

BYU Educator Preparation Program 2017 – 2018 Annual Report

Aggregate Program Reports for the Ira A. Fulton College of Engineering and Technology

Prepared by the EPP Support Team August 2018

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BYU Educator Preparation Program 2017 – 2018 Annual Report

Aggregate Report for the Entire EPP

Prepared by the EPP Support Team August 2018



Dear Educator Preparation Program members:

As the 2017-2018 academic year comes to a close, the Educator Preparation Program (EPP) office and I want to express how grateful we are to work with you to prepare the next generation of educators. Teaching is a noble profession and your efforts to prepare high quality educators is a moral endeavor critical to the health and well-being of our society. A well-educated citizenry helps safeguard our liberties and the educators you prepare will be instrumental in realizing that end. Thank you for moving this sacred work forward and striving to continually improve your practice.

The EPP office and I are pleased to present the 2017-2018 EPP annual report and celebrate in your successes. We have worked hard to expand the EPP report to provide a richer and more well-rounded view of your programs and candidates. We have included data from three of the four major EPP transitions: T1) Admissions, T2) Pre-Clinical, and T3) Clinical. We will be adding data from T4) Alumni in the 2018-2019 report after collecting alumni and employer surveys.

You will notice in this report that we have added enrollment and demographic information to help characterize the candidates in our programs. We are all aware that enrollments are down, so we wanted to make transparent current enrollment, as well as attrition and graduation rates. 2017-2018 saw the launch of several EPP-wide recruitment efforts and having enrollment, attrition, and graduation data will help us measure our progress.

Another new feature of this report is the inclusion of EPP professional core data. All of our candidates take EPP professional core courses and we wanted to share how our candidates are performing in these courses. EPP professional core courses are foundational to our candidates' success in the classroom. Understanding how well they are learning these critical constructs will help us improve our programs. We hope that the EDA will provide us a new insight into the perceptions of our candidates and how they are developing Christ-like attributes so that all students learn.

Along with these new features of the report, you will find the more traditional EPP assessment data. We have included data and statistical analysis for GPA, PAES, Praxis, and RTWS and have added TSA and UTESS. We will be adding the EDA, our newly adopted dispositions assessment, to the 2018-2019 report.

We hope that this 2017-2018 report will be useful and help you reflect on candidate learning and program outcomes. We invite you to carefully review the results presented in this report and set goals for improving your programs. We look forward to the upcoming academic year and further strengthening our programs, while preparing high quality educators to meet the challenges of tomorrow's classrooms and schools. Thank you again, for your hard work and sacrifice. May the Lord continually bless your efforts.

Sincerely,

J. Aaron Popham, Director

BYU Educator Preparation Program

Executive Summary

Annual Report Mission

The 2017-2018 Annual Report is a presentation of facts and figures in each Education Major. Our goal for this report is to provide information about candidates in education programs to assist programs in identifying areas of success and places to improve. We hope this report will aid your program in achieving continuous improvement.

Data Extraction Methodology

The EPP Office and its support team began compiling data in April and continued through mid-June. We used information submitted through the mYlink system, admissions cohort data provided by individual programs, BYU AIMS data, BYU SAAS data, and the Educational Testing Service (ETS).

Data from every source was compiled into a Microsoft Excel spreadsheets, which the EPP support team either used Excel functions to input data or inserted data by hand. Every team member understood the coding process before harvesting the data, a process which was a group effort in order to reduce error.

Report Content

The report begins with an Administrative Overview for the program, which is followed by a Biographical Overview that breaks down the major by gender, socioeconomic status, marital status, age, and ethnicity.

The report provides performance statistics for each Transition, or each stage of the major. It goes through each transition and gives results for required assessments; where possible, program results are compared to EPP results. Students fall within Transition One (T1) until an admission decision is made. Transition Two (T2) is when a candidate has been accepted and is currently taking courses on BYU campus, as well as completing the first stage of their field-based learning (e.g. practicum experience). Transition Three (T3) is when a candidate is currently enrolled in their Student Teaching or Internship experience. The last section of the report is the appendix, which provides more detailed graphs and definitions of key variables to help readers understand the data.

Limitations

There were several limitations when creating this report. Deciding which transition a candidate belongs to, particularly when distinguishing between T1 and T2, was difficult. We had to hand enter a large amount of data—seven employees were involved in the process, which explains some discrepancies among the various populations. Furthermore, the mYlink data does not accurately reflect the true population due to system malfunctions.

Conclusion

We hope that this report will be useful to your program as you seek continuous improvement. This is the first time our department produced a report as detailed as this, and we thank you for your patience. There may be errors and weaknesses in presentation, so if you have any feedback or comments please let us know. You can contact us at eppsupport@byu.edu.

Best Regards,

The EPP Support Team

Samuel D. Allan, Hannalee Allen, Madalyn Wilkins, Isabella Wilkins, Cale Sieverts, Allie King, and Madeleine Dame

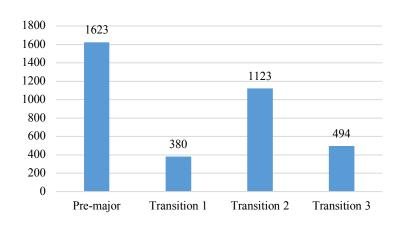
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Aggregate Report for the Entire EPP

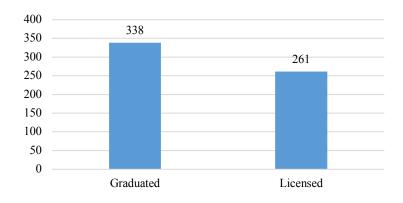
Administrative Overview

The Administrative Overview goes over the program size and various candidate make up.



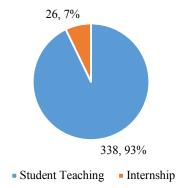
In 2017-2018, the Educator Preparation Program had 1,623 candidates enrolled in various premajors, 380 candidates in Transition 1, 1123 candidates in Transition 2, and 494 candidates in Transition 3.

Figure 1. Program Flow



Three hundred thirty-eight students graduated from Educator Preparation Programs. While many candidates pursue licensure, 77 could not be accurately identified as seeking licensure, or have yet to apply.

Figure 2. Graduated and Licensed



The accurate and available data shows that candidates prefer completing student teaching over an internship, with 93% of the candidates choosing student teaching.

Figure 3. Clinical Experiences for T3 Candidates

Aggregate Report for the Entire EPP

Biographic Overview

The Biographic Overview presents a program's biographical composition, which includes gender, socioeconomic status, marital status, age, and ethnicity.

Gender

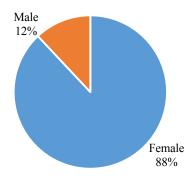


Figure 4. Gender

Socioeconomic Status

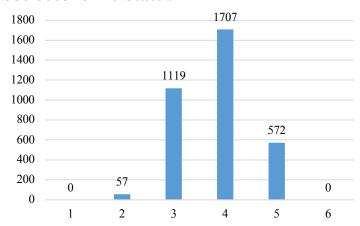


Figure 5. Socioeconomic Status Table 2.

Marital Status

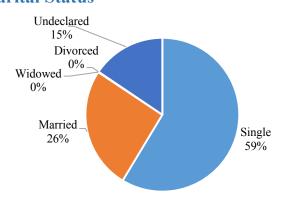


Figure 6. Marital Status

Table 1. *Gender*

Genuer		
Gender	Count	Percent of Total
Female	3185	88.01%
Male	434	11.99%
Total	3619	100.00%
Missing	0	0.00%
Grand Total	3619	100.00%

Socioeconomic Status

SES Category	Count	Percent of Total
SES 1	0	0.00%
SES 2	57	1.58%
SES 3	1119	30.92%
SES 4	1707	47.17%
SES 5	572	15.81%
SES 6	0	0.00%
Total	3455	95.47%
Missing	164	4.53%
Grand Total	3619	100.00%

Note: See Appendix A for SES Explanation

Table 3. *Marital Status*

Marital Status	Count	Percent of Total
Single	2122	58.63%
Married	930	25.70%
Widowed	1	0.03%
Divorced	3	0.08%
Undeclared	563	15.56%
Total	3619	100.00%
Missing	0	0.00%
Grand Total	3619	100.00%

Aggregate Report for the Entire EPP

Biographic Overview

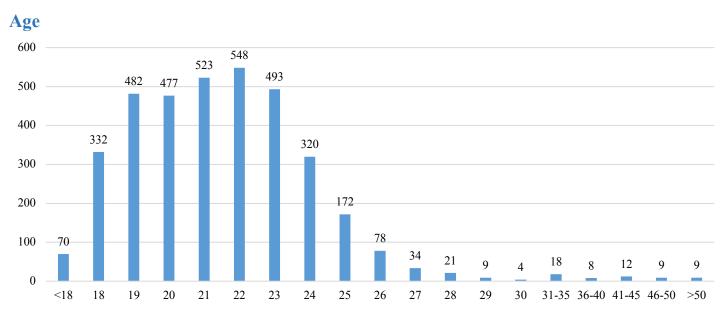


Figure 7. Age

Table 4.

Age		
Age	Count	Percent of Total
<18	70	1.93%
18	332	9.17%
19	482	13.32%
20	477	13.18%
21	523	14.45%
22	548	15.14%
23	493	13.62%
24	320	8.84%
25	172	4.75%
26	78	2.16%
27	34	0.94%
28	21	0.58%
29	9	0.25%
30	4	0.11%
31-35	18	0.50%
36-40	8	0.22%
41-45	12	0.33%
46-50	9	0.25%
>50	9	0.25%
Total	3619	100.00%
Missing	0	0.00%
Grand Total	3619	100.00%

Aggregate Report for the Entire EPP

Biographic Overview

Ethnicity

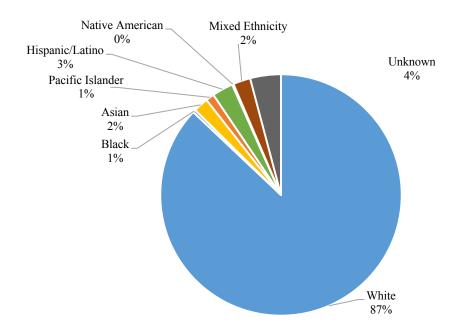


Figure 8. Ethnicity

Table 5. *Ethnicity*

Ethnicity	Count	Percent of Total
White	3150	87.04%
Black	14	0.39%
Asian	72	1.99%
Pacific Islander	41	1.13%
Hispanic/Latino	102	2.82%
Native American	7	0.19%
Mixed Ethnicity	84	2.32%
Unlisted	149	4.12%
Total	3619	100.00%
Missing	0	0.00%
Grand Total	3619	100.00%

Aggregate Report for the Entire EPP

Transition 1: Admissions

The following is the beginning of the Transition 1 section. Transition 1 is comprised of candidates who have applied for and been accepted into the major but have not begun course work. This section does not reflect the actual number of candidates admitted to program admissions cohort(s); the data population includes all active pre-majors during 2017-2018 and candidates who have transitioned from pre-major to major but have not yet started major course work at the time of data collection. This section includes results for candidates' GPA, ACT, UTESS, and TSA results.

GPA

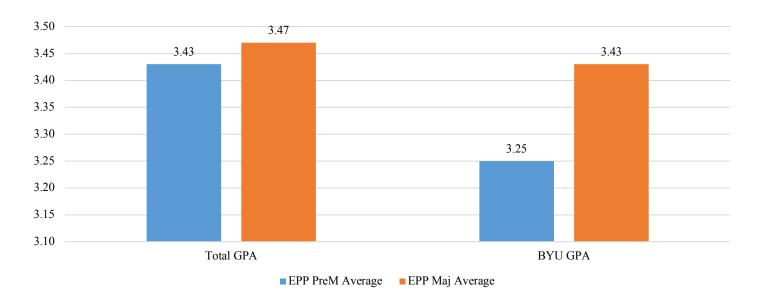


Figure 9. Total and BYU GPA at Admissions

Table 6. *T1 Total and BYU GPA*

	EPP Total GPA (PreM)	EPP Total GPA (Maj)	EPP BYU GPA (PreM)	EPP BYU GPA (Maj)
Max	4.00	4.00	4.00	4.00
Min	0.18	0.53	0.18	0.53
Average	3.43	3.47	3.25	3.43
St Dev	0.57	0.48	0.65	0.51
Count	1258	491	858	466
% of Total	77.94%	96.46%	53.16%	91.55%
Missing	356	18	756	43
% of Total	22.06%	3.54%	46.84%	8.45%

Note: Maj = Major, PreM = Pre-major

Aggregate Report for the Entire EPP

Transition 1: Admissions

ACT

This ACT section is looking only at candidates who are declared as both education pre-majors and education majors in Transition 1.

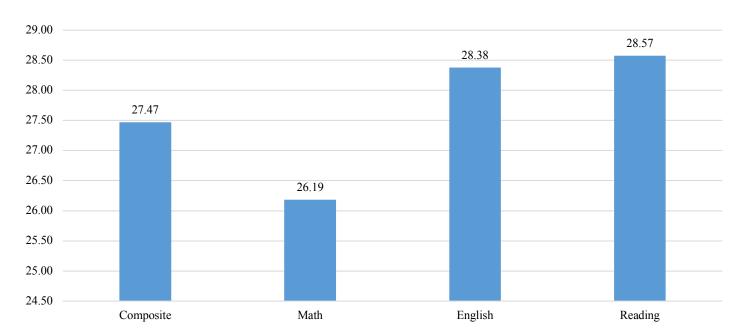


Figure 10. ACT Results

Table 7. *ACT Results*

N = 1,975	EPP Average	EPP St Dev	Min	Max
Composite	27.47	3.66	16	36
Math	26.19	3.78	15	36
English	28.38	4.74	15	36
Reading	28.57	4.66	14	36

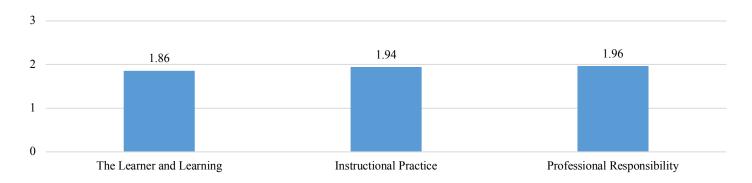
Note: The data contains SAT and ACT data combined. The ACT English score is equivalent to the SAT Language and Writing score and the ACT Reading score is equivalent to the SAT Verbal score. Data transformations for the ACT English Results could not be performed for SAT Language and Writing Results, hence the count discrepancy for English.

Aggregate Report for the Entire EPP

Transition 1: Admissions

UTESS

The Utah Teacher Education Student Survey is a survey where candidates rate themselves on how prepared they perceive themselves to be for the classroom. The graphs below represent the responses based on survey items, Utah Effective Teaching Standards (UETS) domains, and UET standards. This section shows results for the EPP as a whole.



Note: See Appendix A for complete, organized, and compiled data tables.

Figure 11. T1 UTESS by UETS Domains

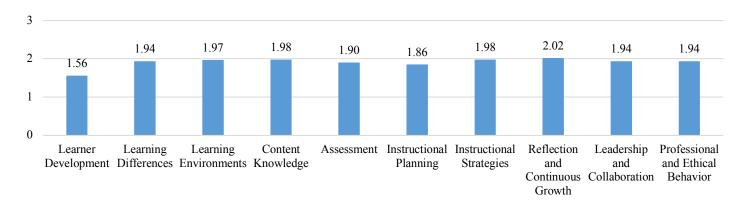


Figure 12. T1 UTESS by UET Standards

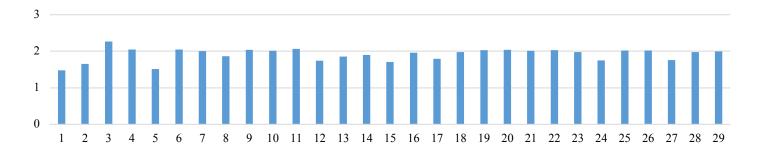


Figure 13. T1 UTESS by Items

Aggregate Report for the Entire EPP

Transition 1: Admissions

TSA

This section presents the Technology Skills Assessment results which candidates take as part of their admissions application.

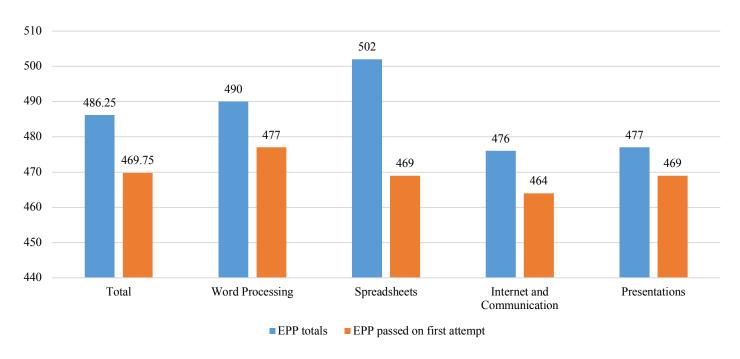


Figure 14. T1 TSA Results of Candidates Passing on the First Attempt.

Table 8. T1 TSA Results of Candidates Passing on the First Attempt

	EPP totals	EPP passed on first attempt	EPP percentage
Total	486.25	469.75	96.61%
Word Processing	490	477	97.35%
Spreadsheets	502	469	93.43%
Internet and Communication	476	464	97.48%
Presentations	477	469	98.32%

Aggregate Report for the Entire EPP

Transition 2: Preclinical

This section is the beginning of Transition 2. Transition 2 is comprised of candidates who are in an education program and taking classes within their major.

GPA

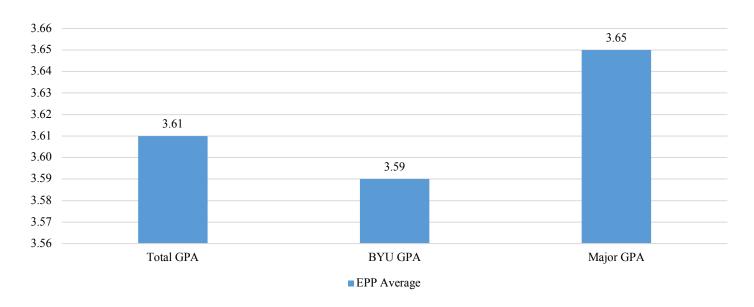


Figure 15. T2 Total, BYU, and Major GPA

Table 9. *T2 Total, BYU, and Major GPA*

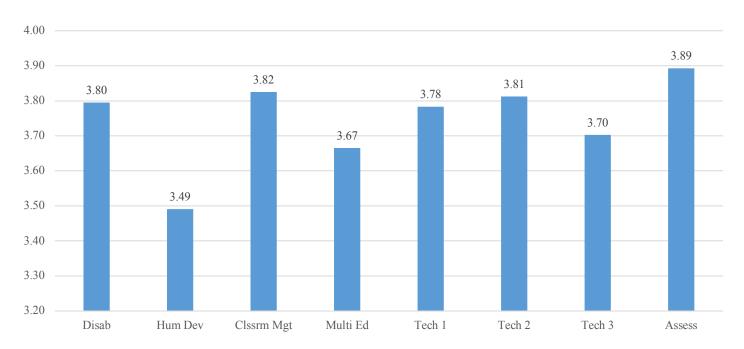
	EPP Total GPA	EPP BYU GPA	EPP Major GPA
Max	4.00	4.00	4.00
Min	1.77	1.36	1.00
Average	3.61	3.59	3.65
St Dev	0.30	0.33	0.31
Count	1099	1099	1094
% of Total	100.00%	100.00%	99.55%
Missing	0	0	5
% of Total	0.00%	0.00%	0.45%

Aggregate Report for the Entire EPP

Transition 2: Preclinical

Core GPA

This section presents candidates' GPA for the six different core classes that all education candidates must take, regardless of emphasis, in order to graduate.



Note: See Appendix A for more detail on Core GPA

Figure 16. EPP Core GPA.

Table 10. *EPP Core GPA*

	Disab	Hum Dev	Clssrm Mgt	Multi Ed	Tech 1	Tech 2	Tech 3	Assess
Min	0	0	0	0	0	0	0.7	0
Max	4	4	4	4	4	4	4	4
Average	3.80	3.49	3.82	3.67	3.78	3.81	3.70	3.89
St Dev	0.43	0.75	0.52	0.67	0.71	0.52	0.62	0.40
Count	327	535	331	398	316	239	42	253

Note: Disab = Disabilities, Hum Dev = Human Development, Clssrm Mgt = Classroom Management, Multi Ed = Multicultural

Education, Tech 1 = IP&T 371, Tech 2 = IP&T 372, Tech 3 = IP&T 373, Assess = Assessment

Note 2: See Appendix A for more detail on Core GPA

Aggregate Report for the Entire EPP

Transition 2: Preclinical

PAES US

This section presents the Utah Teacher Candidate Performance Assessment and Evaluation System (PAES), which measures candidates' performance during their clinical experiences. The results are displayed by items, UTES domains, and UET standards.

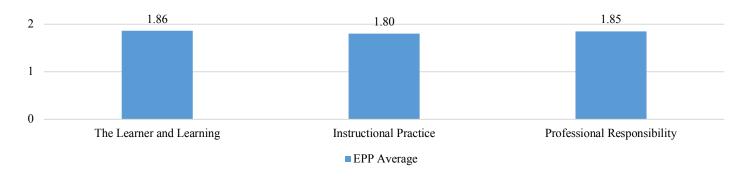


Figure 17. T2 PAES US by UETS Domains

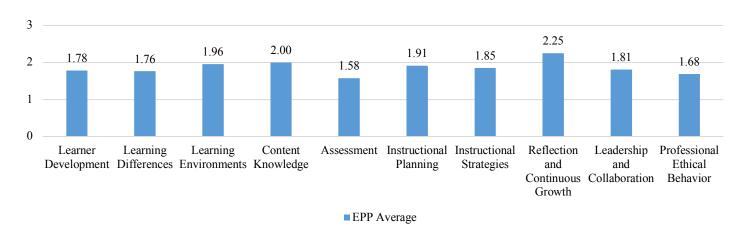


Figure 18. T2 PAES US by UET Standards

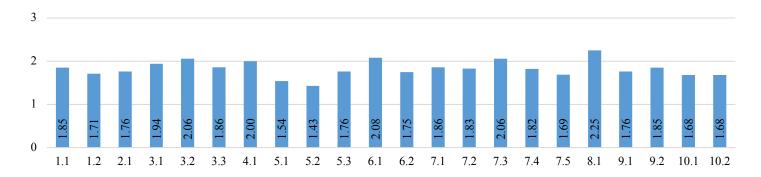


Figure 19. T2 PAES US by Items

Aggregate Report for the Entire EPP

Transition 3: Clinical

The following is the beginning of Transition 3. Transition 3 includes candidates who are finished with course work and are engaged in their capstone clinical teaching experience.

GPA

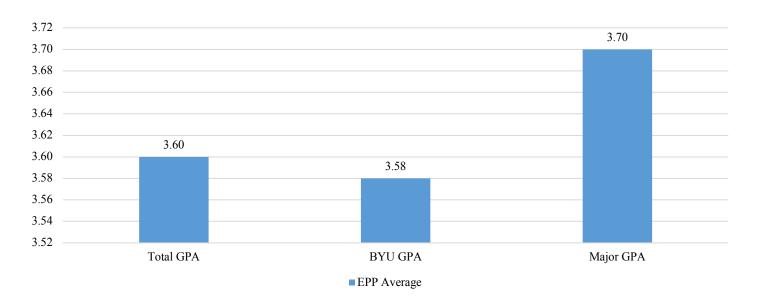


Figure 20. T3 Total, BYU, and Major GPA

Table 11.

T3 Total, BYU, and Major GPA

	EPP Total GPA	EPP BYU GPA	EPP Major GPA
Max	4.00	4.00	4.00
Min	2.30	2.12	2.70
Average	3.60	3.58	3.70
St Dev	0.29	0.31	0.26
Count	492	492	489
% of Total	100.00%	100.00%	99.39%
Missing	0	0	3
% of Total	0.00%	0.00%	0.61%

Aggregate Report for the Entire EPP

Transition 3: Clinical

PAES US

This section presents university supervisor PAES results. They are organized by items, UETS domains, and UET standards.

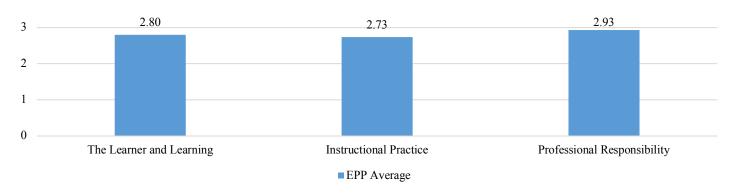


Figure 21. T3 PAES US by UETS Domains

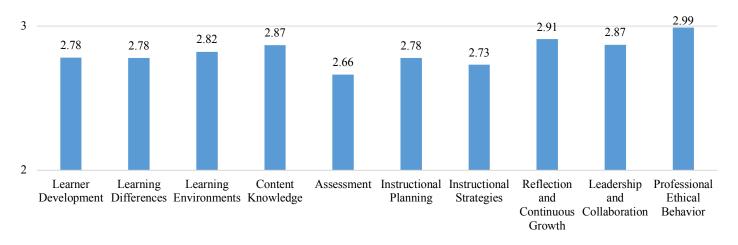


Figure 22. T3 PAES US by UET Standards

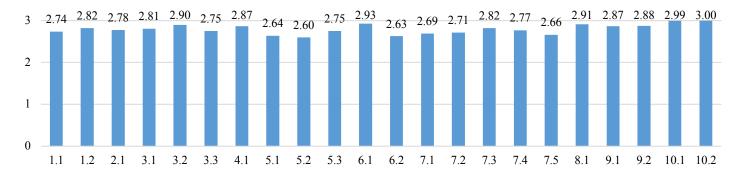


Figure 23. T3 PAES US by Items

Aggregate Report for the Entire EPP

Transition 3: Clinical

PAES MT

This section presents mentor teacher PAES results. They are organized by items, UETS domains, and UET standards.

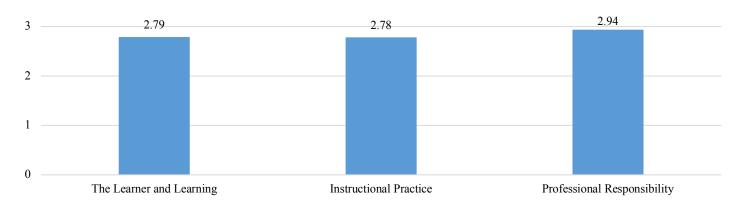


Figure 24. T3 PAES MT by UETS Domains

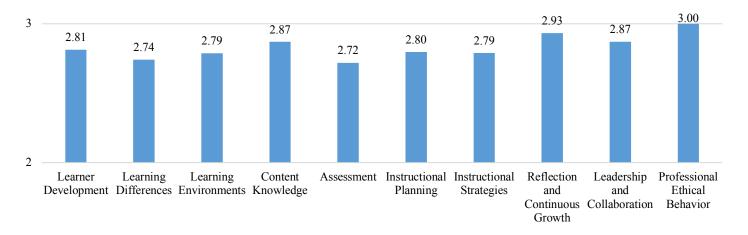


Figure 25. T3 PAES MT by UET Standards

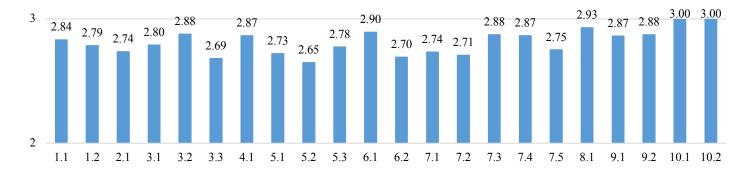


Figure 26. T3 PAES MT by Items

Aggregate Report for the Entire EPP

Transition 3: Clinical

RTWS

This section presents the results of the Renaissance Teacher Work Sample (RTWS), which assesses teacher candidates' ability to facilitate their students' learning by integrating the principles of the 7 RTWS sections during their clinical experience.

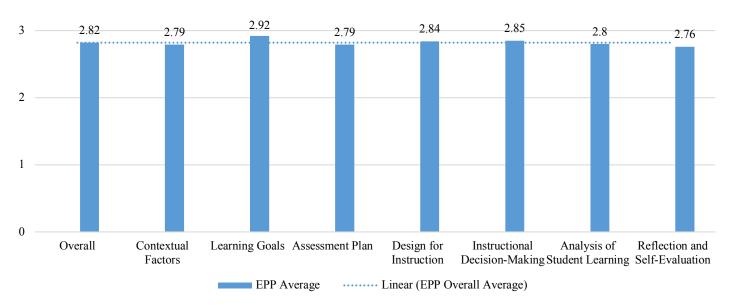


Figure 27. T3 RTWS

Table 12. *T3 RTWS*

Standard	EPP Average	EPP St Dev	N
Overall	2.82	0.15	454
Contextual Factors	2.79	0.05	454
Learning Goals	2.92	0.20	454
Assessment Plan	2.79	0.27	454
Design for Instruction	2.84	0.21	454
Instructional Decision-Making	2.85	0.31	454
Analysis of Student Learning	2.80	0.28	454
Reflection and Self-Evaluation	2.76	0.31	454

Aggregate Report for the Entire EPP

Transition 3: Clinical

UTESS

This section presents the results of UTESS for candidates enrolled in their capstone clinical experience. The graphs are organized by items, UTES domains, and UET standards.



Figure 28. T3 UTESS by UETS Domains

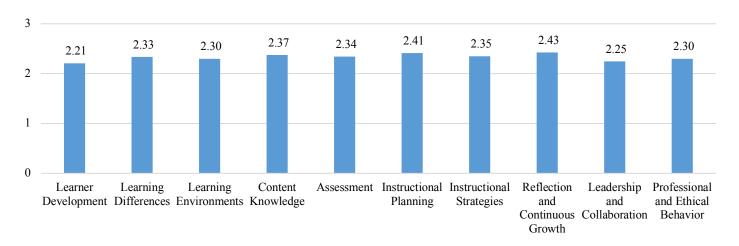


Figure 29. T3 UTESS by UET Standards

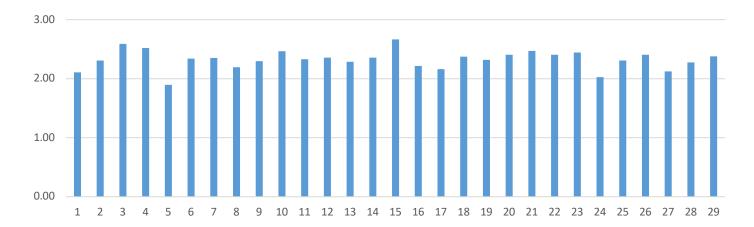


Figure 30. T3 UTESS by Items

Aggregate Report for the Entire EPP

Transition 3: Clinical

Praxis

This section reports the results of candidates' performance on the Praxis test. While candidates must pass a Praxis test to receive licensure and be classified as highly qualified, because the content and passing score for each Praxis test varies by program, these data could not be shown in an aggregated form.

Aggregate Report for the Entire EPP

Appendix A

Supporting Statistics

Cleaned and organized data, which was used to create the figures in the report, are presented below. Population totals, observed count sizes, minimum values, maximum values, means, standard deviations, and percentages of the total are provided. The population size varies by as much as 11.49% due to 1) whether candidates who withdrew from the EPP are included in the results, 2) several candidates being listed as having both the major and pre-major, and 3) differences in using Microsoft Excel by EPP support personnel. Since the data was collected by hand, inconsistencies exist.

Aggregate Report for the Entire EPP

Appendix A

Administrative Overview

Table A.1. *Program Flow*

Transition	Pre-major	T1	T2	T3	Grand Total
N	1623	380	1123	494	3620
Count	1516	332	1120	494	3510
% Total	43.19%	9.17%	31.91%	14.07%	100.00%
Withdrawal	107	48	3	0	158
Withdrawal %	6.59%	12.63%	0.27%	0.00%	18.07%
Grand Total	44.83%	10.50%	31.02%	13.65%	100.00%

Table A.2.

Graduated and Licensed

	Graduated	Licensed
Count	338	261
% of T3	52.72%	68.28%
Total T3	495	495

Table A.3. *Clinical Experiences for T3 Candidates*

	Student Teaching	Internship	Missing	Total
Count	338	26	0	364
Percent of Total	92.86%	7.14%	0	100.00%

Transition 1

UTESS

Table A.4.

T1 UTESS by UETS Domains

Domain	EPP Average	EPP St Dev	N
The Learner and Learning	1.86	0.67	430
Instructional Practice	1.94	0.68	430
Professional Responsibility	1.96	0.70	430

Appendix A

Table A.5.

T1 UTESS by UET Standards

Standard	EPP Average	EPP St Dev	N
Learner Development	1.56	0.83	430
Learning Differences	1.94	0.73	430
Learning Environments	1.97	0.75	430
Content Knowledge	1.98	0.71	430
Assessment	1.90	0.78	430
Instructional Planning	1.86	0.78	430
Instructional Strategies	1.98	0.65	430
Reflection and Continuous Growth	2.02	0.73	430
Leadership and Collaboration	1.94	0.74	430
Professional and Ethical Behavior	1.94	0.74	430

Table A.6.

T1 UTESS by Items

Item	EPP Average	EPP St Dev	N
1	1.47	0.88	430
2	1.66	0.89	430
3	2.27	0.82	430
4	2.04	0.88	430
5	1.52	0.92	430
6	2.05	0.82	430
7	2.00	0.86	430
8	1.86	0.83	430
9	2.03	0.81	430
10	2.01	0.79	430
11	2.07	0.82	430
12	1.74	0.90	430
13	1.85	0.86	430
14	1.90	0.87	430
15	1.71	0.98	430
16	1.96	0.83	430
17	1.79	0.85	430
18	1.98	0.79	430
19	2.03	0.78	430
20	2.04	0.84	430
21	2.01	0.89	430
22	2.03	0.79	430
23	1.98	0.80	430
24	1.75	0.87	430
25	2.02	0.83	430
26	2.02	0.86	430

Appendix A				
27	1.76	0.86	430	
28	1.98	0.85	430	
29	1.99	0.83	430	
Overall	1.91	0.67	430	

Transition 2

PAES

Table A.7.

T2 PAES US by UETS Domains

Domain	EPP Average	EPP St Dev	N
The Learner and Learning	1.86	0.50	532
Instructional Practice	1.80	0.49	532
Professional Responsibility	1.85	0.41	532

Table A.8.

T2 PAES US by UET Standards

Standard	EPP Average	EPP St Dev	N
Learner Development	1.78	0.49	532
Learning Differences	1.76	0.59	532
Learning Environments	1.96	0.59	532
Content Knowledge	2.00	0.65	532
Assessment	1.58	0.58	532
Instructional Planning	1.91	0.58	532
Instructional Strategies	1.85	0.49	532
Reflection and Continuous Growth	2.25	0.68	532
Leadership and Collaboration	1.81	0.55	532
Professional Ethical Behavior	1.68	0.47	532

Table A.9.

T2 PAES US by Items

Item	EPP Average	EPP St Dev	N
1.1	1.85	0.54	532
1.2	1.71	0.64	532
2.1	1.76	0.59	532
3.1	1.94	0.60	532
3.2	2.06	0.73	532
3.3	1.86	0.66	532
4.1	2.00	0.65	532
5.1	1.54	0.63	532

	Appendix A				
5.2	1.43	0.71	532		
5.3	1.76	0.68	532		
6.1	2.08	0.65	532		
6.2	1.75	0.74	532		
7.1	1.86	0.53	532		
7.2	1.83	0.67	532		
7.3	2.06	0.66	532		
7.4	1.82	0.67	532		
7.5	1.69	0.61	532		
8.1	2.25	0.68	532		
9.1	1.76	0.68	532		
9.2	1.85	0.56	532		
10.1	1.68	0.00	532		
10.2	1.68	0.00	532		

Transition 3

PAES US

Table A.10.

T3 PAES US by UETS Domains

Domain	EPP Average	EPP St Dev	N
The Learner and Learning	2.80	0.22	496
Instructional Practice	2.73	0.22	496
Professional Responsibility	2.93	0.14	496

Table A.11.

T3 PAES US by UET Standards

15 THES CE OF CET STURBER OF			
Standard	EPP Average	EPP St Dev	N
Learner Development	2.78	0.30	496
Learning Differences	2.78	0.42	496
Learning Environments	2.82	0.27	496
Content Knowledge	2.87	0.34	496
Assessment	2.66	0.35	496
Instructional Planning	2.78	0.29	496
Instructional Strategies	2.73	0.27	496
Reflection and Continuous Growth	2.91	0.29	496
Leadership and Collaboration	2.87	0.28	496
Professional Ethical Behavior	2.99	0.07	496

Appendix A

Table A.12.

T3 PAES US by Items

Item	EPP Average	EPP St Dev	N
1.1	2.74	0.44	496
1.2	2.82	0.38	496
2.1	2.78	0.42	496
3.1	2.81	0.39	496
3.2	2.90	0.31	496
3.3	2.75	0.44	496
4.1	2.87	0.34	496
5.1	2.64	0.48	496
5.2	2.60	0.50	496
5.3	2.75	0.44	496
6.1	2.93	0.26	496
6.2	2.63	0.50	496
7.1	2.69	0.47	496
7.2	2.71	0.47	496
7.3	2.82	0.39	496
7.4	2.77	0.45	496
7.5	2.66	0.49	496
8.1	2.91	0.29	496
9.1	2.87	0.34	496
9.2	2.88	0.33	496
10.1	2.99	0.07	496
10.2	3.00	0.00	496

PAES MT

Table A.13.

T3 PAES MT by UETS Domains

15 1 HES MIT by CETS Bomains			
Domain	EPP Average	EPP St Dev	N
The Learner and Learning	2.79	0.22	514
Instructional Practice	2.78	0.20	514
Professional Responsibility	2.94	0.13	514

Table A.14.

T3 PAES MT by UET Standards

Standard	EPP Average	EPP St Dev	N
Learner Development	2.81	0.29	514
Learning Differences	2.74	0.44	514
Learning Environments	2.79	0.29	514
Content Knowledge	2.87	0.35	514

Appendix A				
Assessment 2.72 0.32 514				
Instructional Planning	2.80	0.29	514	
Instructional Strategies	2.79	0.23	514	
Reflection and Continuous Growth	2.93	0.25	514	
Leadership and Collaboration	2.87	0.28	514	
Professional Ethical Behavior	3.00	0.00	514	

Table A.15.

T3 PAES MT by Items

Item	EPP Average	EPP St Dev	N
1.1	2.84	0.38	514
1.2	2.79	0.42	514
2.1	2.74	0.44	514
3.1	2.80	0.40	514
3.2	2.88	0.33	514
3.3	2.69	0.47	514
4.1	2.87	0.35	514
5.1	2.73	0.45	514
5.2	2.65	0.48	514
5.3	2.78	0.43	514
6.1	2.90	0.32	514
6.2	2.70	0.47	514
7.1	2.74	0.44	514
7.2	2.71	0.47	514
7.3	2.88	0.33	514
7.4	2.87	0.34	514
7.5	2.75	0.45	514
8.1	2.93	0.25	514
9.1	2.87	0.36	514
9.2	2.88	0.34	514
10.1	3.00	0.00	514
10.2	3.00	0.00	514

UTESS

Table A.16.

T3 UTESS by UETS Domains

Domain	EPP Average	EPP St Dev	N
The Learner and Learning	2.29	0.40	353
Instructional Practice	2.36	0.36	353
Professional Responsibility	2.33	0.37	353

Appendix A

Table A.17. T3 UTESS by UET Standards

Standard	EPP Average	EPP St Dev	N
Learner Development	2.21	0.83	353
Learning Differences	2.33	0.73	353
Learning Environments	2.30	0.75	353
Content Knowledge	2.37	0.71	353
Assessment	2.34	0.78	353
Instructional Planning	2.41	0.78	353
Instructional Strategies	2.35	0.65	353
Reflection and Continuous Growth	2.43	0.73	353
Leadership and Collaboration	2.25	0.74	353
Professional and Ethical Behavior	2.30	0.74	353

Table A.18. T3 UTESS by Items

Item	EPP Average	EPP St Dev	N
1	2.11	0.65	353
2	2.31	0.65	353
3	2.59	0.57	353
4	2.52	0.59	353
5	1.90	0.76	353
6	2.34	0.56	353
7	2.35	0.59	353
8	2.20	0.59	353
9	2.30	0.59	353
10	2.46	0.53	353
11	2.33	0.56	353
12	2.36	0.60	353
13	2.29	0.59	353
14	2.35	0.59	353
15	2.67	0.53	353
16	2.22	0.57	353
17	2.16	0.59	353
18	2.37	0.53	353
19	2.32	0.58	353
20	2.41	0.56	353
21	2.47	0.57	353
22	2.41	0.56	353
23	2.44	0.54	353
24	2.03	0.66	353

	<u> </u>			
	Appendix A			
25	2.31	0.56	353	
26	2.41	0.56	353	
27	2.12	0.61	353	
28	2.27	0.60	353	
29	2.38	0.55 0.35	353	
Overall	2.32	0.35	353	



BYU Educator Preparation Program 2017 – 2018 Annual Report

Report for Technology and Engineering Studies - Teaching (BS)

Prepared by the EPP Support Team
July 2018

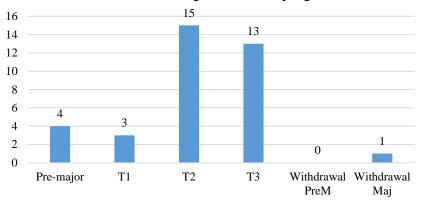
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Technology and Engineering Studies - Teaching

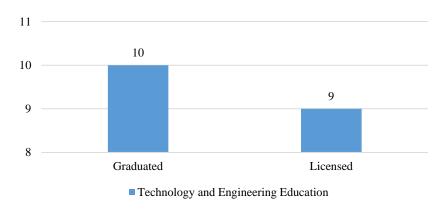
Administrative Overview

The Administrative Overview goes over the program size and various candidate make up.



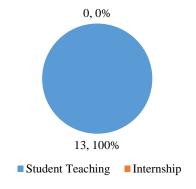
In 2017-2018, the Technology and Engineering Studies - Teaching program had four candidates enrolled in its premajor, three candidates in Transition 1, 15 candidates in Transition 2, and 13 candidates in Transition 3.

Figure 1. Program Flow



Ten students graduated from Technology and Engineering Studies - Teaching. While many candidates pursue licensure, one could not be accurately identified as seeking licensure, or have yet to apply.

Figure 2. Graduated and Licensed



candidates prefer completing student teaching over an internship, with 100% of the candidates choosing student teaching.

The accurate and available data shows that

Figure 3. Clinical Experiences for T3 Candidates

Technology and Engineering Studies - Teaching

Biographic Overview

The Biographic Overview presents a program's biographical composition, which includes gender, socioeconomic status, marital status, age, and ethnicity.

Gender

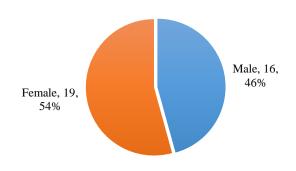


Figure 4. Gender Table 1. Gender

Gender	Count	Percent of Total
Female	19	52.29%
Male	16	45.71%
Total	35	100.00%
Missing	0	0.00%
Grand Total	35	100.00%

Socioeconomic Status

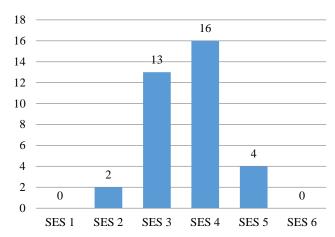


Figure 5. Socioeconomic Status

Table 2. *Socioeconomic Status*

SES Category	Count	Percent of Total
SES 1	0	0.00%
SES 2	2	5.71
SES 3	13	37.14
SES 4	16	45.71
SES 5	4	11.43
SES 6	0	0.00%
Total	35	100.00%
Missing	0	0.00%
Grand Total	35	100.00%

Note: See Appendix A for SES explanation

Marital Status

Single, 16, 46% Married, 19, 54%

Figure 6. Marital Status

Table 3. *Marital Status*

Marital Status	Count	Percent of Total
Single	16	45.71
Married	19	52.29
Total	35	100.00%
Missing	0	0.00%
Grand Total	35	100.00%

Technology and Engineering Studies - Teaching

Biographic Overview

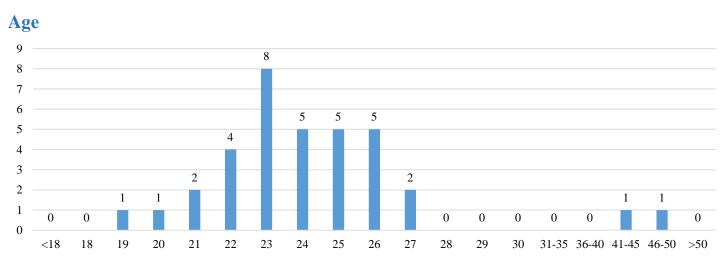


Figure 7. Age

Table 4.

Age		
Age	Count	Percent of Total
<18	0	0.00%
18	0	0.00%
19	1	9.09%
20	1	18.18%
21	2	9.09%
22	4	9.09%
23	8	27.27%
24	5	9.09%
25	5	9.09%
26	5	9.09%
27	2	0.00%
28	0	0.00%
29	0	0.00%
30	0	0.00%
31-35	0	0.00%
36-40	0	0.00%
41-45	1	0.00%
46-50	1	0.00%
>50	0	0.00%
Total	35	100.00%
Missing	0	0.00%
Grand Total	35	100.00%

Technology and Engineering Studies - Teaching

Biographic Overview

Ethnicity

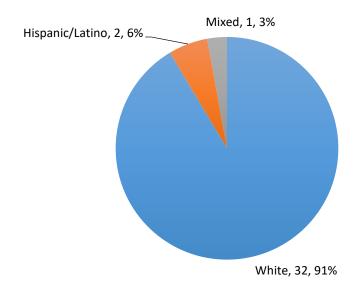


Figure 8. Ethnicity

Table 5. *Ethnicity*

Ethnicity	Count	Percent of Total
White	32	91.43%
Hispanic/Latino	2	5.71%
Mixed	1	2.86%
Total	35	100.00%
Missing	0	0.00%
Grand Total	35	100.00%

Technology and Engineering Studies - Teaching

Transition 1: Admissions

The following is the beginning of the Transition 1 section. Transition 1 is comprised of candidates who have applied for and been accepted into the major but have not begun course work. This section does not reflect the actual number of candidates admitted to program admissions cohort(s); the data population includes all active pre-majors during 2017-2018 and candidates who have transitioned from pre-major to major but have not yet started major course work at the time of data collection. This section includes results for candidates' GPA, ACT, UTESS, and TSA results.

GPA

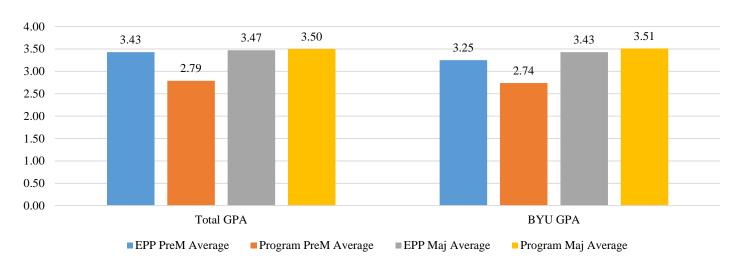


Figure 9. Total and BYU GPA at Admissions

Table 6. *T1 Total and BYU GPA*

	EPP Total GPA (PreM)	Program Total GPA (PreM)	EPP Total GPA (Maj)	Program Total GPA (Maj)	EPP BYU GPA (PreM)	Program BYU GPA (PreM)	EPP BYU GPA (Maj)	Program BYU GPA (Maj)
Max	4.00	2.99	4.00	3.75	4.00	2.95	4.00	3.78
Min	0.18	2.38	0.53	3.28	0.18	2.20	0.53	3.28
Average	3.43	2.79	3.47	3.50	3.25	2.74	3.43	3.51
St Dev	0.57	0.28	0.48	0.24	0.65	0.36	0.51	0.25
Count	1258	4	491	3	858	4	466	3
% of Total	77.94%	100.00%	96.46%	100.00%	53.16%	100.00%	91.55%	100.00%
Missing	356	0	18	0	756	0	43	0
% of Total	22.06%	0.00%	3.54%	0.00%	46.84%	0.00%	8.45%	0.00%

Note: Maj = Major, PreM = Pre-major

Technology and Engineering Studies - Teaching

Transition 1: Admissions

ACT

This ACT section is looking only at candidates who are declared as education pre-majors.

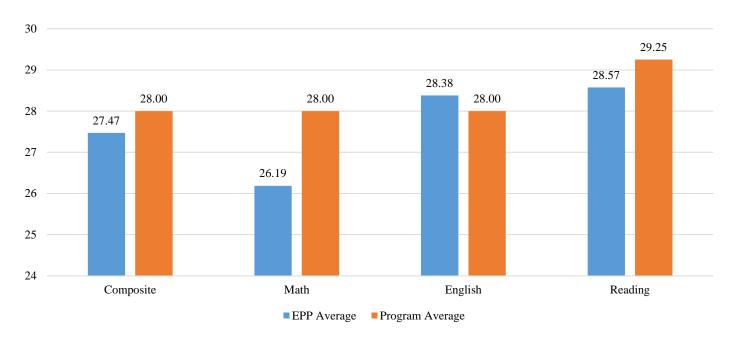


Figure 10. Pre-major ACT Results

Table 7. *Pre-major ACT Results*

ACT Score	EPP Average	Program Average	EPP St Dev	Program St Dev	Program Min	Program Max	Count	% of Total
Composite	27.47	28.00	3.66	1.63	26	30	4	100.00%
Math	26.19	28.00	3.78	2.58	25	31	4	100.00%
English	28.38	28.00	4.74	2.00	26	30	3	75.00%
Reading	28.57	29.25	4.66	2.63	27	33	4	100.00%

Note: The data contains SAT and ACT data combined. The ACT English score is equivalent to the SAT Language and Writing score and the ACT Reading score is equivalent to the SAT Verbal score. Data transformations for the ACT English Results could not be performed for SAT Language and Writing Results, hence the count discrepancy for English.

Technology and Engineering Studies - Teaching

Transition 1: Admissions

This ACT section includes candidates who are accepted into the Education program but have not yet taken major classes.

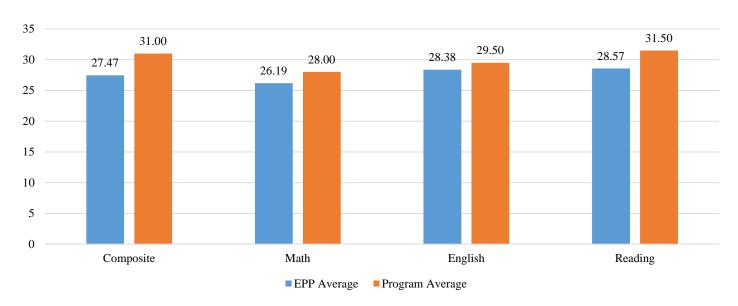


Figure 11. Major ACT Results

Table 8. *Major ACT Results*

ACT Score	EPP	Program	EPP St Dev	Program St Dev	Program Min	Program Max	Count	% of Total
Composite	Average 27.47	Average 31.00	3.66	7.07	26	36	2	100.00%
Math	26.19	28.00	3.78	11.31	20	36	2	100.00%
English	28.38	29.50	4.74	9.19	23	36	2	100.00%
Reading	28.57	31.50	4.66	6.36	27	36	2	100.00%

Note: The data contains SAT and ACT data combined. The ACT English score is equivalent to the SAT Language and Writing score and the ACT Reading score is equivalent to the SAT Verbal score. Data transformations for the ACT English Results could not be performed for SAT Language and Writing Results, hence the count discrepancy for English.

Technology and Engineering Studies - Teaching

Transition 1: Admissions

UTESS

The Utah Teacher Education Student Survey is a survey where candidates rate themselves on how prepared they perceive themselves to be for the classroom. The graphs below represent the responses based on survey items, Utah Effective Teaching Standards (UETS) domains, and UET standards. This section compares the various Results for each of the UTESS within the program and the EPP as a whole.

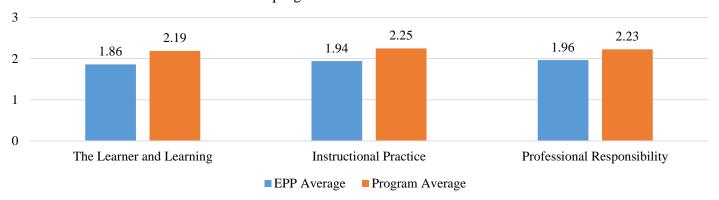


Figure 12. T1 UTESS by UETS Domains

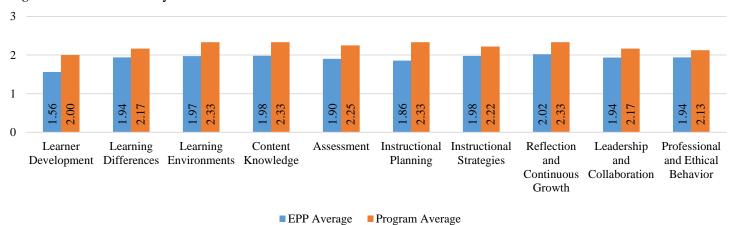
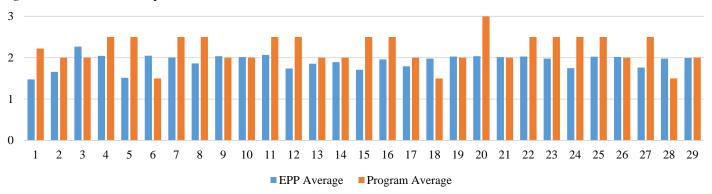


Figure 13. T1 UTESS by UET Standards



Note: See Appendix A for complete, organized, and compiled data tables.

Figure 14. T1 UTESS by Items

Technology and Engineering Studies - Teaching

Transition 1: Admissions

TSA

This section presents the Technology Skills Assessment results, which candidates take as part of their admissions application.

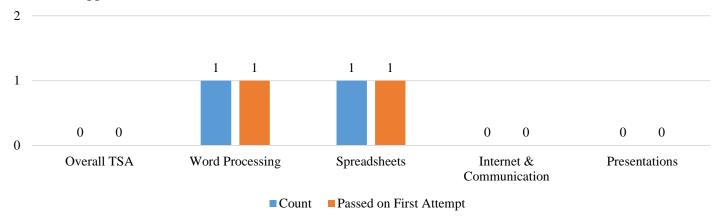


Figure 15. T1 TSA Results of Candidates Passing on the First Attempt.

Table 9.

T1 TSA Results of Candidates Passing on the First Attempt

N = 7	Count	Percent of Total	Passed on First Attempt	Percent of Passing on First Attempt	EPP Average to pass on first attempt
Overall TSA	0	0.00%	0	-	86.28%
Word Processing	1	14.29%	1	100.00%	95.53%
Spreadsheets	1	14.29%	1	100.00%	92.95%
Internet & Communication	0	0.00%	0	-	98.29%
Presentations	0	0.00%	0	-	97.41%

Technology and Engineering Studies - Teaching

Transition 2: Preclinical

This section is the beginning of Transition 2. Transition 2 is comprised of candidates who are in the education program and taking classes within their major.

GPA

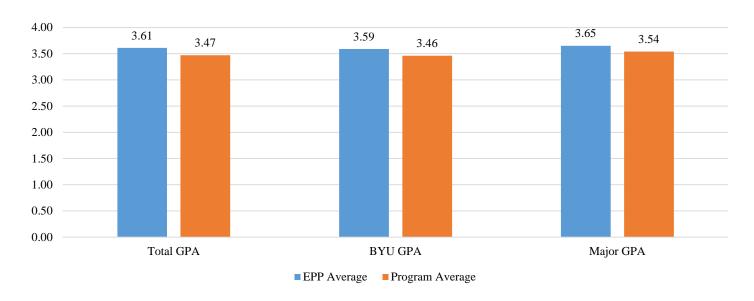


Figure 16. T2 Total, BYU, and Major GPA

Table 10. *T2 Total, BYU, and Major GPA*

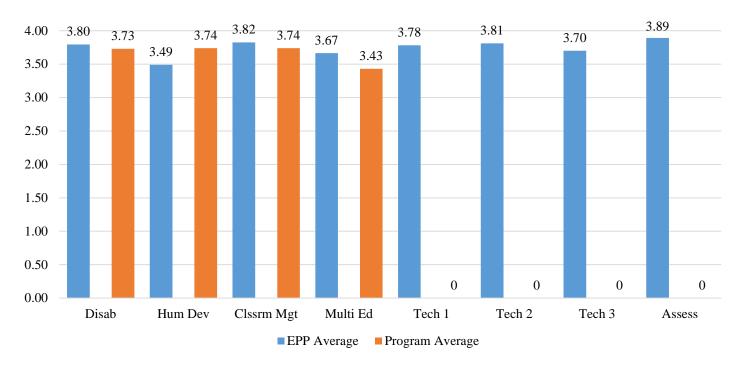
	EPP Total GPA	Program Total GPA	EPP BYU GPA	Program BYU GPA	EPP Major GPA	Program Major GPA
Max	4.00	3.94	4.00	3.94	4.00	4.00
Min	1.77	3.07	1.36	3.07	1.00	3.00
Average	3.61	3.47	3.59	3.46	3.65	3.54
St Dev	0.30	0.27	0.33	0.27	0.31	0.31
Count	1099	14.00	1099	14	1094	14
% of Total	100.00%	100.00%	100.00%	100.00%	99.55%	100.00%
Missing	0	0	0	0	5	0
% of Total	0.00%	0.00%	0.00%	0.00%	0.45%	0.00%

Technology and Engineering Studies - Teaching

Transition 2: Preclinical

Core GPA

This section presents candidates' GPA for the six different core classes that all education candidates must take, regardless of emphasis, in order to graduate.



Note: See Appendix A for more detail on Core GPA

Figure 17. EPP Core GPA.

Table 11. *EPP Core GPA*

	Disab	Hum Dev	Clssrm Mgt	Multi Ed	Tech 1	Tech 2	Tech 3	Assess
EPP Average	3.80	3.49	3.82	3.67	3.78	3.81	3.70	3.89
Program Average	3.73	3.74	3.74	3.43	-	0	-	-
Course Count	6	10	10	8	-	1	-	-
St Dev	0.43	0.41	0.41	0.46	-	0	-	-

Note: Disab = Disabilities, Hum Dev = Human Development, Clssrm Mgt = Classroom Management, Multi Ed = Multicultural Education, Tech 1 = IP&T 371, Tech 2 = IP&T 372, Tech 3 = IP&T 373, Assess = Assessment Note 2: See Appendix A for more detail on Core GPA

Technology and Engineering Studies - Teaching

Transition 2: Preclinical

PAES US

This section presents the Utah Teacher Candidate Performance Assessment and Evaluation System (PAES), which measures candidates' performance during their clinical experiences. The results are displayed by items, UTES domains, and UET standards.

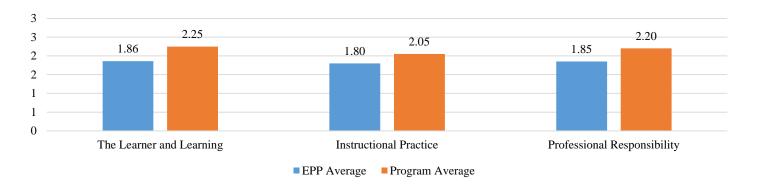


Figure 18. T2 PAES US by UETS Domains

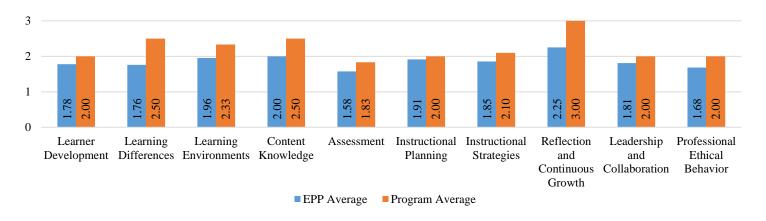


Figure 19. T2 PAES US by UET Standards

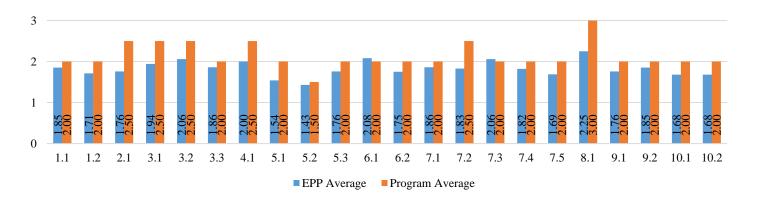


Figure 20. T2 PAES US by Items

Technology and Engineering Studies - Teaching

Transition 3: Clinical

The following is the beginning of Transition 3. Transition 3 includes candidates who are finished with course work and are engaged in their capstone clinical teaching experience.

GPA

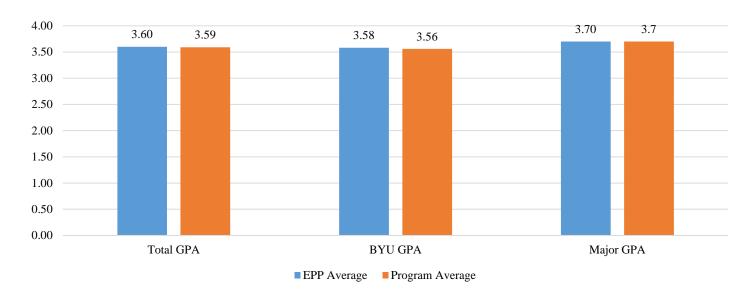


Figure 21. T3 Total, BYU, and Major GPA

Table 12. *T3 Total, BYU, and Major GPA*

	EPP Total GPA	Program Total GPA	EPP BYU GPA	Program BYU GPA	EPP Major GPA	Program Major GPA
Max	4.00	3.96	4.00	3.96	4.00	3.96
Min	2.30	3.06	2.12	3.06	2.70	3.39
Average	3.60	3.59	3.58	3.56	3.70	3.70
St Dev	0.29	0.28	0.31	0.29	0.26	0.18
Count	492	13	492	13	489	13
% of Total	100.00%	100.00%	100.00%	100.00%	99.39%	100.00%
Missing	0	0.00	0	0	3	0
% of Total	0.00%	0.00%	0.00%	0.00%	0.61%	0.00%

Technology and Engineering Studies - Teaching

Transition 3: Clinical

PAES US

This section presents university supervisor PAES results. They are organized by items, UETS domains, and UET standards.

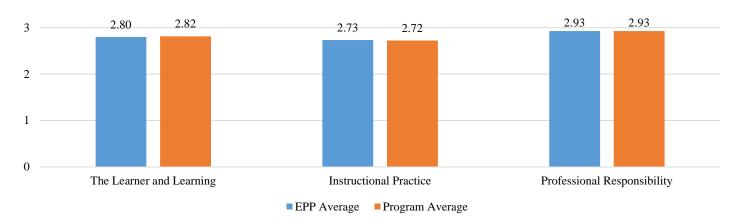


Figure 22. T2 PAES US by UETS Domains

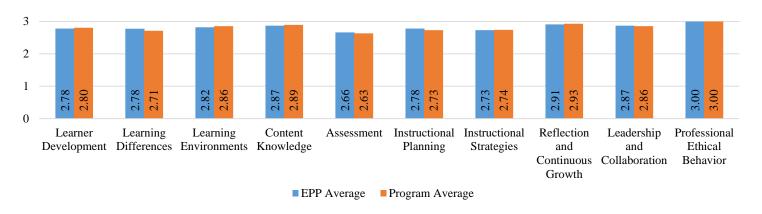


Figure 23. T2 PAES US by UET Standards

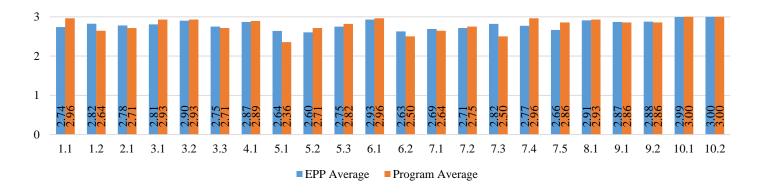


Figure 24. T2 PAES US by Items

Technology and Engineering Studies - Teaching

Transition 3: Clinical

PAES MT

This section presents mentor teacher PAES results. They are organized by items, UETS domains, and UET standards.

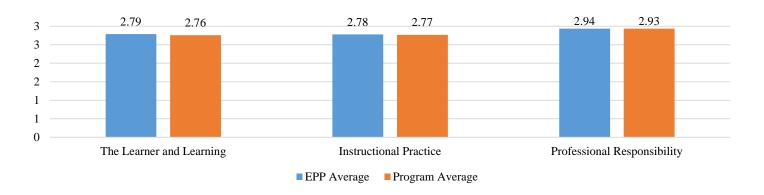


Figure 25. T2 PAES US by UETS Domains

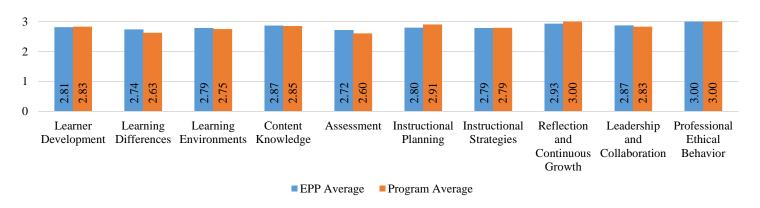


Figure 26. T2 PAES US by UET Standards

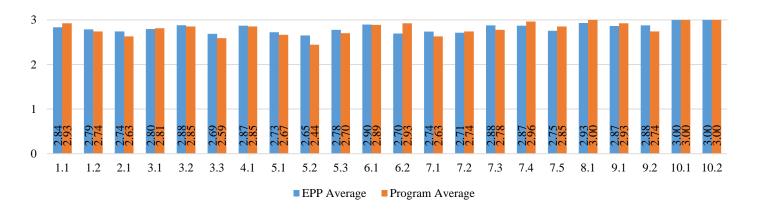


Figure 27. T2 PAES US by Items

Technology and Engineering Studies - Teaching

Transition 3: Clinical

RTWS

This section presents the results of the Renaissance Teacher Work Sample (RTWS), which assesses teacher candidates' ability to facilitate their students' learning by integrating the principles of the 7 RTWS sections during their clinical experience.

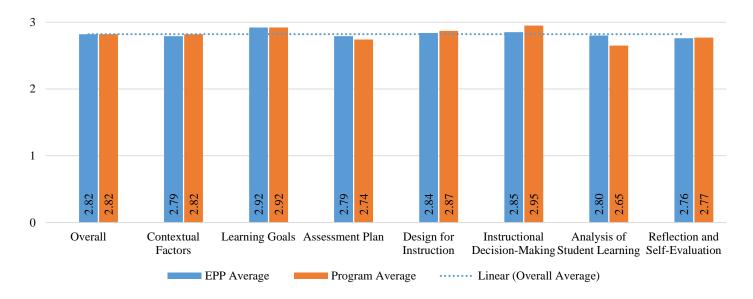


Figure 28. T3 RTWS

Table 13. *T3 RTWS*

13 K1 W5					
Section	EPP Average	Program Average	EPP St Dev	Program St Dev	N
Overall	2.82	2.82	0.15	0.08	13
Contextual Factors	2.79	2.82	0.05	0.07	13
Learning Goals	2.92	2.92	0.20	0.12	13
Assessment Plan	2.79	2.74	0.27	0.17	13
Design for Instruction	2.84	2.87	0.21	0.15	13
Instructional Decision- Making	2.85	2.95	0.31	0.24	13
Analysis of Student Learning	2.80	2.65	0.28	0.13	13
Reflection and Self- Evaluation	2.76	2.77	0.31	0.20	13

Technology and Engineering Studies - Teaching

Transition 3: Clinical

UTESS

This section presents the results of UTESS for candidates enrolled in their capstone clinical experience. The graphs are organized by items, UTES domains, and UET standards.

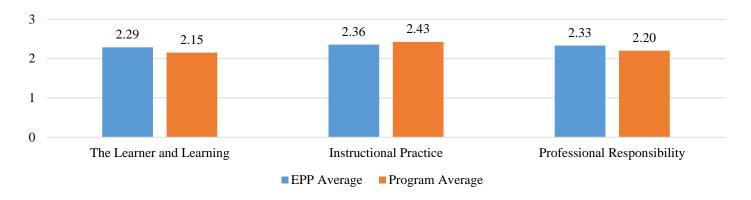


Figure 29. T1 UTESS by UETS Domains

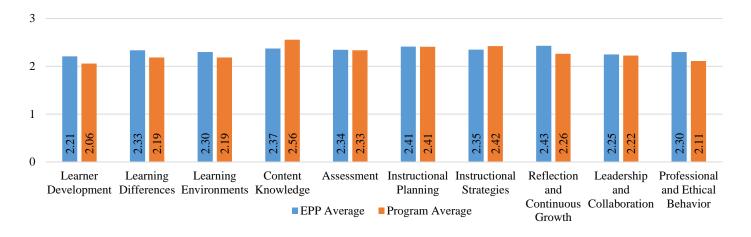


Figure 30. T1 UTESS by UET Standards

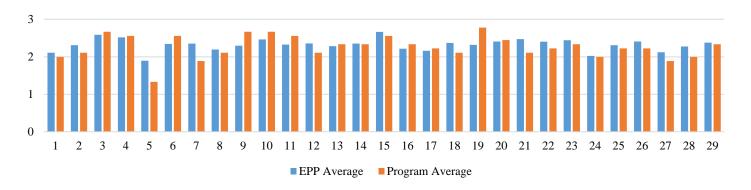


Figure 31. T1 UTESS by Items

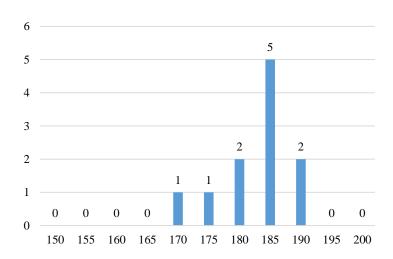
Technology and Engineering Studies - Teaching

Transition 3: Clinical

Praxis

This section presents the results of the Praxis test(s), which candidates must pass in order to receive licensure and be classified as highly qualified.

Praxis Test 5051: Technology Education



Note: Test 5051 is scored out of 200 maximum points and a minimum passing score of 159

Figure 32. Praxis Test 5051 Results

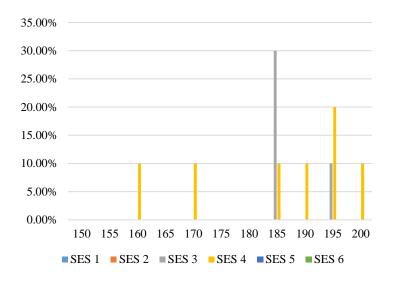


Table 14.

Praxis Test 5051 Results

Results	Frequency
<150	0
150-154	0
155-159	0
160-164	0
165-169	0
170-174	1
175-179	1
180-184	2
185-189	5
190-194	2
195-199	0
200	0
Total	11

Table 15. SES Categories

Category	Income Range
SES 1	\$0-24,999
SES 2	\$25,000-49,000
SES 3	\$50,000-74,999
SES 4	\$75,000-99,000
SES 5	\$100,000-199,999
SES 6	\$200,000+

Figure 33. Praxis Test 5051 Results by SES

Technology and Engineering Studies - Teaching

Appendix A

Supporting Statistics

Cleaned and organized data, which was used to create the figures in the report, are presented below. Population totals, observed count sizes, minimum values, maximum values, means, standard deviations, and percentages of the total are provided. The population size varies by as much as 5.71% due to 1) whether candidates who withdrew from the EPP are included in the results, 2) several candidates being listed as having both the major and pre-major, and 3) differences in using Microsoft Excel by EPP support personnel. Since the data was collected by hand, inconsistencies exist.

Technology and Engineering Studies - Teaching

Appendix A

Administrative Overview

Table A.1. *Program Flow*

Transition	Pre-Major	T1	T2	Т3	Withdrawal PreM	Withdrawal Maj	Grand Total
Count	4	3	15	13	0	1	35
Withdrawal %	-	-	-	_	0.00%	3.23%	2.86%
% Total	11.43%	8.57%	42.86%	37.14%	0.00%	2.86%%	100%

Table A.2.

Graduated and Licensed

	Graduated	Licensed
Count	10	9
% of T3	76.92%	69.23%
Total T3	13	13

Table A.3.

Clinical Experiences for T3 Candidates

	Student Teaching	Internship	Missing	Total
Count	13	0	0	13
Percent of Total	100%	0.00%	0.00%	100.00%

Transition 1

UTESS

Table 4.

T1 UTESS by UETS Domains

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
The Learner and Learning	1.86	2.19	0.67	0.62	2
Instructional Practice	1.94	2.25	0.68	0.20	2
Professional Responsibility	1.96	2.23	0.70	0.32	2

Appendix A

Table 5. T1 UTESS by UET Standards

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
Learner Development	1.56	2.00	0.83	1.41	2
Learning Differences	1.94	2.17	0.73	0.24	2
Learning Environments	1.97	2.33	0.75	0.47	2
Content Knowledge	1.98	2.33	0.71	0.00	2
Assessment	1.90	2.25	0.78	0.35	2
Instructional Planning	1.86	2.33	0.78	0.00	2
Instructional Strategies	1.98	2.22	0.65	0.31	2
Reflection and Continuous Growth	2.02	2.33	0.73	0.47	2
Leadership and Collaboration	1.94	2.17	0.74	0.24	2
Professional and Ethical Behavior	1.94	2.13	0.74	0.18	2

Table A.6. T1 UTESS by Items

Item	EPP Average	Program Average	EPP St Dev	Program St Dev	N
1	1.47	2.22	0.88	1.41	2
2	1.66	2.00	0.89	1.41	2
3	2.27	2.00	0.82	0.71	2
4	2.04	2.50	0.88	0.71	2
5	1.52	2.50	0.92	0.71	2
6	2.05	1.50	0.82	0.71	2
7	2.00	2.50	0.86	0.71	2
8	1.86	2.50	0.83	0.00	2
9	2.03	2.00	0.81	0.00	2
10	2.01	2.00	0.79	0.71	2
11	2.07	2.50	0.82	0.71	2
12	1.74	2.50	0.90	0.00	2
13	1.85	2.00	0.86	0.00	2
14	1.90	2.00	0.87	0.71	2
15	1.71	2.50	0.98	0.71	2
16	1.96	2.50	0.83	0.00	2
17	1.79	2.00	0.85	0.71	2
18	1.98	1.50	0.79	0.00	2
19	2.03	2.00	0.78	0.00	2

		Appendix	A		
20	2.04	3.00	0.84	0.00	2
21	2.01	2.00	0.89	0.71	2
22	2.03	2.50	0.79	0.71	2
23	1.98	2.50	0.80	0.71	2
24	1.75	2.50	0.87	0.71	2
25	2.02	2.50	0.83	0.00	2
26	2.02	2.00	0.86	0.71	2
27	1.76	2.50	0.86	0.71	2
28	1.98	1.50	0.85	0.00	2
29	1.99	2.00	0.83	0.71	2
Overall	1.91	2.50	0.67	0.37	2

Transition 2

PAES

Table 7. T2 PAES by UETS Domains

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
The Learner and Learning	1.86	2.25	0.50	0.12	2
Instructional Practice	1.80	2.05	0.49	0.06	2
Professional Responsibility	1.85	2.20	0.41	0.00	2

Table 8. T2 PAES US by UET Standards

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
Learner Development	1.78	2.00	0.49	0.00	2
Learning Differences	1.76	2.50	0.59	0.71	2
Learning Environments	1.96	2.33	0.59	0.47	2
Content Knowledge	2.00	2.50	0.65	0.71	2
Assessment	1.58	1.83	0.58	0.24	2
Instructional Planning	1.91	2.00	0.58	0.00	2
Instructional Strategies	1.85	2.10	0.49	0.14	2
Reflection and Continuous Growth	2.25	3.00	0.68	0.00	2

Appendix A						
Leadership and Collaboration	1.81	2.00	0.55	0.00	2	
Professional Ethical Behavior	1.68	2.00	0.47	0.00	2	

Table 9. T2 PAES by Items

Item	EPP Average	Program Average	EPP St Dev	Program St Dev	N
1.1	1.85	2.00	0.54	0.00	2
1.2	1.71	2.00	0.64	0.00	2
2.1	1.76	2.50	0.59	0.71	2
3.1	1.94	2.50	0.60	0.71	2
3.2	2.06	2.50	0.73	0.71	2
3.3	1.86	2.00	0.66	0.00	2
4.1	2.00	2.50	0.65	0.71	2
5.1	1.54	2.00	0.63	0.00	2
5.2	1.43	1.50	0.71	0.71	2
5.3	1.76	2.00	0.68	0.00	2
6.1	2.08	2.00	0.65	0.00	2
6.2	1.75	2.00	0.74	0.00	2
7.1	1.86	2.00	0.53	0.00	2
7.2	1.83	2.50	0.67	0.71	2
7.3	2.06	2.00	0.66	0.00	2
7.4	1.82	2.00	0.67	0.00	2
7.5	1.69	2.00	0.61	0.00	2
8.1	2.25	3.00	0.68	0.00	2
9.1	1.76	2.00	0.68	0.00	2
9.2	1.85	2.00	0.56	0.00	2
10.1	1.68	2.00	0.47	0.00	2
10.2	1.68	2.00	0.47	0.00	2

Technology and Engineering Studies - Teaching

Appendix A

Transition 3

PAES US

Table 10.

T3 PAES US by UETS Domains

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
The Learner and Learning	2.80	2.82	0.22	0.20	28
Instructional Practice	2.73	2.72	0.22	0.12	28
Professional Responsibility	2.93	2.93	0.14	0.14	28

Table 11.

T3 PAES US by UET Standards

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
Learner Development	2.78	2.80	0.30	0.28	28
Learning Differences	2.78	2.71	0.42	0.46	28
Learning Environments	2.82	2.86	0.27	0.21	28
Content Knowledge	2.87	2.89	0.34	0.31	28
Assessment	2.66	2.63	0.35	0.33	28
Instructional Planning	2.78	2.73	0.29	0.29	28
Instructional Strategies	2.73	2.74	0.27	0.20	28
Reflection and Continuous Growth	2.91	2.93	0.29	0.26	28
Leadership and Collaboration	2.87	2.86	0.28	0.27	28
Professional Ethical Behavior	3.00	3.00	0.07	0.00	28

Table 12. *T3 PAES US by Items*

Item	EPP Average	Program Average	EPP St Dev	Program St Dev	N
1.1	2.74	2.96	0.44	0.19	28
1.2	2.82	2.64	0.38	0.49	28
2.1	2.78	2.71	0.42	0.46	28
3.1	2.81	2.93	0.39	0.26	28
3.2	2.90	2.93	0.31	0.26	28
3.3	2.75	2.71	0.44	0.46	28
4.1	2.87	2.89	0.34	0.31	28
5.1	2.64	2.36	0.48	0.49	28
5.2	2.60	2.71	0.50	0.46	28
5.3	2.75	2.82	0.44	0.39	28

	<i>U</i> 3	0 0						
Appendix A								
6.1	2.93	2.96	0.26	0.19	28			
6.2	2.63	2.50	0.50	0.51	28			
7.1	2.69	2.64	0.47	0.49	28			
7.2	2.71	2.75	0.47	0.44	28			
7.3	2.82	2.50	0.39	0.51	28			
7.4	2.77	2.96	0.45	0.19	28			
7.5	2.66	2.86	0.49	0.36	28			
8.1	2.91	2.93	0.29	0.26	28			
9.1	2.87	2.86	0.34	0.36	28			
9.2	2.88	2.86	0.33	0.36	28			
10.1	2.99	3.00	0.07	0.00	28			
10.2	3.00	3.00	0.00	0.00	28			

PAES MT

Table 13. T3 PAES MT by UETS Domains

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
The Learner and Learning	2.79	2.76	0.22	0.22	27
Instructional Practice	2.78	2.77	0.20	0.15	27
Professional Responsibility	2.94	2.93	0.13	0.12	27

Table 14. T3 PAES MT by UET Standards

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
Learner Development	2.81	2.83	0.29	0.28	27
Learning Differences	2.74	2.63	0.44	0.49	27
Learning Environments	2.79	2.75	0.29	0.30	27
Content Knowledge	2.87	2.85	0.35	0.36	27
Assessment	2.72	2.60	0.32	0.33	27
Instructional Planning	2.80	2.91	0.29	0.20	27
Instructional Strategies	2.79	2.79	0.23	0.15	27
Reflection and Continuous Growth	2.93	3.00	0.25	0.00	27
Leadership and Collaboration	2.87	2.83	0.28	0.31	27

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Professional Ethical Behavior	3.00	3.00	0.00	0.00	27	

Table 15. T3 PAES MT by Items

Item	EPP Average	Program Average	EPP St Dev	Program St Dev	N
1.1	2.84	2.93	0.38	0.27	27
1.2	2.79	2.74	0.42	0.45	27
2.1	2.74	2.63	0.44	0.49	27
3.1	2.80	2.81	0.40	0.40	27
3.2	2.88	2.85	0.33	0.36	27
3.3	2.69	2.59	0.47	0.57	27
4.1	2.87	2.85	0.35	0.36	27
5.1	2.73	2.67	0.45	0.48	27
5.2	2.65	2.44	0.48	0.58	27
5.3	2.78	2.70	0.43	0.47	27
6.1	2.90	2.89	0.32	0.32	27
6.2	2.70	2.93	0.47	0.27	27
7.1	2.74	2.63	0.44	0.49	27
7.2	2.71	2.74	0.47	0.45	27
7.3	2.88	2.78	0.33	0.42	27
7.4	2.87	2.96	0.34	0.19	27
7.5	2.75	2.85	0.45	0.36	27
8.1	2.93	3.00	0.25	0.00	27
9.1	2.87	2.93	0.36	0.27	27
9.2	2.88	2.74	0.34	0.45	27
10.1	3.00	3.00	0.00	0.00	27
10.2	3.00	3.00	0.00	0.00	27

UTESS

Table 16. T3 UTESS by UETS Domains

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
The Learner and Learning	2.29	2.15	0.40	0.37	9
Instructional Practice	2.36	2.43	0.36	0.31	9
Professional Responsibility	2.33	2.20	0.37	0.33	9

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Table 17. T3 UTESS by UET Standards

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
Learner Development	2.21	2.06	0.83	0.58	9
Learning Differences	2.33	2.19	0.73	0.65	9
Learning Environments	2.30	2.19	0.75	0.41	9
Content Knowledge	2.37	2.56	0.71	0.33	9
Assessment	2.34	2.33	0.78	0.43	9
Instructional Planning	2.41	2.41	0.78	0.46	9
Instructional Strategies	2.35	2.42	0.65	0.31	9
Reflection and Continuous Growth	2.43	2.26	0.73	0.32	9
Leadership and Collaboration	2.25	2.22	0.74	0.44	9
Professional and Ethical Behavior	2.30	2.11	0.74	0.38	9

Table A.18. T3 UTESS by Items

Item	EPP Average	Program Average	EPP St Dev	Program St Dev	N
1	2.11	2.00	0.65	0.71	9
2	2.31	2.11	0.65	0.60	9
3	2.59	2.67	0.57	0.71	9
4	2.52	2.56	0.59	0.53	9
5	1.90	1.33	0.76	1.12	9
6	2.34	2.56	0.56	0.53	9
7	2.35	1.89	0.59	0.60	9
8	2.20	2.11	0.59	0.60	9
9	2.30	2.67	0.59	0.50	9
10	2.46	2.67	0.53	0.50	9
11	2.33	2.56	0.56	0.53	9
12	2.36	2.11	0.60	0.78	9
13	2.29	2.33	0.59	0.50	9
14	2.35	2.33	0.59	0.71	9
15	2.67	2.56	0.53	0.73	9
16	2.22	2.33	0.57	0.50	9
17	2.16	2.22	0.59	0.44	9

Technology and Engineering Studies - Teaching

		Appendix	A		
18	2.37	2.11	0.53	0.60	9
19	2.32	2.78	0.58	0.44	9
20	2.41	2.44	0.56	0.53	9
21	2.47	2.11	0.57	0.60	9
22	2.41	2.22	0.56	0.44	9
23	2.44	2.33	0.54	0.50	9
24	2.03	2.00	0.66	0.50	9
25	2.31	2.22	0.56	0.67	9
26	2.41	2.22	0.56	0.44	9
27	2.12	1.89	0.61	0.78	9
28	2.27	2.00	0.60	0.50	9
29	2.38	2.33	0.55	0.50	9
Overall	2.32	2.26	0.35	0.30	9

Praxis

Praxis Test 5051: Technology Education

Table A.19.

Praxis Test 5051: Technology Education Overall Results

	Max	Min	Average	St Dev
Score	200	161	188	11.34
N Size	12	12	12	12
N Missing	0	0	0	0
Percentage	100.00%	100.00%	100.00%	100.00%

Note: Test 5051 is scored out of 200 maximum points and a minimum passing score of 159.

Table A.20.

Praxis Test 5051: Technology Education Section Results

Ü,	Points Available	Max	Average	Min	St Dev	N Size	Missing	Percentage
Technology and Society	16.00	17	13.42	10	2.27	12	0	100.00%
Technological Design and Problem Solving	21.42	21	17.50	14	1.73	12	0	100.00%
Energy Power and Transportation	16.75	15	12.17	7	2.48	12	0	100.00%

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Information and Communication Technologies	16.50	17	13.67	10	2.10	12	0	100.00%	
Manufacturing and Construction Technologies	15.25	15	12.42	10	1.88	12	0	100.00%	
Pedagogical and Professional Studies	22.67	22	18.00	12	3.05	12	0	100.00%	

Table A.21.

Praxis Test 5051: Technology Education Attempts

O.	First Attempt	Second Attempt	Third Attempt	Total
N Size	12	-	-	12
Count	12	-	-	12
Missing	0	-	-	0
Passed	12	-	-	12
Failed	0	-	-	0
% Who Passed The Attempt	100.00%	-	-	100.00%
% Who Passed the Test	100.00%	-	-	100.00%

Note: Count = number who took the exam, Missing = number who failed a previous test but did not take a subsequent test.

Table A.22.

Praxis Test 5051: Technology Education Results sorted by Socioeconomic Status

Category	150- 154	155- 159	160- 164	165- 169	170- 174	175- 179	180- 184	185- 189	190- 194	195- 199	200	Total
SES 1	0	0	0	0	0	0	0	0	0	0	0	0
SES 2	0	0	0	0	0	0	0	0	0	0	0	0
SES 3	0	0	0	0	0	0	0	3	0	1	0	4
SES 4	0	0	1	0	1	0	0	1	1	2	1	7
SES 5	0	0	0	0	0	0	0	0	0	0	0	0
SES 6	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	1	2	4	2	0	0	10

Note: SES 1 = \$0-\$25K, SES 2 = \$25K-\$50K, SES 3 = \$50K-\$75K, SES 4 = \$75K-\$100K, SES 5 = \$100K-\$200K, SES 6 = \$200K+\$100K

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Appendix A

The Appendix provides more detailed statistics and information to support the report.

Data Collection Method

The EPP Office and its support team combined data from several sources for the 2017-2018 annual report. Data compilation officially began in April and continued through mid-June. These sources include 1) information submitted through the mYlink system, 2) admissions cohort data provided by individual programs, 3) BYU AIMS data, which shows course enrollments, GPAs, and biographical information, 4) BYU SAAS data, which provided information regarding student changes in their program of study (used to measure attrition) in addition to those actively taking classes during Spring term, and 5) the Educational Testing Service (ETS), which administers the Praxis test. The 2017-2018 EPP Annual Report includes active data between August 31, 2017 until the data collection process was complete, which finished around the middle of June. Summer-term results are not included because summer term is still ongoing.

Data from every source was compiled into Microsoft Excel spreadsheets, from which the EPP support team either used Excel functions to input data or inserted data by hand. Every team member understood the coding process before harvesting the data, a process which was a group effort to reduce error.

Each variable in the dataset represents the candidates' current position in the EPP as of the collection date. For example, candidates who progressed from Transition One to Transition Two during the 2017-2018 Annual Report window are considered Transition Two candidates. Consequentially, results for GPAs, population totals, etc. represent candidates' recent activities (i.e., results from the last active semester/term completed, typically Winter 2018 or Spring 2018).

The final population size for all programs, including candidates who left Educator Preparation Programs, reached 3,628 candidates.

Variable Definition and Operationalization

A list of several key variables is given below. The process used to define and gather the variable's content is also explained.

Name, last and first:

• Last and first names were gathered for each candidate using the data listed on AIMS. In the cases where a female candidate married and had a name change, the current name, as shown on AIMS, was used.

Age / Date of Birth:

- Candidate's date of birth was determined by AIMS data. An Excel formula was then used to calculate current age. Gender:
 - Gender was determined by AIMS data using the following codes: 0=female, 1=male.

Ethnicity:

- Ethnicity was determined by AIMS data.
- Hawaiian ethnicity was combined with Pacific Islander.
- A separate code was used for candidates with multiple ethnicities.
- When ethnicity was not specified in AIMS, the candidate was coded as "unknown."

Marital Status:

• Marital status was determined by AIMS data using the following codes: 0=single, 1=married, 2=widowed, 3=divorced, 4=undeclared.

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Socioeconomic Status:

- Socioeconomic status was determined by AIMS data in conjunction with IRS data on zip codes (see "SOI Tax Stats Individual Income Tax Statistics Zip Code Data (SOI) for 2015, https://www.irs.gov/statistics/soi-tax-stats-individual-income-tax-statistics-zip-code-data-soi.)
- AIMS data includes a permanent address, mailing address, and identifies a candidate's hometown. Where listed, permanent address was prioritized first, hometown second, and mailing address third. The permanent address and mailing address data on AIMS includes a zip code; however, the hometown indicator does not list a zip code. In the cases where a candidate did not list a permanent address and hometown was used, the EPP support team searched Google for the city's zip code online and used the first zip code listed. For example, Orem, UT has four zip codes. If a candidate's hometown was listed as Orem, UT, the first zip code was used, which is 84057.
- For candidates with a BYU zip code or a Provo zip code for permanent and mailing address with a different hometown location, the hometown location was prioritized based on the assumption that the hometown location is a more accurate portrayal of where the candidate grew up and attended high school than is a BYU or Provo zip code.
- International candidates were not included in this analysis. Instead, their home country was listed instead. For example, a student from Taiwan with a permanent address of Provo, UT with a zip code of 84604 was listed as Taiwan in the dataset rather than by the Provo zip code.
- With zip codes harvested, the IRS data was then consulted. The IRS data lists income level using six (6) categories and lists how many people are in each category, as follows: category 1 = \$0-\$25,000; category 2=\$25,000-\$50,000; category 3=\$50,000-\$75,000; category 4=\$75,000-\$100,000; category 5=\$100,000-\$200,000; category 6=\$200,000+. Each zip code shows the number of how many people are in each of the six categories.
- Using this data, the populations for each category were multiplied by the category's highest dollar value (e.g., category 1=\$25,000).
 - Note, the EPP support team acknowledges the IRS data is given as a range while this conversion uses the ranges' highest dollar values. The logic behind this decision is that people try to minimize the amount of money they report to the IRS to pay less on their taxes. Therefore, the EPP support team assumes people are more likely to be clustered along the highest dollar value of any given range.
- Next, the sums for all six categories of a zip code were compiled and then averaged by the total number of candidates. This process provided greater variability in the income scores rather than the scores remaining confined by the six categories. After the conversion, both the original category and the converted income range were kept in the dataset for each student.

Pre-major:

• Pre-major was determined by AIMS data. Only active pre-majors were included.

Major:

Major was determined by AIMS data. Only active majors were included.

Minor:

• Minor was determined by AIMS data. Only active minors were included.

Graduation:

• Graduation was determined by AIMS data, coded as follows: 1=graduated, 0=candidate is in Transition Three but not yet graduated, and 999=missing/not a Transition Three candidate.

Licensure:

• To determine whether a completer had received licensure, EPP team members consulted the Utah State Board of Education teacher search (see https://cactus.schools.utah.gov/PersonSearch). The following codes were used: 0=no licensure, but graduated, 1=licensed, 2=cannot verify if Cactus data matches roster. This problem is due to the lack of unique identifiers. For example, a name like Sarah Jones may appear upwards of ten times in the Cactus database, so the database does not include enough information to confirm which one of those "Sarah Jones" is the Sarah Jones in question.

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Withdrawal:

• The number of candidates who withdrew from Educator Preparation Programs is determined by candidates who had all EPP majors or minors expire during the 2017-2018 annual report time frame (August 31, 2017-July 2018). For example, a candidate who had an Elementary Education major expire in September 2017 is counted in the withdrawal statistic. Students who did not have an active EPP major or minor within the time window are not included in the dataset. AIMS data was consulted for this information.

Transition:

• The population is divided into three transitions, based on progression in the candidate's program of study. Candidates fall within Transition One (T1) until an admission decision is made. Transition One also includes all pre-majors, regardless of the progression in that pre-major. Transition Two (T2) includes candidates who have been accepted into the EPP major and are currently taking courses on BYU campus, as well as those completing the first stage of their field-based learning (e.g. practicum experience). Transition Three (T3) includes candidates who are currently enrolled in their Student Teaching or Internship experience.

Ten Percent:

• Students who do not qualify for program admittance may still be admitted under a "ten percent" exception. For any program, ten percent of the candidates may be admitted without the proper qualifications (e.g., qualifying ACT/SAT results, satisfactory GPA, etc.). The information on this variable is drawn from this year's previously completed reports by the EPP directors with supporting data from each individual program.

Total GPA:

• Total GPA is the average grade point average for all college courses, including credit hours from other institutions and credit hours from BYU. Total GPA was gathered from AIMS data.

BYU GPA:

• BYU GPA is the average grade point average of all BYU courses, including those from minor and general education courses. BYU GPA was gathered from AIMS data.

Major GPA:

• Major GPA is the average grade point average for all classes within the candidate's major, excluding all courses outside the specific major. Major GPA was gathered from AIMS data.

ACT and SAT scores:

• College entrance exam scores from the ACT and SAT were gathered through AIMS data and the BYU Registrar's Office. To provide consistent data, SAT scores were converted to ACT scores, which is explained in the next section of the appendix (Data Transformations).

Technology Skills Assessment (TSA):

• TSAs are completed at the TEC Lab in the McKay building, its scores uploaded into mYlink, and its results downloaded from mYlink. The TSA has four sections: Word Processing, Spreadsheets, Presentations, and Internet & Communication. Scores are graded as pass/fail. Additionally, TSAs are analyzed for how many candidates took the exam a second or third time before passing the assessment. TSAs are coded as follows: 1=pass, 0=fail.

Utah Teacher Education Student Survey (UTESS):

• The UTESS is a candidate survey completed through the mYlink system, where the data is downloaded from. The 29 survey questions focus on how well candidates feel prepared to engage in the classroom and with students, design assessments, use technology, follow federal laws and keep student confidentiality. Scores range from one through four (1-4): 1=Not at All, 2=Minimally, 3=Effectively, 4=Exceptionally.

Utah Effective Teaching Standards (UETS):

• The UETS are Utah's ten teaching standards as established by the Utah State Board of Education. These standards act as the framework for all EPP teacher preparation programs. The UETS are measured through such EPP assessments as the PAES, RTWS, and UTESS.

Core GPA:

• All EPP students are required to take several core EPP courses regardless of education major. The results for these courses were gathered from AIMS data.

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Utah Teacher Candidate Performance Assessment & Evaluation System (PAES):

• PAES has 22 items across the ten UET standards and is scored on a zero through three (0-3) scale: 0=Not Effective, 1=Beginning, 2=Developing, 3=Preservice Effective. PAES measures candidates' knowledge, skills, and dispositions during clinical experiences. PAES data is downloaded directly from the mYlink system.

Praxis:

Praxis is administered by the Educational Testing Service (ETS) and is scored out of 200 points. Each exam has
its own cut score (determined by the Utah State Board of Education) to accommodate the content and meet the
needs of the Utah educational system. Praxis tests are Utah's content licensure exams required for teachers to be
designated as highly qualified. Praxis tests are analyzed by candidate major. Praxis scores were downloaded from
the ETS website.

T3 Clinical Experience: Internship and Student Teaching:

• During Transition Three, candidates either complete an internship or a student teaching experience. This variable is coded as follows: 1=Internship, 2=Student teaching. Population data for Intern / Student Teaching are determined by course enrollment per AIMS.

Renaissance Teacher Work Sample (RTWS):

- The RTWS is completed during Transition Three and is scored on a one through three (1-3) scale: 1=Indicator Not Met, 2=Partially Met, 3=Indicator Met. RTWS is a capstone assignment that measures candidates' knowledge, skills, and dispositions during clinical experiences. Scores are downloaded directly from the mYlink system.
- Due to technical errors in the mYlink system, some students were assigned the BYU Teacher Work Sample (TWS) during Fall 2017 instead of the RTWS. The BYU TWS results are not presented in this report, only those students who had the RTWS.

Data Transformations

The EPP Support Team made the following changes to ensure consistency in the analysis of data:

- PAES (Transition Two US, Transition Three US and MT):
 - o Item 10.1 and 10.2, which are scored as either "Yes" or "No," were changed to a score of the maximum possible points. For the case of practicum one, "Yes" was considered as one (1) point. For the case of practicum two, "Yes" was considered as two (2) points. For the case of student teaching/ internship, "Yes" was considered as three (3) points for a "Yes" answer and zero (0) points for a "No" answer. Microsoft Excel was used to make the transformation.
- SAT Scores
 - Several students choose to submit SAT scores rather than ACT scores. Since more BYU students submit ACT scores than SAT scores, all SAT scores were converted to ACT scores. This transformation used Microsoft Excel functions in conjunction with the Concordance Tables published May 9, 2016 by CollegeBoard.org (https://collegereadiness.collegeboard.org/pdf/ higher-ed-brief-sat-concordance.pdf) and BYU AIMS data, which provides SAT composite scores converted to ACT composite scores for some but not all candidates.
 - Of the 3,400 candidates with ACT and SAT scores, 649 (19.09%) candidates had SAT scores; all SAT scores were converted to ACT scores using Excel formulas. In the case of some candidates showing both ACT and SAT scores, ACT scores were used for analysis and SAT scores were ignored.
- Utah Effective Teaching Standards (UETS) for UTESS:
 - Each item in the UTESS corresponds to one or more of the ten (10) Utah Effective Teaching Standards (UETS). In the case where a UTESS item corresponds to two of the UETS, the UTESS item's score is used multiple times to calculate the UETS score. For example, UTESS item 3 reads, "Provide instruction that addresses learners' cultural differences," which corresponds to UETS 2 and UETS 7. In this case, the candidate's UTESS item 3 score is used to calculate both the UETS 2 and UETS 7 results.
 - o Of the twenty-nine (29) UTESS items, eight (8) (27.59%) correspond to two UETS items.

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- UETS Professional Domains
 - O The UETS Professional Domains are The Learner and Learning, Instructional Practice, and Professional Responsibility. After separating each question into the ten UETS standards, the appropriate standards were combined by professional domain and then analyzed. UET standards one through three (1-3) are associated with The Learner and Learning domain, standards four through seven (4-7) are associated with Instructional Practice, and standards eight through ten (8-10) are associated with Professional Responsibility.