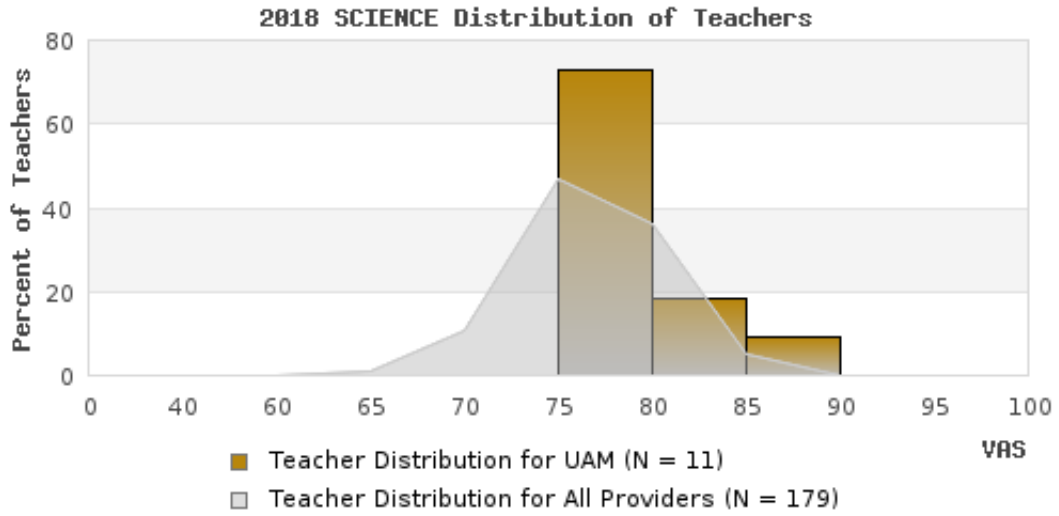


## Distribution of 2017 Completer Scores By Mathematics and Provider - UAM





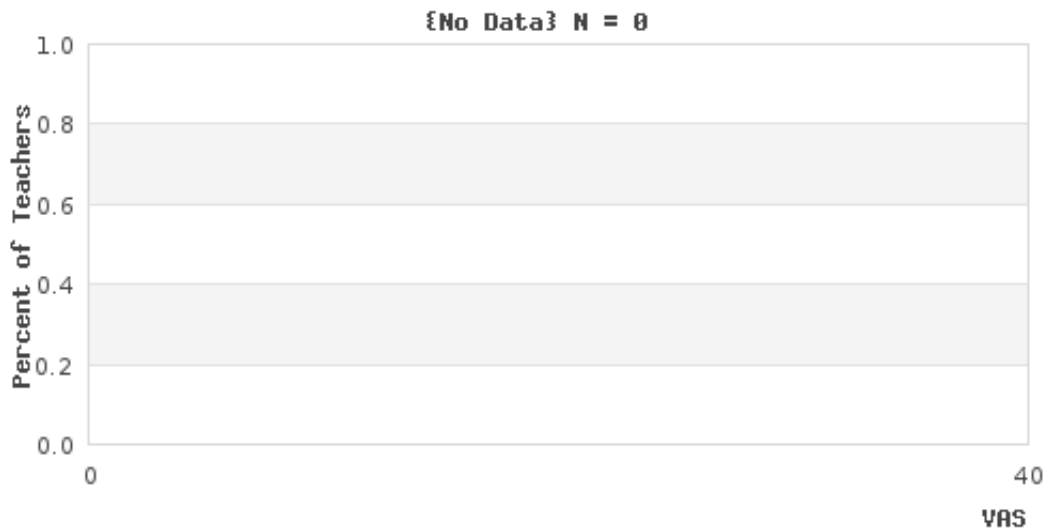
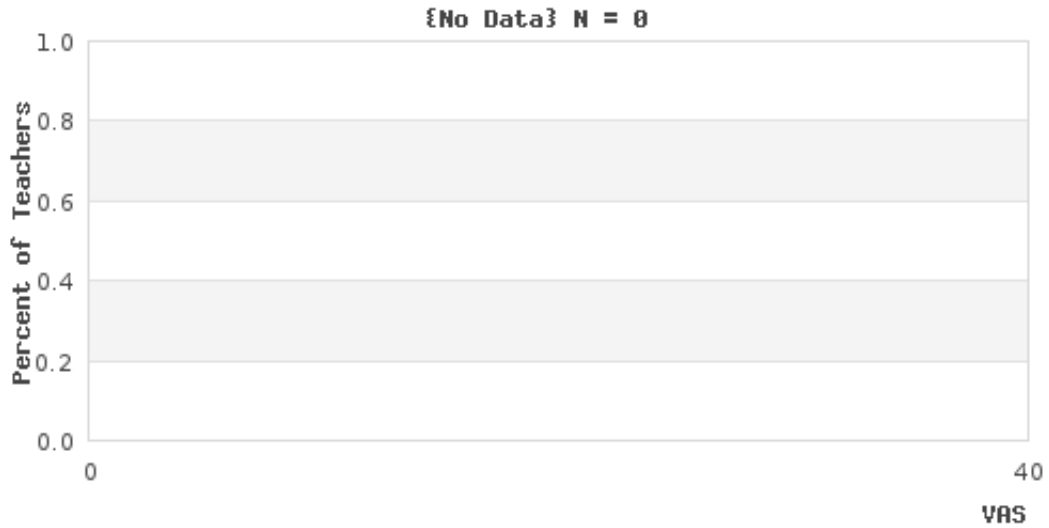
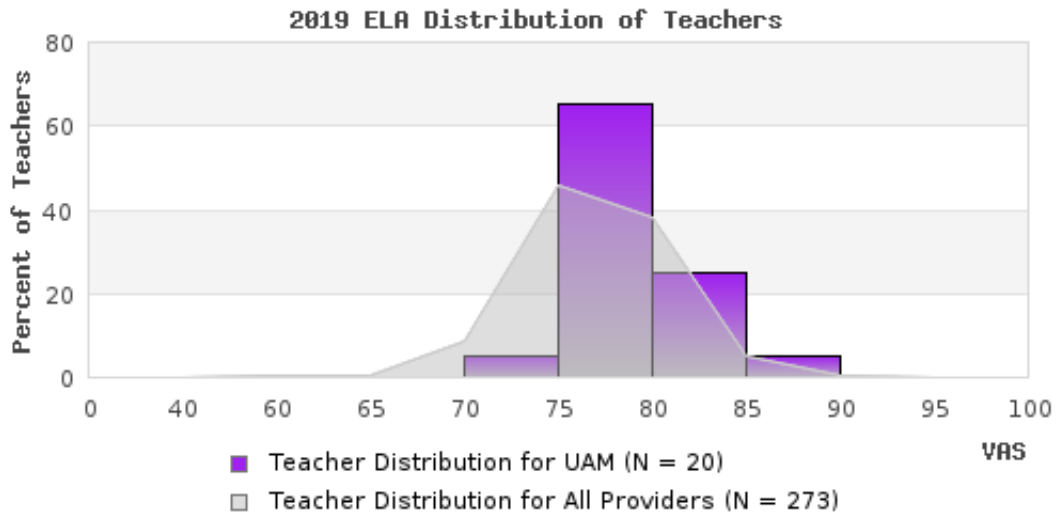
## Distribution of 2017 Completer Scores By Science and Provider - UAM





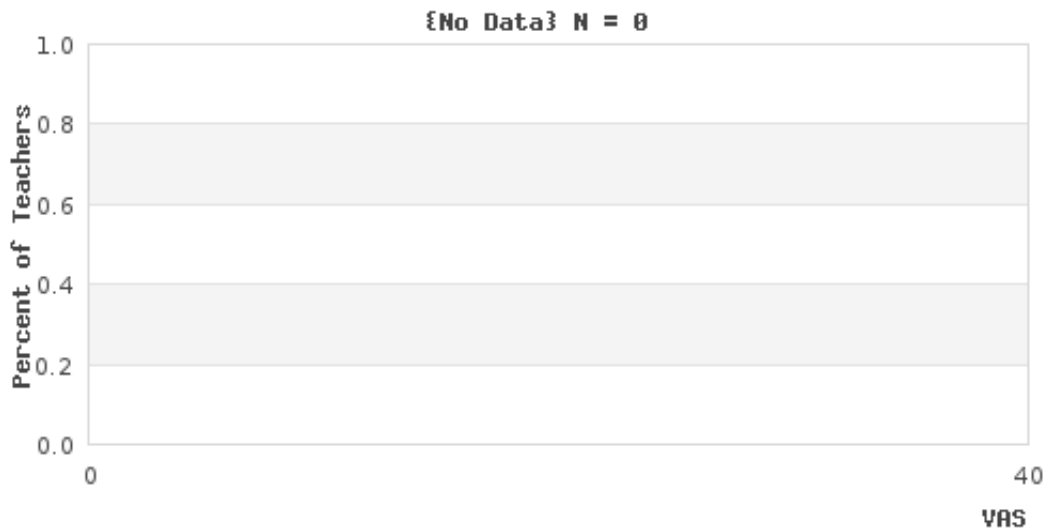
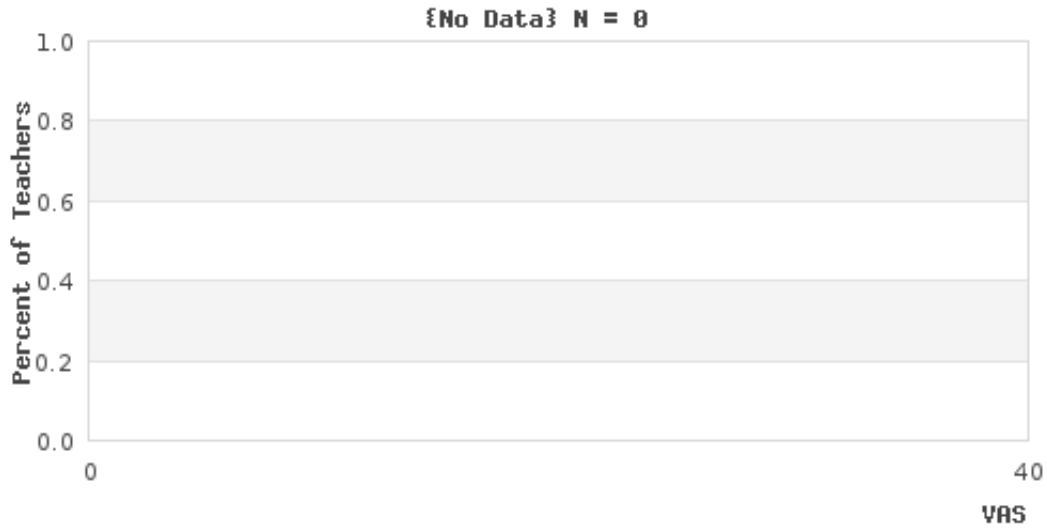
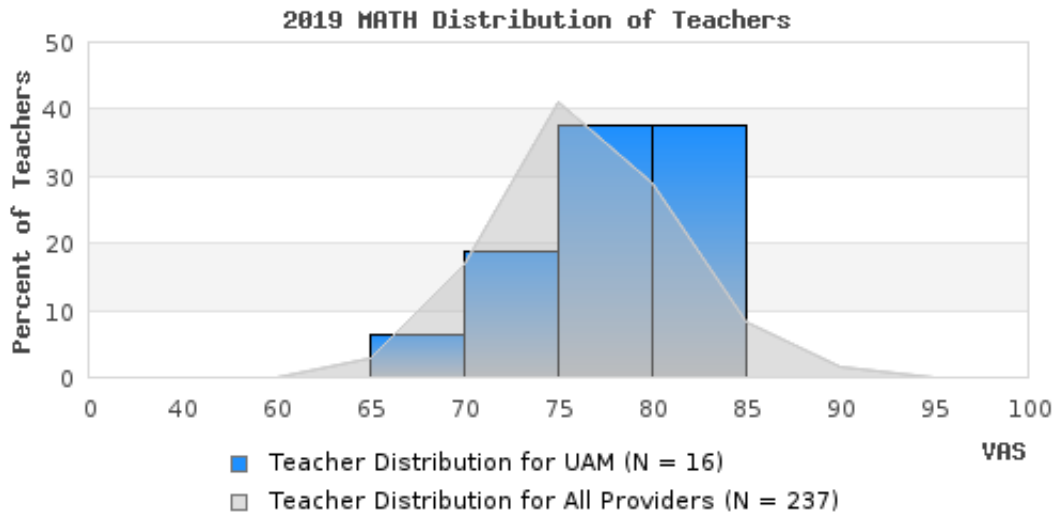


## Distribution of 2018 Completer Scores By ELA and Provider - UAM





## Distribution of 2018 Completer Scores By Mathematics and Provider - UAM





## Distribution of 2018 Completer Scores By Science and Provider - UAM

