# Completer Survey VEAC Report 2019-2020

Virginia Education Assessment Collaborative

# **Virginia Education Assessment Collaborative**

The Virginia Education Assessment Collaborative (VEAC) is an outgrowth of several collaborations taking place between Educator Preparation Programs (EPP) in the Commonwealth of Virginia. The purpose of VEAC is to provide a centralized assessment structure for Virginia EPPs that standardizes and reduces the complexity of data collection for both the Virginia Department of Education (VDOE) and the Council for the Accreditation of Educator Preparation (CAEP).

You can find more information at <u>www.projectveac.org</u>

# **VEAC Steering Committee**

#### **Chairs:**

Jillian McGraw – University of Virginia Joel Hanel - University of Richmond **Leadership:** Mandy Turner - University of Virginia Adrienne Sullivan – George Mason University Amy Thelk – James Madison University

Angie Wetzel - Virginia Commonwealth University

# **VEAC Pilot Educator Preparation Providers (EPPs)**

Bluefield College Christopher Newport University Ferrum College George Mason University Hampton University James Madison University Liberty University Longwood University Norfolk State University Regent University Shenandoah University Sweet Briar College University of Lynchburg University of Richmond University of Virginia Virginia Commonwealth University Virginia State University Virginia Wesleyan University

# **VEAC Report Version & Feedback**

VEAC Completer Survey Report 2019-2029 | Version 1.0 This document was updated September 17, 2020 Please contact the VEAC Steering Committee to share feedback on this report.

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# **Project Summary**

The Virginia Education Assessment Collaborative (VEAC) is a partnership among Educator Preparation Programs (EPPs) in the Commonwealth of Virginia. The purpose of VEAC is provide a centralized assessment structure for Virginia EPPs in order to standardize and reduce the complexity of data collection required for accreditation and program improvement. The use of common instruments and data collection processes will improve EPPs' ability to understand their relative strengths and opportunities for improvement. Shared instruments also provide a common language and can prompt discussion around areas for collective improvement across the commonwealth.

The first phase of the VEAC initiative centered on the collection of survey data. Every year, all 39 EPPs in Virginia send their own program surveys to program completers and their employers. These surveys provide feedback to support program improvement and to meet the requirements of the Virginia Department of Education and the Council for the Accreditation of Educator Preparation. In years past, because these surveys have been specific to each institution, principals were required to respond to multiple surveys with different content and structures throughout the year.

In an effort to streamline and improve the survey process, 18 institutions have come together to administer common surveys to program completers and employers. This group includes public and private institutions representing a range of sizes, program structures, and contexts. In addition to reducing the complexity of survey completion for administrators, the use of common instruments has allowed these 18 institutions to benchmark their data against the larger consortium of participating EPPs. The surveys are also aligned to the Commonwealth of Virginia's Uniform Performance Standards, which school administrators currently use to evaluate in-service teachers' performance.

Central to understanding the quality of an educator preparation program is an examination of completers' performance as they apply their acquired knowledge and skills. Phase 2 will supplement survey data with teacher evaluation data collected through partnerships with Virginia School Divisions.

This report includes information on the VEAC completer survey. In addition to this consortium-level report, each partner institutions will receive an individualized report that allows member EPPs to benchmark and compare their EPPs data to consortium-level data.

# **Project Timeline**

## Pre-Phase I: Fall 2018 – Summer 2019

Early Collaboration

 Faculty and staff at the University of Richmond and Virginia Commonwealth University collaborated during the 2018-19 academic year to develop a common employer survey. Both institutions' advisory boards reviewed the survey, which was designed to measure competencies outlined in the Virginia Uniform Performance Standards as the InTASC standards.

Spring 2019:

- The University of Richmond and Virginia Commonwealth University administered the employer survey to the employers of program completers working in the Richmond Region.
- The University of Virginia administered the employer survey to the employers of all program graduates.
- The University of Richmond developed and administered a completer survey aligned with the employer survey.

Consortium Development

- In spring 2019, VEAC leadership came together to discuss the scope of assessment collaboration in the Commonwealth of Virginia. At the Association for Teacher Educators in Virginia Conference in Richmond, Virginia, VEAC leaders held conversations with representatives from EPPs across Virginia to explore opportunities to increase collaboration through the use of common assessments.
- VEAC leadership surveyed the 36 Virginia EPPs to assess their interest in participating in a collaborative project that would initially focus on CAEP Standard 4: Program Impact. Based on EPP responses, VEAC leadership determined the completer and employer surveys would be the focus of Phase I of the project.

### Phase I: Fall 2019 – Summer 2020

Survey Preparation

- At the Fall 2019 Virginia Association of Colleges for Teacher Education conference at Roanoke College, VEAC leadership recruited EPPs to participate in the pilot for completer and employer surveys for initial licensure. Eighteen institutions signed on to the pilot.
- VEAC leadership provided EPPs a template to submit completer and employer data to VEAC. EPPs submitted information for up to three years of program completers.
- EPPs reviewed drafts of each survey and provided feedback to VEAC leadership. Based on this feedback, VEAC leadership revised both surveys for the spring 2020 administration.

Completer Survey Administration

• VEAC administered the completer survey on February 27, 2020. They closed the survey on March 13, 2020.

**Employer Survey Administration** 

• In March 2020, institutions of higher education, school divisions, and independent schools across the nation moved to online instruction in response to the COVID-19.

- In April 2020, VEAC leadership reached out to 14 school division central offices to determine the best new timeline that considered principal's workload through the COVID-19 pandemic. In consultation with school partners, a division was made to delay the administration of the employer survey until summer 2020.
- VEAC administered the employer survey on July 30, 2020. It was closed on August 31, 2020.

Teacher Evaluation Data: Initial Conversations

• EPP representatives met with school division leadership to discuss opportunities and challenges related to sharing teacher evaluation data with EPPs. These data would be used to support two additional components of CAEP standard 4: (4.1) Impact on P-12 Student Learning and Development and (4.2) Indicators of Teaching Effectiveness.

### Phase II: Fall 2020 – Summer 2021

Consortium Engagement and Expansion

- VEAC leadership with share reports from 2020-2021 with stakeholders from all Virginia EPPs, the Virginia Department of Education, and P-12 school partners.
- VEAC leadership will solicit feedback from university and school partners on the design and distribution of the completer and employer surveys.
- All EPPs will be invited to participate in the 2020-2021 survey administration.
- Survey Revision and Administration
- VEAC leadership will use feedback from stakeholders to revise the completer and employer surveys.
- VEAC will distribute revised completer and employer surveys in February and March 2021, respectively.
- VEAC will prepare reports for EPPs and other stakeholders in late spring 2021.

### Teacher Evaluation Data:

• VEAC is re-evaluating plans based on the new CAEP Streamlined Standard S4.1.

Please visit projectveac.org for updates on VEAC timelines, recruitment, and events.

# **Data Collection & Response Rates**

VEAC partners submitted contact information for program completers to VEAC in January 2020. Initial recruitment for the survey was conducted on February 27, 2020 and was open with reminders through late July 2020. Due to COVID-19, VEAC extended the timeline for data collection in the completer survey.

# **Survey Response Rates**

For our 2019-2020 Pilot VEAC fielded the Completer Survey to 2375 program completers from 17 of the 18 EPP pilot participants who provided contact fields for program completers and their employers.

Upon closing the survey in September 2020, VEAC collected 832 (35%) complete and partial responses. Related to the 14 InTASC/VUPS items, VEAC collected between 666 (28%) to 680 (29%) responses. On the overall satisfaction item, VEAC collected 682 (29%) responses.

On the optional open-ended items, 532 (22%) completers provided a response to the program strengths item, and 506 (21%) completers provided a response to the program weaknesses item.

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Each EPP has been provided with their specific response rates in their individual reports. The EPP specific response rates ranged from 14% to 74%. Throughout fielding the survey, VEAC and each EPP worked to correct bounced/failed emails to improve the reach of the survey.

After receiving feedback from EPPS, divisions, and completers, the VEAC is developing a streamlined process to increase communication, address about the VEAC surveys

# Survey Response Background

This section provides descriptive information on respondents that completed at least one of the 15 items (682) in the VEAC Completers Survey pilot 2020.

#### **Respondent State/Location**

Responses to the Completer Survey came from the following states in order of number of respondents: Virginia, North Carolina, Maryland, Washington, Georgia, Massachusetts, South Carolina, California, Connecticut, Washington DC, Delaware, Indiana, Mississippi, New York, Arizona, Ohio, Tennessee, Texas, and West Virginia. There were several international respondents.

#### **Respondent Virginia Public School Division**

Table 1 provides the number of respondents that were employed by a Virginia Public School Division. Results are ordered from greatest to least by the number of respondents in the given division.

Virginia Division	Number of Respondents
FAIRFAX CO PBLC SCHS	57
LOUDOUN CO PBLC SCHS	55
CHESTERFIELD CO PBLC SCHS	47
HENRICO CO PBLC SCHS	41
PRINCE WILLIAM CO PBLC SCHS	34
RICHMOND CITY PBLC SCHS	31
VA BEACH CITY PBLC SCHS	25
HANOVER CO PBLC SCHS	22
CHESAPEAKE CITY PBLC SCHS	18
ALBEMARLE CO PBLC SCHS	17
NEWPORT NEWS CITY PBLC SCHS	12
ARLINGTON CO PBLC SCHS	10
FREDERICK CO PBLC SCHS	10
HAMPTON CITY PBLC SCHS	10
LYNCHBURG CITY PBLC SCHS	10
FRANKLIN CO PBLC SCHS	9
ALEXANDRIA CITY PBLC SCHS	7
CAMPBELL CO PBLC SCHS	7
ORANGE CO PBLC SCHS	7
BEDFORD CO PBLC SCHS	6

#### Table 1: Responses by Virginia Public School Division

Virginia Division	Number of Respondents
CHARLOTTESVILLE CTY PBLC SCHS	6
LOUISA CO PBLC SCHS	6
ROANOKE CITY PBLC SCHS	6
STAFFORD CO PBLC SCHS	6
WINCHESTER CITY PBLC SCHS	6
YORK CO PBLC SCHS	6
CULPEPER CO PBLC SCHS	5
NORFOLK CITY PBLC SCHS	5
SPOTSYLVANIA CO PBLC SCHS	5
WILLIAMSBURG-JAMES CITY PBLC SCHS	5
CAROLINE CO PBLC SCHS	4
FLUVANNA CO PBLC SCHS	4
GOOCHLAND CO PBLC SCHS	4
GREENE CO PBLC SCHS	4
HARRISONBURG CITY PBLC SCHS	4
HENRY CO PBLC SCHS	4
POWHATAN CO PBLC SCHS	4
AMHERST CO PBLC SCHS	3
CLARKE CO PBLC SCHS	3
CUMBERLAND CO PBLC SCHS	3
GLOUCESTER CO PBLC SCHS	3
KING WILLIAM CO PBLC SCHS	3
MECKLENBURG CO PBLC SCHS	3
PORTSMOUTH CITY PBLC SCHS	3
SHENANDOAH CO PBLC SCHS	3
SOUTHAMPTON CO PBLC SCHS	3
SUFFOLK CITY PBLC SCHS	3
TAZEWELL CO PBLC SCHS	3
WARREN CO PBLC SCHS	3
AMELIA CO PBLC SCHS	2
AUGUSTA CO PBLC SCHS	2
ESSEX CO PBLC SCHS	2
FAUQUIER CO PBLC SCHS	2
GALAX CITY PBLC SCHS	2
HALIFAX CO PBLC SCHS	2
HOPEWELL CITY PBLC SCHS	2
KING GEO CO PBLC SCHS	2

Virginia Division	Number of Respondents
LANCASTER CO PBLC SCHS	2
MADISON CO PBLC SCHS	2
NEW KENT CO PBLC SCHS	2
NOTTOWAY CO PBLC SCHS	2
PATRICK CO PBLC SCHS	2
PRINCE EDWARD CO PBLC SCHS	2
WAYNESBORO CO PBLC SCHS	2
APPOMATTOX CO PBLC SCHS	1
BUCKINGHAM CO PBLC SCHS	1
COLONIAL HEIGHTS CITY PBLC SCHS	1
DANVILLE PBLC SCHS	1
DINWIDDIE CO PBLC SCHS	1
FLOYD CO PBLC SCHS	1
FRANKLIN CITY PBLC SCHS	1
LUNENBURG CO PBLC SCHS	1
MARTINSVILLE CITY PBLC SCHS	1
MONTGOMERY CO PBLC SCHS	1
NELSON CO PBLC SCHS	1
NORTHAMPTON CO PBLC SCHS	1
NORTHUMBERLAND CO PBLC SCHS	1
PAGE CO PBLC SCHS	1
PITTSYLVANIA County Public Schools	1
ROCKBRIDGE CO PBLC SCHS	1
ROCKINGHAM CO PBLC SCHS	1
STAFFORD CO PBLC SCHS	1
STAUNTON CITY PBLC SCHOOLS	1
WEST POINT PBLC SCHS	1

#### Independent and Non-Virginia Public School Respondents

Table 2 provides the number of respondents that were employed by independent/private schools, an organization/corporation, identified as not-employed or did not provide any information in their response.

Respondent Category	Number of Respondents
Independent/Public	27
Organization	9
Not Currently Employed	2
Unknown	7

### Table 2: Responses by Independent and Non-Virginia Public School Completers

#### **Responses by VEAC Pilot Partner Institution**

Table 3 provides the number and percentage of total respondents (that completed at least one of the 15 satisfaction items) that completed a program at one of the 17 VEAC pilot education preparation providers.

IHE (VEAC Pilot)	Number of Respondents	Percent of Respondents
Bluefield College	7	1.03%
Christopher Newport University	61	8.94%
Ferrum College	20	2.93%
George Mason University	24	3.52%
Hampton University	7	1.03%
James Madison University	50	7.33%
Liberty University	12	1.76%
Longwood University	102	14.96%
Regent University	29	4.25%
Shenandoah University	58	8.50%
Sweet Briar College	7	1.03%
University of Lynchburg	27	3.96%
University of Richmond	41	6.01%
University of Virginia	126	18.48%
Virginia Commonwealth University	82	12.02%
Virginia State University	15	2.20%
Virginia Wesleyan University	14	2.05%
Total Pilot	682	100%

Table 3: Responses by VEAC Pilot Partner Institution

### Responses by Primary Virginia License Area

Table 4 provides the number and percent of respondents that completed at least one of the 15 satisfaction items by primary licensure area. Results are ordered from greatest to least by the number of respondents in the given licensure area.

Licensure Area	Number of Respondents	s Percent of Respondents		
Elementary education preK-6	313	45.90%		
History and social sciences	69	10.12%		
Special education - general curriculum K-12	66	9.68%		
English	58	8.50%		
Visual arts preK-12	26	3.81%		
Health and physical education preK-12	24	3.52%		
Music education - instrumental preK-12	22	3.23%		
Science - Biology	16	2.35%		
Mathematics	16	2.35%		
English as a second language preK-12	14	2.05%		
Music education - vocal/choral preK-12	12	1.76%		
Science - chemistry	9	1.32%		
Foreign language preK-12 - Spanish	7	1.03%		
Special education early childhood (birth-age five years)	6	0.88%		
Middle education 6-8 - laboratory sciences	4	0.59%		
Middle education 6-8 - mathematics	4	0.59%		
Science - physics	3	0.44%		
Special education - adapted curriculum K-12	2	0.29%		
Foreign language preK-12 - Chinese	2	0.29%		
Career and technical education - business and information technology	2	0.29%		
Foreign language preK-12 - French	1	0.15%		
Middle education 6-8 - English	1	0.15%		
Career and technical education - agricultural education	1	0.15%		
Gifted education	1	0.15%		
Science - Earth Science	1	0.15%		
Middle education 6-8 - history and social sciences	1	0.15%		
Early/primary education preK-3	1	0.15%		

Table 4: Responses by Licensure Area

# **Completer Overall Program Satisfaction**

This section addresses the overall satisfaction items in the VEAC completers survey. Specifically, the item asks completers, "Overall, how satisfied are you with your preparation from \${e://Field/Institution}?" With \${e://Field/Institution} embedded by each respondent's institution of higher education (IHE) in their unique survey. Respondents could respond "extremely dissatisfied, somewhat dissatisfied, neither satisfied nor dissatisfied, somewhat satisfied, or extremely satisfied." On this overall satisfaction item, there were 682 responses collected.

Table 5 provides the frequency and percent of respondents from all VEAC EPPs that rated their satisfaction at a particular level with a given institution. The modal (most frequent response) is highlighted in purple.

	extremely dissatisfied (1)	somewhat dissatisfied (2)	neither satisfied nor dissatisfied (3)	somewhat satisfied (4)	extremely satisfied (5)	Ν
ALL VEAC EPPs	2 (.29%)	11 (1.16%)	10 (1.47%)	223 (32.70%)	436 (63.93%)	682 (100%)

### Table 5: Overall Satisfaction Frequency & Percentage

Of the 682 VEAC pilot completer survey respondents, **96.63%** were either somewhat or extremely satisfied with their preparation from their institution of higher education.

To find the average overall satisfaction, responses are coded, as seen in Table 5, from 1 to 5. Higher values indicate more satisfaction, and lower values indicate more dissatisfaction. Table 6 provides descriptive statistics on this scaled version of the overall satisfaction item. The average rated satisfaction by program completers for all EPPs in 2019-2020 is 4.58.

 Table 6: Overall Satisfaction Scaled Descriptive

	Mean	Standard Deviation	Standard Error	Lower 95% CI from Mean	Upper 95% CI from Mean	Ν
ALL VEAC	4.58	.636	.024	4.533	4.627	682

# **Overall Satisfaction Sub-Benchmarks**

Using background data on completer respondent's institutions, the following section provides average overall satisfaction by EPP size, EPP type, license category, and graduate/undergraduate licensure. For EPPs interpreting these items, VEAC suggests finding your average (mean) satisfaction of your candidates and compare to the various average benchmarks. These multiple benchmarks will help you interpret your EPP's data. In this section, VEAC provides graphical representations of data, however, in Appendix A, these descriptive statistics are listed for convenience. EPPs can utilize

# **Overall Satisfaction EPP Size**

Beginning with EPP size, completers' institutions are categorized based upon the average number of program completers found in the Title II report over the last three years. Using these data, VEAC created three equal size categories of all 36 Virginia EPPs. Small EPPs had between 0 and 24 programs completers per year over a three-year period, medium EPPs averaged between 25 and 66 completers per year over a three-year period, and large EPPs had more than 66 completers per year over a three-year period, and large EPPs had more than 66 completers per year over a three-year period, and large EPPs that more than 66 completers per year over a three-year period, and large EPPs that more than 66 completers per year over a three-year period. Using this metric to categorize Virginia EPPs there were 4 VEAC EPPs that are defined as small, 5 VEAC EPPs defined as medium, and 8 VEAC EPPs that are defined as large.

Figure 1 provides overall satisfaction averages by EPP size. Note that 95% confidence intervals are provided to show variation across the EPPs in these categories. Please note that the figure's x-axis has been reduced to ease readers visual cues.

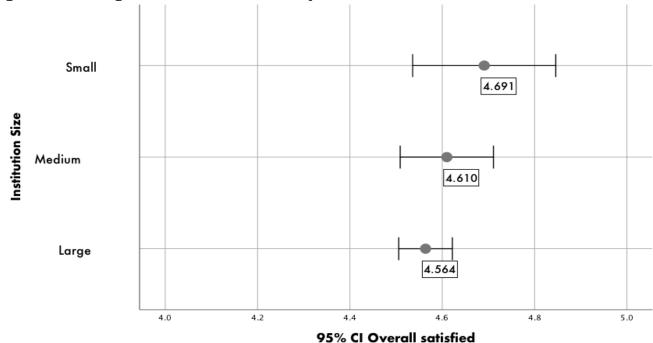
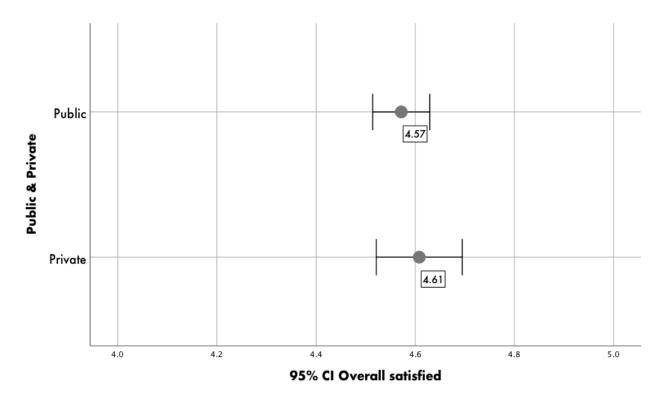


Figure 1: Average Overall Satisfaction by EPP Size

# **Overall Satisfaction EPP Public/Private**

Figure 2 provides overall satisfaction averages by EPP's status as a public or private institution of higher education. Of the VEAC Pilot members, 10 are private institutions and 7 are public institutions. Note that 95% confidence intervals are provided to show variation across the EPPs in these categories. Please note that the figure's x-axis has been reduced to ease readers visual cues.

Figure 2: Average Overall Satisfaction by EPP Type (Public/Private)



# **Overall Satisfaction Completer Endorsement Category**

Figure 3 provides overall satisfaction averages by respondent completer's primary licensure area. Categories were developed to provide a sufficient number of cases in each licensure area. Please reach out to VEAC committee members to request additional data for programs that lead to multiple licensure areas. Note that 95% confidence intervals are provided to show variation across the EPPs in these categories. Please note that the figure's x-axis has been reduced to ease readers visual cues.

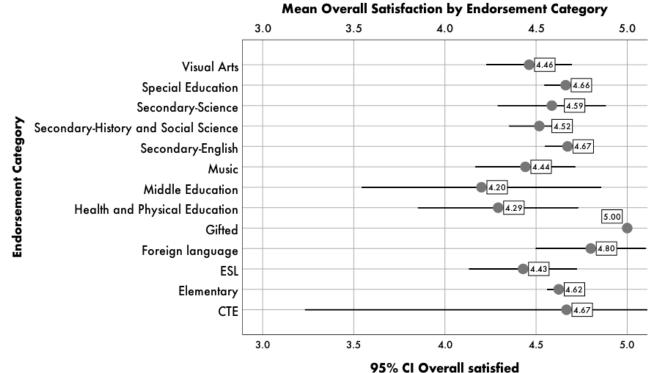
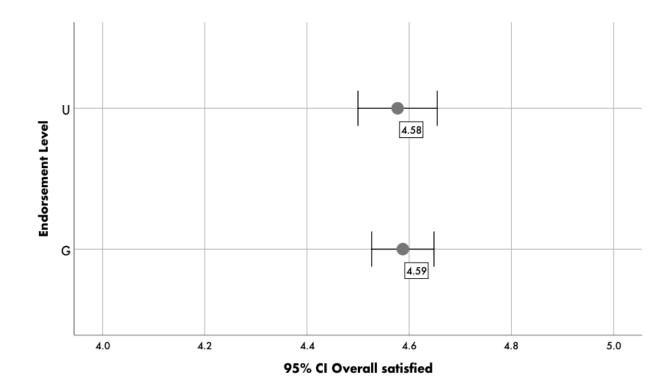


Figure 3: Average Overall Satisfaction by Endorsement Category

# **Overall Satisfaction Completer Level (G/UG)**

Figure 4 provides overall satisfaction averages by respondent completer's primary endorsement level. Of completer respondents, 61% earned an endorsement at the graduate level, and 38% earned an endorsement at the undergraduate level. Note that 95% confidence intervals are provided to show variation across the EPPs in these categories. Please note that the figure's x-axis has been reduced to ease readers visual cues.

Figure 4: Average Overall Satisfaction by Endorsement Level



# Completer Satisfaction on VUPS/InTASC

In addition to the overall satisfaction item, completers were asked, based on their preparation at their EPP to rate their performance on the 14 VUPS/InTASC items listed in Table 7. This table additionally includes each item tagged to the Virginia Uniform Performance Standards an InTASC standards. Candidates could respond to each item with the following, "Exemplary, Proficient, Developing/Needs Improvement, and Unacceptable." Table 8 provides the frequency and percentage of responses for each 14 items. In addition, the modal response is highlighted in purple.

lable /:	Tagged VUPS/InTASC Survey Items		
ltem Order	"Based on your preparation at EPP X, how would you rate your performance in each of these teaching areas:	InTASC	VUPS
Item A	Demonstrates an understanding of the curriculum, subject content, and the developmental needs of students by providing relevant learning experiences.	1, 2, 4	1
Item B	Plans using state standards, the school's curriculum, effective strategies, resources, and data to meet the needs of all students.	1, 2, 7, 8	2
Item C	Effectively engages students in learning by using a variety of instructional strategies in order to meet individual learning needs.	1, 2, 8	3
ltem D	Systematically gathers, analyzes, and uses all relevant data to measure student academic progress, guide instructional content and delivery methods, and provide timely feedback to both students and parents throughout the school year.	6, 10	4, 7
ltem E	Uses resources, routines, and procedures to provide a respectful, positive, safe, student centered environment that is conducive to learning.	3	5
ltem F	Maintains a commitment to professional ethics, communicates effectively, and takes responsibility for and participates in professional growth that results in enhanced student learning.	1, 2, 9	6
Item G	Work results in acceptable, measurable, and appropriate student academic progress.	6, 7, 8	7
Item H	Selects technologies, informed by research, to promote learning for all students.	7, 8	3
ltem l	Integrates technology into instructional materials.	8	2, 3
ltem J	Brings multiple perspectives to instruction, including the learners' personal, family, and community experiences / norms.	1, 2, 9, 10	3
ltem K	Integrates diverse language and cultures into instruction to promote the value of multilingual / multicultural perspectives	1, 2	3, 5
ltem L	Collaborates with the learning community to meet the needs of all learners and contribute to a supportive culture.	3, 9, 10	6
Item M	Uses assessment results to inform and adjust practice.	6	4, 7
Item N	Engages in reflective practice.	9	6

# Table 7: Tagged VUPS/InTASC Survey Items

# VUPS/INTASC Item Frequency & Percentages

Item	Unacceptable (1)	Developing/ Needs Improvement (2)	Proficient (3)	Exemplary (4)	Ν
A: Demonstrates an understanding of the curriculum, subject content, and the developmental needs of students by providing relevant learning experiences.	2 (0.3%)	23 (3.4%)	394 (57.9%)	261 (38.4%)	680
B: Plans using state standards, the school's curriculum, effective strategies, resources, and data to meet the needs of all students.	2 (0.3%)	38 (5.6%)	398 (59.0%)	237 (35.1%)	675
C: Effectively engages students in learning by using a variety of instructional strategies in order to meet individual learning needs.	4 (0.6%)	41 (6.0%)	339 (49.9%)	296 (43.5%)	680
D: Systematically gathers, analyzes, and uses all relevant data to measure student academic progress, guide instructional content and delivery methods, and provide timely feedback to both students and parents throughout the school year.	5 (0.7%)	112 (16.5%)	365 (53.8%)	196 (28.9%)	678
E: Uses resources, routines, and procedures to provide a respectful, positive, safe, student centered environment that is conducive to learning.	6 (0.9%)	40 (5.9%)	291 (42.8%)	343 (50.3%)	680
F: Maintains a commitment to professional ethics, communicates effectively, and takes responsibility for and participates in professional growth that results in enhanced student learning.	2 (0.3%)	4 (0.6%)	256 (37.7%)	417 (61.4%)	679

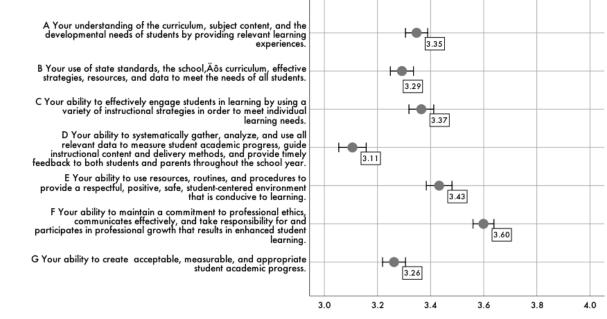
# Table 8: Tagged VUPS/InTASC Items Frequency & Percentages

ltem	Unacceptable (1)	Developing/ Needs Improvement (2)	Proficient (3)	Exemplary (4)	И
G: Work results in acceptable, measurable, and appropriate student academic progress.	3 (0.4%)	39 (5.8%)	415 (61.2%)	221 (32.6%)	678
H: Selects technologies, informed by research, to promote learning for all students.	3	85	349	239	676
I: Integrates technology into instructional materials.	3 (0.4%)	91 (13.5%)	323 (47.9%)	257 (38.1%)	674
J: Brings multiple perspectives to instruction, including the learners' personal, family, and community experiences / norms.	4 (0.6%)	64 (9.4%)	338 (49.7%)	274 (40.3%)	680
K: Integrates diverse language and cultures into instruction to promote the value of multilingual / multicultural perspectives	10 (1.5%)	147 (22.1%)	318 (47.7%)	191 (28.7%)	666
L: Collaborates with the learning community to meet the needs of all learners and contribute to a supportive culture.	3 (0.4%)	47 (6.9%)	338 (49.9%)	289 (42.7%)	677
M: Uses assessment results to inform and adjust practice.	3 (0.4%)	49 (7.2%)	353 (52.0%)	274 (40.4%)	679
N: Engages in reflective practice.	2 (0.3%)	29 (4.3%)	275 (40.5%)	373 (54.9%)	679

Note: Modal responses highlighted in purple

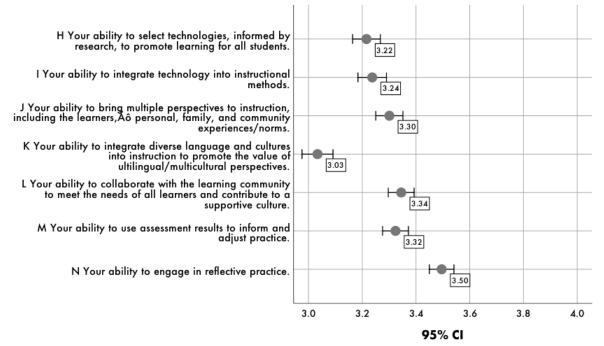
# **VUPS/INTASC Item Means**

To find the average for each of the VUPS/InTASC 14 items, responses are coded, as seen in Table 8, from 1 to 4. Higher values indicate greater performance and lower values lower performance. Figure 5A and 5B provide the mean satisfaction with 95% confidence intervals for all VEAC pilot responses. Please note that the figures x-axes have been reduced to ease readers visual cues. **Figure 5A: Completer Satisfaction on VUPS/InTASC (Items 1-7)** 



95% CI

### Figure 5B: Completer Satisfaction on VUPS/InTASC (Items 8-14)



# **VUPS/InTASC Satisfaction Sub-Benchmarks**

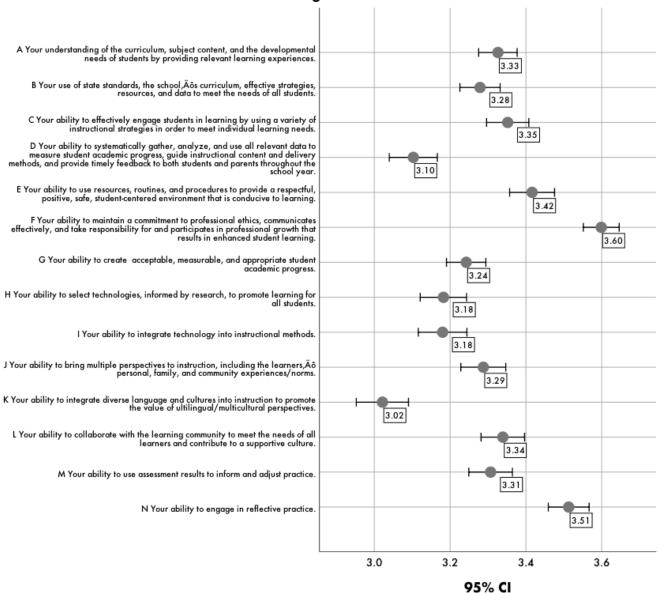
Using background data on completer respondent's institutions, the following section provides average VUPS/InTASC satisfaction by EPP size, EPP type, and graduate/undergraduate licensure. For EPPs interpreting these items, VEAC suggests finding your average (mean) satisfaction of your candidates and compare to the various average benchmarks. These multiple benchmarks will help you interpret your EPP's data. In this section, VEAC provides graphical representations of data, however, in Appendix B, these descriptive statistics are listed for convenience.

# **EPP Size on VUPS/InTASC Satisfaction**

Beginning with EPP size, completers' institutions are categorized based upon the average number of program completers found in the Title II report over the last three years. Using these data, VEAC created three equal size categories of all 36 Virginia EPPs. Small EPPs had between 0 and 24 programs completers per year over a three-year period, medium EPPs averaged between 25 and 66 completers per year over a three-year period, and large EPPs had more than 66 completers per year over a three-year period, and large EPPs had more than 66 completers per year over a three-year period. Using this metric there were 4 VEAC EPPs that are defined as small, 5 VEAC EPPs defined as medium, and 8 VEAC EPPs that are defined as large.

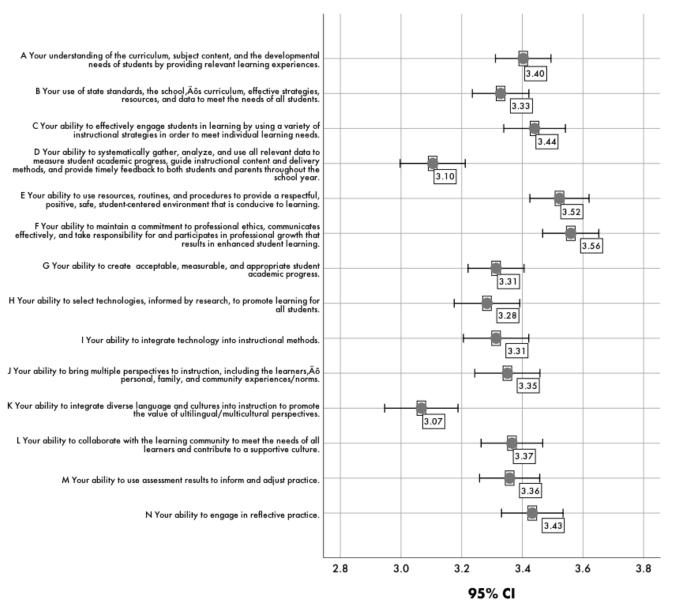
Figures 6A-6C provides VUPS/InTASC satisfaction averages by EPP size. Note that 95% confidence intervals are provided to show variation across the EPPs in these categories. Please note that the figures x-axes have been reduced to ease readers visual cues.

#### Figure 6A: Large EPP Respondent Satisfaction on VUPS/InTASC (Items A-N)



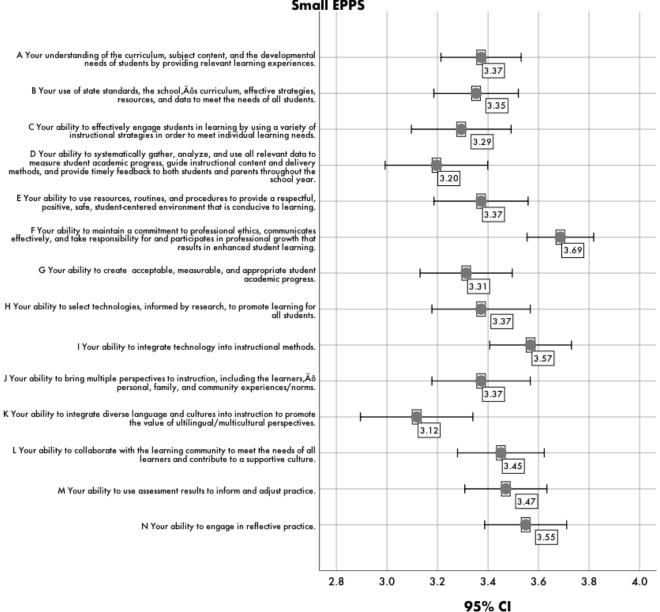
#### Large EPPS

### Figure 6B: Medium EPP Respondent Satisfaction on VUPS/InTASC (Items A-N)



#### Medium EPPS

#### Figure 6C: Small EPP Respondent Satisfaction on VUPS/InTASC (Items A-N)

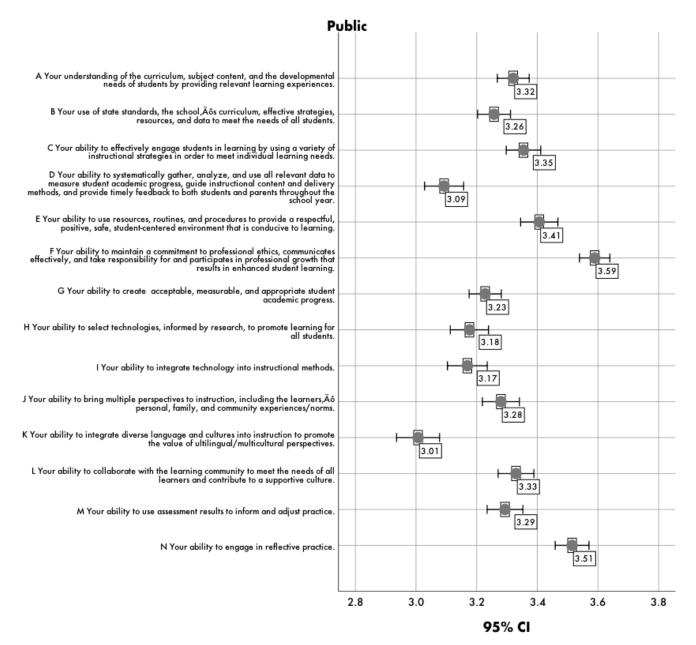


Small EPPS

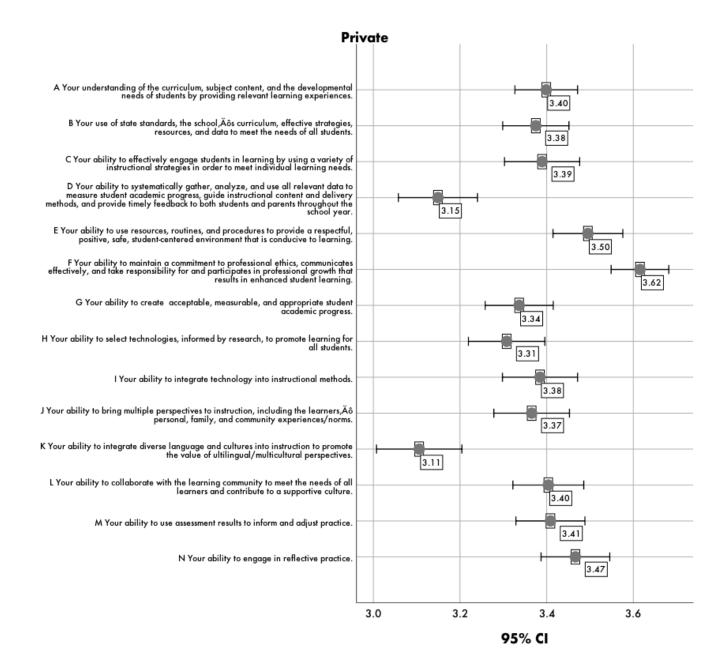
# **EPP Type on VUPS/InTASC Satisfaction**

Figures 7A and 7B provides VUPS/InTASC satisfaction averages by EPP's status as a public or private institution of higher education. Of the VEAC Pilot members, 10 are private institutions and 7 are public institutions. Note that 95% confidence intervals are provided to show variation across the EPPs in these categories. Please note that the figures x-axes have been reduced to ease readers visual cues.

### Figure 7A: Public EPP Respondent Satisfaction on VUPS/InTASC (Items A-N)



24

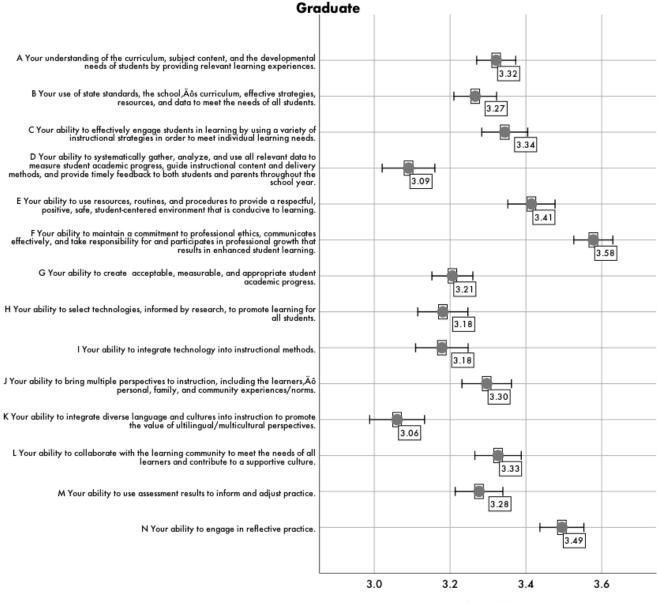


#### Figure 7B: Private EPP Respondent Satisfaction on VUPS/InTASC (Items A-N)

# Completer Level (G/UG) on VUPS/InTASC Satisfaction

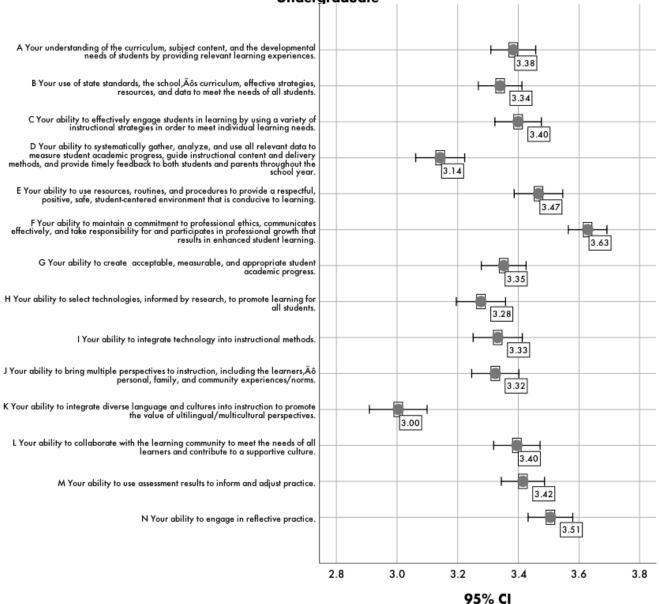
Figure 8A and 8B provides satisfaction averages by respondent completer's primary endorsement level. Of completer respondents, 61% earned an endorsement at the graduate level, and 38% earned an endorsement at the undergraduate level. Note that 95% confidence intervals are provided to show variation across the EPPs in these categories. Please note that the figures x-axes have been reduced to ease readers visual cues.

#### Figure 8A: Graduate Level Respondent Satisfaction on VUPS/InTASC (Items A-N)





### Figure 8B: Undergraduate Level Respondent Satisfaction on VUPS/InTASC (Items A-N)



#### Undergraduate

# **Appendix A: Overall Satisfaction Descriptive** Statistics

### Appendix Table 1: Overall Satisfaction Scaled Descriptive by Category

Appendix Table	1: Overall Satis	raction	Scalea Des	criptive by	caregory		
Variable	Category	Mean	Standard Deviation	Standard Error	Lower 95% Cl	Upper 95% Cl	Ν
All	ALL VEAC	4.58	.636	.024	4.533	4.627	682
Public/Private	Private	4.61	.655	.044	4.524	4.696	222
Public/Private	Public	4.57	.627	.029	4.513	4.627	460
EPP Size	Small	4.69	.573	.077	4.539	4.841	55
EPP Size	Medium	4.61	.607	.051	4.510	4.710	141
EPP Size	Large	4.56	.651	.030	4.501	4.619	486
License Category	CTE	4.67	.577	.333	4.017	5.323	3
License Category	Elementary	4.62	.575	.032	4.557	4.683	314
License Category	ESL	4.43	.514	.137	4.161	4.699	14
License Category	Foreign language	4.80	.422	.133	4.539	5.061	10
License Category	Gifted	5.00	•	•		•	1
License Category	Health and Physical Education	4.29	1.042	.213	3.873	4.707	24
License Category	Middle Education	4.20	.919	.291	3.630	4.770	10
License Category	Music	4.44	.786	.135	4.175	4.704	34
License Category	Secondary- English	4.67	.473	.062	4.548	4.792	58
License Category	Secondary- History and Social Science	4.52	.766	.083	4.357	4.683	85
License Category	Secondary- Science	4.59	.780	.145	4.306	4.874	29
License Category	Special Education	4.66	.504	.059	4.544	4.776	74
License Category	Visual Arts	4.46	.582	.114	4.237	4.683	26
License Type	Graduate	4.59	.634	.031	4.52	4.651	417
License Type	Undergraduate	4.58	.642	.039	4.50356	4.656	265

# Appendix B: VUPS/InTASC Satisfaction Descriptive Statistics

### Appendix Table 2A: Item A Satisfaction Scaled Descriptive by Category

A: Demonstrates an understanding of the curriculum, subject content, and the developmental needs of students by providing relevant learning experiences.

needs of students by providing relevant learning experiences.								
Variable	Category	Mean	Standard Deviation	Standard Error	Lower 95% Cl	Upper 95% Cl	Ν	
All	ALL VEAC	3.34	.558	.024	3.29	3.39	680	
Public/Private	Private	3.38	.548	.037	3.31	3.45	222	
Public/Private	Public	3.33	.562	.026	3.28	3.38	458	
EPP Size	Small	3.40	.564	.076	3.25	3.55	55	
EPP Size	Medium	3.39	.531	.045	3.30	3.48	141	
EPP Size	Large	3.32	.565	.026	3.27	3.37	484	
License Type	Graduate	3.32	.522	.026	3.27	3.37	416	
License Type	Undergraduate	3.37	.610	.038	3.30	3.44	264	

### Appendix Table 2B: Item B Satisfaction Scaled Descriptive by Category

B: Plans using state standards, the school's curriculum, effective strategies, resources, and data to meet the needs of all students.

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Variable	Category	Mean	Standard Deviation	Standard Error	Lower 95% Cl	Upper 95% Cl	Ν		
All	ALL VEAC	3.29	.580	.022	3.25	3.33	675		
Public/Private	Private	3.36	.576	.039	3.28	3.44	219		
Public/Private	Public	3.26	.580	.027	3.21	3.31	456		
EPP Size	Small	3.37	.592	.081	3.21	3.53	54		
EPP Size	Medium	3.32	.539	.046	3.23	3.41	139		
EPP Size	Large	3.27	.590	.027	3.22	3.32	482		
License Type	Graduate	3.26	.570	.028	3.21	3.31	414		
License Type	Undergraduate	3.33	.594	.037	3.26	3.40	261		

meet individual learning needs.										
Variable	Category	Mean	Standard Deviation	Standard Error	Lower 95% Cl	Upper 95% Cl	Ν			
All	ALL VEAC	3.36	.623	.024	3.31	3.41	680			
Public/Private	Private	3.38	.654	.044	3.29	3.47	222			
Public/Private	Public	3.35	.608	.028	3.30	3.40	458			
EPP Size	Small	3.29	.685	.092	3.11	3.47	55			
EPP Size	Medium	3.46	.592	.050	3.36	3.56	141			
EPP Size	Large	3.34	.622	.028	3.29	3.39	484			
License Type	Graduate	3.26	3.35	.614	2.06	4.46	416			
License Type	Undergraduate	3.33	3.39	.637	2.08	4.58	264			

# Appendix Table 2C: Item C Satisfaction Scaled Descriptive by Category C: Effectively engages students in learning by using a variety of instructional strategies in order to

Appendix Table 2D: Item D Satisfaction Scaled Descriptive by Category
D: Systematically gathers, analyzes, and uses all relevant data to measure student academic progress, guide instructional content and delivery methods, and provide timely feedback to both students and parents throughout the school year.

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Variable	Category	Mean	Standard Deviation	Standard Error	Lower 95% Cl	Upper 95% Cl	Ν		
All	ALL VEAC	3.11	.687	.026	3.06	3.16	678		
Public/Private	Private	3.15	.678	.046	3.06	3.24	220		
Public/Private	Public	3.09	.691	.032	3.03	3.15	458		
EPP Size	Small	3.22	0.712	0.096	3.03	3.41	55		
EPP Size	Medium	3.12	0.629	0.053	3.02	3.22	140		
EPP Size	Large	3.09	0.701	0.032	3.03	3.15	483		
License Type	Graduate	3.09	.698	.034	3.02	3.16	414		
License Type	Undergraduate	3.13	.671	.041	3.05	3.21	264		

	E: Uses resources, routines, and procedures to provide a respectful, positive, safe, student centered environment that is conducive to learning.										
Variable	Category	Mean	Standard Deviation	Standard Error	Lower 95% Cl	Upper 95% Cl	Ν				
All	ALL VEAC	3.43	.645	.025	3.38	3.48	680				
Public/Private	Private	3.48	.614	.041	3.40	3.56	222				
Public/Private	Public	3.40	.659	.031	3.34	3.46	458				
EPP Size	Small	3.40	.655	.088	3.23	3.57	55				
EPP Size	Medium	3.52	.568	.048	3.43	3.61	141				
EPP Size	Large	3.40	.663	.030	3.34	3.46	484				
License Type	Graduate	3.42	.631	.031	3.36	3.48	416				
License Type	Undergraduate	3.45	.668	.041	3.37	3.53	264				

## Appendix Table 2E: Item E Satisfaction Scaled Descriptive by Category

### Appendix Table 2F: Item F Satisfaction Scaled Descriptive by Category

	F: Maintains a commitment to professional ethics, communicates effectively, and takes responsibility for and participates in professional growth that results in enhanced student learning.										
Variable	Category	Mean	Standard Deviation	Standard Error	Lower 95% Cl	Upper 95% Cl	N				
All	ALL VEAC	3.60	.519	.020	3.56	3.64	679				
Public/Private	Private	3.62	.487	.033	3.56	3.68	221				
Public/Private	Public	3.59	.534	.025	3.54	3.64	458				
EPP Size	Small	3.69	.466	.063	3.57	3.81	55				
EPP Size	Medium	3.57	.538	.045	3.48	3.66	141				
EPP Size	Large	3.60	.519	.024	3.55	3.65	483				
License Type	Graduate	3.58	.522	.026	3.53	3.63	416				
License Type	Undergraduate	3.63	.514	.032	3.57	3.69	263				

Work results in acc	Work results in acceptable, measurable, and appropriate student academic progress.										
Variable	Category	Mean	Standard Deviation	Standard Error	Lower 95% Cl	Upper 95% Cl	N				
All	ALL VEAC	3.26	.578	.022	3.22	3.30	678				
Public/Private	Private	3.32	.596	.040	3.24	3.40	221				
Public/Private	Public	3.23	.568	.027	3.18	3.28	457				
EPP Size	Small	3.35	.645	.087	3.18	3.52	55				
EPP Size	Medium	3.30	.546	.046	3.21	3.39	140				
EPP Size	Large	3.24	.579	.026	3.19	3.29	483				
License Type	Graduate	3.32	.596	.040	3.24	3.40	221				
License Type	Undergraduate	3.23	.568	.027	3.18	3.28	457				

Appendix Table 2G: Item G Satisfaction Scaled Descriptive by Category

Appendix Table 2H: Item H Satisfaction Scaled Descriptive by Category

H: Selects technolo	H: Selects technologies, informed by research, to promote learning for all students.										
Variable	Category	Mean	Standard Deviation	Standard Error	Lower 95% Cl	Upper 95% Cl	Ν				
All	ALL VEAC	3.22	.671	.026	3.17	3.27	676				
Public/Private	Private	3.29	.667	.045	3.20	3.38	221				
Public/Private	Public	3.18	.670	.031	3.12	3.24	455				
EPP Size	Small	3.38	.680	.092	3.20	3.56	55				
EPP Size	Medium	3.29	.638	.054	3.18	3.40	140				
EPP Size	Large	3.18	.676	.031	3.12	3.24	481				
License Type	Graduate	3.18	.672	.033	3.12	3.24	413				
License Type	Undergraduate	3.27	.666	.041	3.19	3.35	263				

I: Integrates techno	I: Integrates technology into instructional materials.										
Variable	Category	Mean	Standard Deviation	Standard Error	Lower 95% Cl	Upper 95% Cl	Я				
All	ALL VEAC	3.24	.692	.027	3.19	3.29	674				
Public/Private	Private	3.38	.653	.044	3.29	3.47	221				
Public/Private	Public	3.17	.701	.033	3.11	3.23	453				
EPP Size	Small	3.58	.567	.077	3.43	3.73	55				
EPP Size	Medium	3.31	.636	.054	3.20	3.42	140				
EPP Size	Large	3.18	.708	.032	3.12	3.24	479				
License Type	Graduate	3.18	.702	.035	3.11	3.25	411				
License Type	Undergraduate	3.33	.666	.041	3.25	3.41	263				

# Appendix Table 21: Item I Satisfaction Scaled Descriptive by Category

### Appendix Table J: Item J Satisfaction Scaled Descriptive by Category

	perspectives to instru					and commun	itv
experiences / norr	•	,					,
Variable	Category	Mean	Standard Deviation	Standard Error	Lower 95% Cl	Upper 95% Cl	Ν
All	ALL VEAC	3.30	.658	.025	3.25	3.35	680
Public/Private	Private	3.35	.654	.044	3.26	3.44	222
Public/Private	Public	3.27	.659	.031	3.21	3.33	458
EPP Size	Small	3.38	.680	.092	3.20	3.56	55
EPP Size	Medium	3.35	.623	.052	3.25	3.45	141
EPP Size	Large	3.27	.665	.030	3.21	3.33	484
License Type	Graduate	3.28	.669	.033	3.22	3.34	416
License Type	Undergraduate	3.33	.641	.039	3.25	3.41	264

K: Integrates divers	K: Integrates diverse language and cultures into instruction to promote the value of multilingual /										
multicultural perspectives											
Variable	Category	Mean	Standard Deviation	Standard Error	Lower 95% Cl	Upper 95% Cl	Z				
All	ALL VEAC	3.04	.753	.029	2.98	3.10	666				
Public/Private	Private	3.09	.732	.050	2.99	3.19	216				
Public/Private	Public	3.01	.762	.036	2.94	3.08	450				
EPP Size	Small	3.02	.785	.108	2.81	3.23	666				
EPP Size	Medium	3.16	.702	.060	3.04	3.28	53				
EPP Size	Large	3.02	.764	.035	2.95	3.09	475				
License Type	Graduate	3.06	.737	.037	2.99	3.13	407				
License Type	Undergraduate	3.00	.778	.048	2.91	3.09	259				

# Appendix Table K: Item K Satisfaction Scaled Descriptive by Category

Appendix Table L: Item L Satisfaction Scaled Descriptive by Category
L: Collaborates with the learning community to meet the needs of all learners and contribute to a supportive culture

supportive culture.							
Variable	Category	Mean	Standard Deviation	Standard Error	Lower 95% Cl	Upper 95% Cl	Ν
All	ALL VEAC	3.35	.627	.024	3.30	3.40	677
Public/Private	Private	3.39	.619	.042	3.31	3.47	222
Public/Private	Public	3.33	.631	.030	3.27	3.39	455
EPP Size	Small	3.47	.604	.081	3.31	3.63	55
EPP Size	Medium	3.36	.589	.050	3.26	3.46	141
EPP Size	Large	3.33	.640	.029	3.27	3.39	481
License Type	Graduate	3.33	.624	.031	3.27	3.39	415
License Type	Undergraduate	3.39	.631	.039	3.31	3.47	262

M: Uses assessment results to inform and adjust practice.										
Variable	Category	Mean Standard Deviation		Standard Error	Lower 95% Cl	Upper 95% Cl	N			
All	ALL VEAC	3.32	.624	.024	3.27	3.37	679			
Public/Private	Private	3.38	.611	.041	3.30	3.46	221			
Public/Private	Public	3.29	.630	.029	3.23	3.35	458			
EPP Size	Small	3.48	.574	.078	3.33	3.63	54			
EPP Size	Medium	3.34	.583	.049	3.24	3.44	141			
EPP Size	Large	3.30	.640	.029	3.24	3.36	484			
License Type	Graduate	3.27	.640	.031	3.21	3.33	416			
License Type	Undergraduate	3.41	.591	.036	3.34	3.48	263			

Appendix Table M: Item M Satisfaction Scaled Descriptive by Category

### Appendix Table N: Item N Satisfaction Scaled Descriptive by Category

N: Engages in reflective practice.										
Variable	Category	Mean	Standard Deviation	Standard Error	Lower 95% Cl	Upper 95% Cl	Ν			
All	ALL VEAC	3.50	.595	.023	3.45	3.55	679			
Public/Private	Private	3.46	.598	.040	3.38	3.54	222			
Public/Private	Public	3.52	.592	.028	3.47	3.57	457			
EPP Size	Small	3.56	.570	.077	3.41	3.71	55			
EPP Size	Medium	3.44	.590	.050	3.34	3.54	141			
EPP Size	Large	3.51	.599	.027	3.46	3.56	483			
License Type	Graduate	3.50	.585	.029	3.44	3.56	415			
License Type	Undergraduate	3.50	.610	.038	3.43	3.57	264			

# Appendix C: Reliability, Correlations, Factor Analysis

## **Internal Consistency**

To assess scale reliability between the 14 VUPS/InTASC items, Cronbach's Alpha is equal to .901 (Excellent a >= .90). This suggests a high level of internal consistency in the measures. This generally suggests that the 14 VUPS/InTASC items tap into an underlying concept of satisfaction on EPP preparation.

## **Correlations**

Appendix Table 2 provides correlation coefficients across the 14 items. Higher correlations between two given items suggest that responses are more congruent. Notable correlations have been highlighted in Purple, and notes on these correlations are provided below.

					In	ter-Item	Corre	ation A	Aatrix		-	-		
	Α	В	С	D	Е	F	G	Н	I	J	K	L	М	N
Α	-	.582	.436	.460	.393	.456	.481	.416	.345	.376	.336	.423	.444	.412
В	.582	-	.433	.476	.363	.365	.503	.357	.312	.354	.256	.405	.409	.354
С	.436	.433	-	.477	.480	.329	.465	.390	.291	.441	.330	.454	.385	.373
D	.460	.476	.477	-	.415	.328	.512	.375	.303	.342	.316	.386	.565	.389
Е	.393	.363	.480	.415	-	.458	.430	.338	.286	.439	.349	.463	.366	.363
F	.456	.365	.329	.328	.458	-	.392	.346	.285	.393	.261	.388	.375	.414
G	.481	.503	.465	.512	.430	.392	-	.431	.345	.429	.329	.458	.534	.377
Н	.416	.357	.390	.375	.338	.346	.431	-	.724	.413	.406	.397	.333	.336
1	.345	.312	.291	.303	.286	.285	.345	.724	-	.352	.332	.317	.329	.279
J	.376	.354	.441	.342	.439	.393	.429	.413	.352	-	.555	.478	.349	.389
Κ	.336	.256	.330	.316	.349	.261	.329	.406	.332	.555	-	.517	.305	.336
L	.423	.405	.454	.386	.463	.388	.458	.397	.317	.478	.517	-	.469	.424
Μ	.444	.409	.385	.565	.366	.375	.534	.333	.329	.349	.305	.469	-	.521
Ν	.412	.354	.373	.389	.363	.414	.377	.336	.279	.389	.336	.424	.521	-

#### Notable Correlation Coefficients (above .50)

- **H & I (.724)** 
  - Selects technologies, informed by research, to promote learning for all students.
  - Integrates technology into instructional materials.
- A & B (.582)
  - Demonstrates an understanding of the curriculum, subject content, and the developmental needs of students by providing relevant learning experiences.
  - Plans using state standards, the school's curriculum, effective strategies, resources, and data to meet the needs of all students.
- M & D (.565)

#### M: Uses assessment results to inform and adjust practice.

- D: Systematically gathers, analyzes, and uses all relevant data to measure student academic progress, guide instructional content and delivery methods, and provide timely feedback to both students and parents throughout the school year.
- J & K (.555)
  - Brings multiple perspectives to instruction, including the learners' personal, family, and community experiences / norms.
  - Integrates diverse language and cultures into instruction to promote the value of multilingual / multicultural perspectives
- M & G (.534)
  - Uses assessment results to inform and adjust practice.
  - $\circ$  Work results in acceptable, measurable, and appropriate student academic progress.
- M&N(.521)
  - Uses assessment results to inform and adjust practice.
  - Engages in reflective practice.
- L & K (.517)
  - Collaborates with the learning community to meet the needs of all learners and contribute to a supportive culture.
  - Integrates diverse language and cultures into instruction to promote the value of multilingual / multicultural perspectives
- D & G (.512)
  - Systematically gathers, analyzes, and uses all relevant data to measure student academic progress, guide instructional content and delivery methods, and provide timely feedback to both students and parents throughout the school year.
  - Work results in acceptable, measurable, and appropriate student academic progress
- G & B (.503)
  - Work results in acceptable, measurable, and appropriate student academic progress
  - Plans using state standards, the school's curriculum, effective strategies, resources, and data to meet the needs of all students.

## Factor Analysis (Exploratory)

Appendix Table 4 provides an exploratory factor analysis with varimax rotation on the 14 VUPS/InTASC tagged items to identify potential sub-scales in the survey data. Initial eigenvalues run from a principal component analysis suggest that the first three factors explain 44.34%, 8.31%, and 7.143% of variation across the 14 VUPS/InTASC items.

Factors loadings greater than .50 are highlighted in purple to denote factor structure. Based on the factor loadings, VEAC suggests that Factor 1 is most associated with applications of teaching (including planning, engaging, assessing, growing professionally, and reflecting), Factor 2 is most associate with teachers creating cultural, social, and positive environments for all learners, and Factor 3 is most associated with the use of technology in educational settings.

ltem Order	Item Language	InTASC	VUPS	Factor 1 (44.33%)	Factor 2 (8.31%)	Factor 3 (7.14%)
ltem A	Demonstrates an understanding of the curriculum, subject content, and the developmental needs of students by providing relevant learning experiences.	1, 2, 4	1	0.69	0.194	0.242
ltem B	Plans using state standards, the school's curriculum, effective strategies, resources, and data to meet the needs of all students.	1, 2, 7, 8	2	0.729	0.094	0.2
ltem C	Effectively engages students in learning by using a variety of instructional strategies in order to meet individual learning needs.	1, 2, 8	3	0.548	0.403	0.126
ltem D	Systematically gathers, analyzes, and uses all relevant data to measure student academic progress, guide instructional content and delivery methods, and provide timely feedback to both students and parents throughout the school year.	6, 10	4, 7	0.729	0.162	0.153
ltem E	Uses resources, routines, and procedures to provide a respectful, positive, safe, student centered environment that is conducive to learning.	3	5	0.466	0.534	0.044

#### Appendix Table 4: Varimax Rotated Factor Loadings for 14 VUPS/InTASC Items

ltem Order	ltem Language	InTASC	VUPS	Factor 1 (44.33%)	Factor 2 (8.31%)	Factor 3 (7.14%)
ltem F	Maintains a commitment to professional ethics, communicates effectively, and takes responsibility for and participates in professional growth that results in enhanced student learning.	1, 2, 9	6	0.508	0.363	0.105
ltem G	Work results in acceptable, measurable, and appropriate student academic progress.	6, 7, 8	7	0.677	0.252	0.224
ltem H	Selects technologies, informed by research, to promote learning for all students.	7, 8	3	0.277	0.269	0.834
ltem I	Integrates technology into instructional materials.	8	2, 3	0.208	0.171	0.887
ltem J	Brings multiple perspectives to instruction, including the learners' personal, family, and community experiences / norms.	1, 2, 9, 10	3	0.239	0.749	0.213
ltem K	Integrates diverse language and cultures into instruction to promote the value of multilingual / multicultural perspectives	1, 2	3, 5	0.079	0.795	0.251
ltem L	Collaborates with the learning community to meet the needs of all learners and contribute to a supportive culture.	3, 9, 10	6	0.402	0.655	0.122
Item M	Uses assessment results to inform and adjust practice.	6	4, 7	0.709	0.223	0.11
Item N	Engages in reflective practice.	9	6	0.532	0.396	0.065

# Appendix D: Statistically Significant Differences in Means

This section provides difference in means testing (2 Tailed using 95% Confidence Intervals) between observable categories. Our null hypothesis is that there is no observable difference in means between each category. Due to the large number of potential comparisons, we only report differences in means that are statistically significant when the p-value <=.05 using a 2-tailed test. We report means and p-values. Cases where failed to reject the null hypothesis are not reported.

Please note that as these observed differences are only found in our survey data and are dependent upon the category's size. We do <u>not argue that results are generalizable</u> apart from data collected. Additionally, we do not make any causal claims. Please use these results to help identify patterns for program improvement.

### **EPP Size**

#### Group A: Large EPPs compared to Small & Medium EPPs

Testing if Large EPPs' mean on all 14 VUPS/InTASC items individually are statistically different than the combination of Small and Medium EPPs. The null hypothesis is that there is no difference in means. After running 14 separate difference in means tests, the only two items that reject the null hypothesis of equivalent means are in items H and I.

- Item H: Selects technologies, informed by research, to promote learning for all students.
  - Large EPP Mean = 3.18
  - Small & Medium EPP Mean = 3.31
  - Difference Large EPP Small & Medium EPP = -0.132
  - Two Tailed Difference in Mean p-value = 0.02
- o Item I: Integrates technology into instructional materials.
  - Large EPP Mean = 3.18
  - Small & Medium EPP Mean = 3.39
  - Difference Large EPP Small & Medium EPP = -0.214
  - Two Tailed Difference in Mean p-value = 0.0001

#### Group B: Medium EPPs compared to Small & Large EPPs

Testing if Medium EPPs' mean on all 14 VUPS/InTASC items individually are statistically different than the combination of Large and Small EPPs. The null hypothesis is that there is no difference in means. After running 14 separate difference in means tests, the only item that reject the null hypothesis of equivalent means is in item C.

- Item C: Effectively engages students in learning by using a variety of instructional strategies in order to meet individual learning needs.
  - $\circ$  Medium EPP Mean = 3.46
  - Small & Large EPP Mean =3.34
  - Difference Medium EPP Small & Large EPP = .123
  - Two Tailed Difference in Mean p-value =.036

#### Group C: Small EPPs compared to Medium & Large EPPs

Testing if Small EPPs' mean on all 14 VUPS/InTASC items individually are statistically different than the combination of Medium and Large EPPs. The null hypothesis is that there is no difference in means. After running 14 separate difference in means tests, the only item that reject the null hypothesis of equivalent means is in item I.

- Item I: Integrates technology into instructional materials.
  - Small EPP Mean = 3.58
  - Medium & Large EPP Mean = 3.21
  - Difference Small EPP Medium & Large EPP = .375
  - Two Tailed Difference in Mean p-value = 0.0001

## **Public and Private**

#### Group A: Private EPPs and Public EPPs

Testing if Private EPPs' mean on all 14 VUPS/InTASC items individually are statistically different than the combination of Public EPPs. The null hypothesis is that there is no difference in means. After running 14 separate difference in means tests, the three items that reject the null hypothesis of equivalent means are in items B, H, and I.

- Item B: Plans using state standards, the school's curriculum, effective strategies, resources, and data to meet the needs of all students.
  - Private Mean = 3.36
  - Public Mean = 3.26
  - Difference Private Public = 0.10
  - Two Tailed Difference in Mean p-value = .037
- Item H: Selects technologies, informed by research, to promote learning for all students.
  - Private Mean = 3.29
  - Public Mean = 3.18
  - Difference Private Public = .112
  - Two Tailed Difference in Mean p-value = .042
- Item I: Integrates technology into instructional materials.
  - Private Mean = 3.38
  - Public Mean = 3.17
  - Difference Private Public = .206
  - Two Tailed Difference in Mean p-value = .0001

## **Endorsement Category**

In this section we only compare categories that have a large enough N (50) to perform a difference in means test.

#### Group A: Elementary vs. Others

Testing if the Elementary Endorsement mean on all 14 VUPS/InTASC items individually are statistically different than the combination of all other endorsement means. The null hypothesis is that there is no difference in means. After running 14 separate difference in means tests, we cannot reject the null hypothesis.

• Could not reject any null hypotheses

#### Group B: Special Education vs. Others

Testing if the Special Education Endorsement mean on all 14 VUPS/InTASC items individually are statistically different than the combination of all other endorsement means. The null hypothesis is that there is no difference in means. After running 14 separate difference in means tests, the three items that reject the null hypothesis of equivalent means are in items D, K, and L.

- Item D: Systematically gathers, analyzes, and uses all relevant data to measure student academic progress, guide instructional content and delivery methods, and provide timely feedback to both students and parents throughout the school year.
  - Special Education Mean = 3.30
  - Other Endorsement Mean = 3.09
  - Difference Special Education Other Endorsement = .215
  - Two Tailed Difference in Mean p-value = .011
- Item K: Integrates diverse language and cultures into instruction to promote the value of multilingual / multicultural perspectives
  - Special Education Mean = 3.22
  - Other Endorsement Mean = 3.01
  - Difference Special Education Other Endorsement = .21
  - Two Tailed Difference in Mean p-value = .028
- Item L: Collaborates with the learning community to meet the needs of all learners and contribute to a supportive culture.
  - Special Education Mean = 3.51
  - Other Endorsement Mean = 3.33
  - Difference Special Education Other Endorsement = .185
  - Two Tailed Difference in Mean p-value = .015

#### Group C: Secondary English vs. Others

Testing if the Secondary English Endorsement mean on all 14 VUPS/InTASC items individually are statistically different than the combination of all other endorsement means. The null hypothesis is that there is no difference in means. After running 14 separate difference in means tests, the two items that reject the null hypothesis of equivalent means are in items H, and M.

- Item H: Selects technologies, informed by research, to promote learning for all students.
  - English Mean = 3.40
  - $\circ$  Other Endorsement Mean = 3.20
  - Difference English Other Endorsement = .2
  - Two Tailed Difference in Mean p-value = .035
- o Item M: Uses assessment results to inform and adjust practice.
  - English Mean = 3.16
  - Other Endorsement Mean = 3.34
  - Difference English Other Endorsement = -.18
  - Two Tailed Difference in Mean p-value = .033

#### Group D: Secondary History & Social Studies vs. Others

Testing if the Secondary History & Social Studies Endorsement mean on all 14 VUPS/InTASC items individually are statistically different than the combination of all other endorsement means. The null hypothesis is that there is no difference in means. After running 14 separate difference in means tests, the two items that reject the null hypothesis of equivalent means are in items B, and F.

- Item B Plans using state standards, the school's curriculum, effective strategies, resources, and data to meet the needs of all students.
  - History & Social Studies Mean = 3.42
  - Other Endorsement Mean = 3.27
  - Difference History & Social Studies Other Endorsement = .146
  - Two Tailed Difference in Mean p-value = .031
- Item F Maintains a commitment to professional ethics, communicates effectively, and takes responsibility for and participates in professional growth that results in enhanced student learning.
  - History & Social Studies Mean = 3.71
  - Other Endorsement Mean = 3.59
  - Difference History & Social Studies Other Endorsement = .118
  - Two Tailed Difference in Mean p-value = .049

## **Endorsement Level**

0

Testing if an Undergraduate Endorsement mean on all 14 VUPS/InTASC items individually are statistically different than Graduate Endorsement means. The null hypothesis is that there is no difference in means. After running 14 separate difference in means tests, the two items that reject the null hypothesis of equivalent means are in items G, I, and M.

- Item G: Work results in acceptable, measurable, and appropriate student academic progress.
  - Undergraduate Mean = 3.35
  - Graduate = 3.20
  - Difference Undergraduate Graduate = .141
  - Two Tailed Difference in Mean p-value = .002
  - Item I: Integrates technology into instructional materials.
    - Undergraduate Mean = 3.33
      - Graduate = 3.18
      - Difference Undergraduate Graduate = .153
      - Two Tailed Difference in Mean p-value = .005
- Item M: Uses assessment results to inform and adjust practice.
  - Undergraduate Mean = 3.41
  - Graduate = 3.27
  - Difference Undergraduate Graduate = .138
  - Two Tailed Difference in Mean p-value = .005

## Appendix E: 2019-2020 VEAC Pilot Contacts

Bluefield College - Contact: Shellie Brown Christopher Newport University - Contact: Jean Filetti Ferrum College – Contact: Christine Christianson George Mason University – Contact: Adrienne Sullivan (VEAC) Hampton University - Contact: Martha Jallim Hall James Madison University – Contact: Amy Thelk (VEAC) Liberty University - Contact: Stacey L. Bose Longwood University - Contact: Gena Southall Norfolk State University – Contact: Denelle Wallace Regent University - Contact: Kurt Kreassig Shenandoah University – Contact: Mary Bowser Sweet Briar College - Contact: Meredith McCool University of Lynchburg - Contact: Holly Gould University of Richmond - Contact: Joel Hanel (VEAC) University of Virginia – Contact: Mandy Turner (VEAC)/Jillian McGraw (VEAC) Virginia Commonwealth University - Contact: Angie Wetzel (VEAC) Virginia State University – Contact: Shelly H. Bazemore/John Blackwell Virginia Wesleyan University – Contact: Bill McConnell