



**BYU Educator Preparation Program  
2017 – 2018 Annual Report**

Aggregate Program Reports for the College of Physical and  
Mathematical Sciences

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,

A handwritten signature in blue ink, which appears to read "J. Aaron Popham". The signature is fluid and stylized, with a large loop at the end.

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](mailto: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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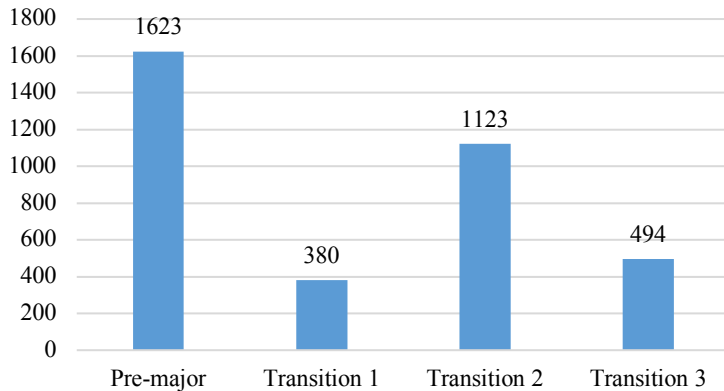
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# BYU Educator Preparation Program Annual Report

## Aggregate Report for the Entire EPP

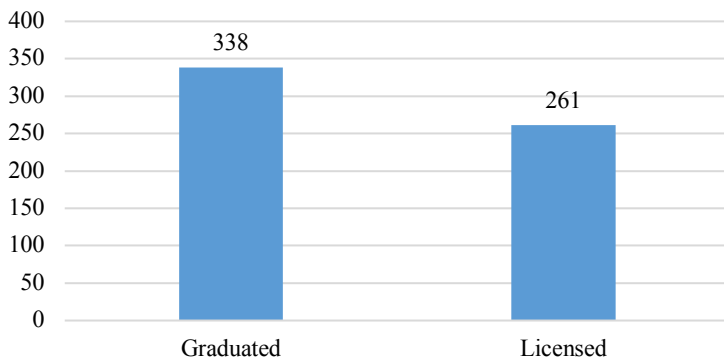
### Administrative Overview

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



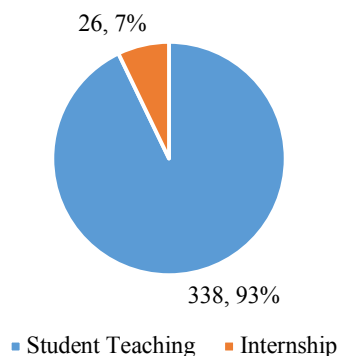
In 2017-2018, the Educator Preparation Program had 1,623 candidates enrolled in various pre-majors, 380 candidates in Transition 1, 1123 candidates in Transition 2, and 494 candidates in Transition 3.

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

# BYU Educator Preparation Program Annual Report

## 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

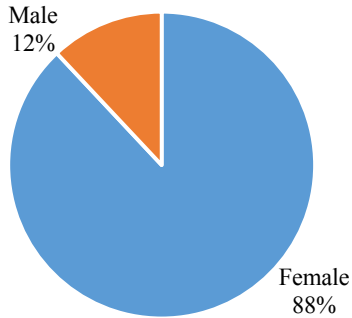


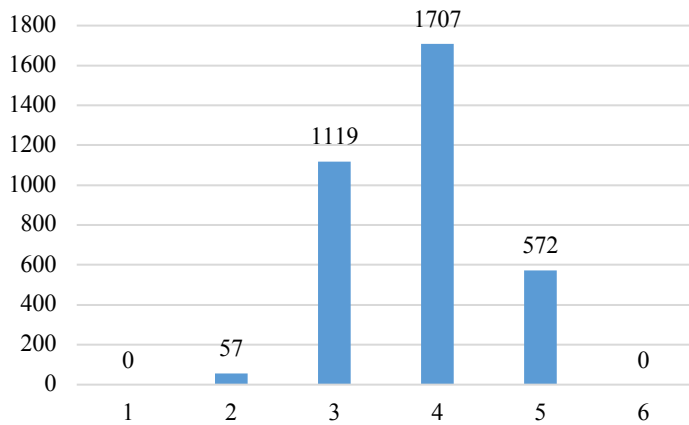
Table 1.

#### Gender

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%

Figure 4. Gender

#### Socioeconomic Status



#### 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

Figure 5. Socioeconomic Status  
Table 2.

#### Marital Status

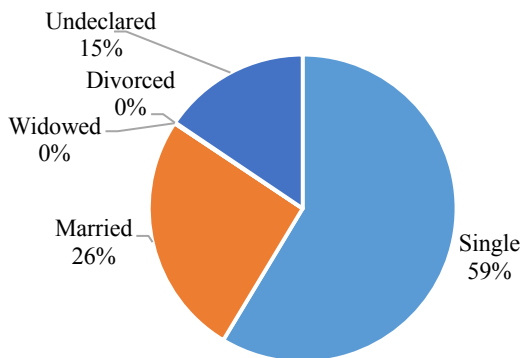


Table 3.

#### 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%

Figure 6. Marital Status



# BYU Educator Preparation Program Annual Report

Aggregate Report for the Entire EPP

## Biographic Overview

### Age

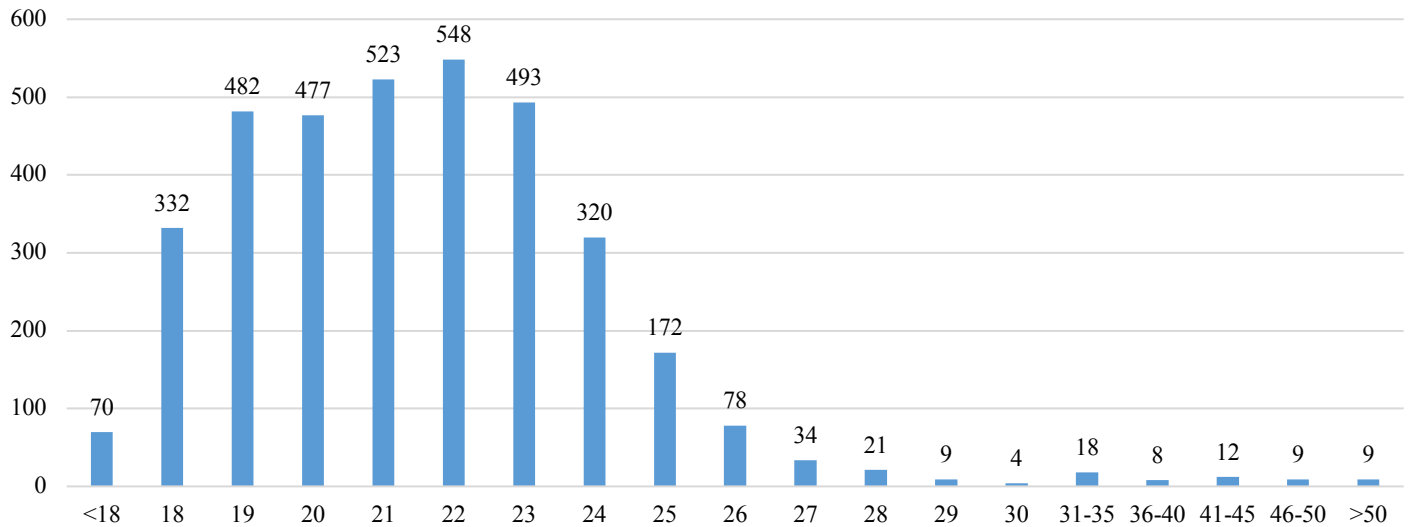


Figure 7. Age

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%
<b>Total</b>	<b>3619</b>	<b>100.00%</b>
<b>Missing</b>	<b>0</b>	<b>0.00%</b>
<b>Grand Total</b>	<b>3619</b>	<b>100.00%</b>

# BYU Educator Preparation Program Annual Report

Aggregate Report for the Entire EPP

## Biographic Overview

### Ethnicity

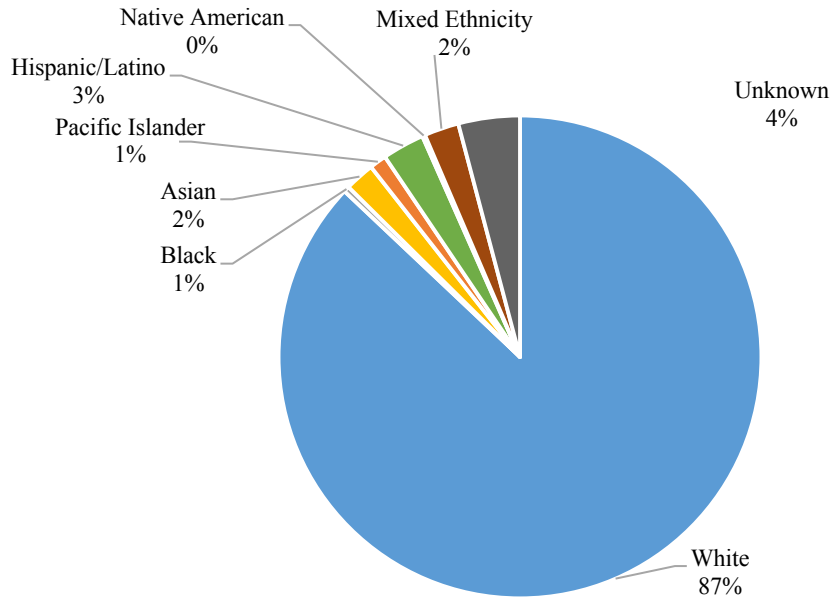


Figure 8. Ethnicity

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%

# BYU Educator Preparation Program Annual Report

## 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

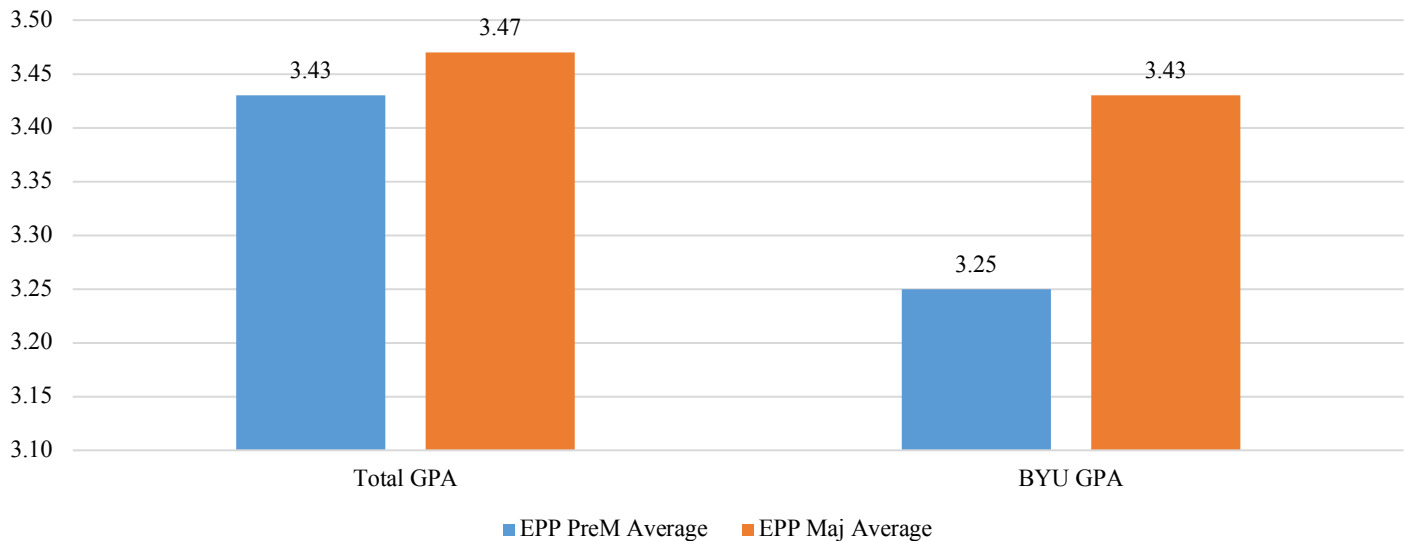


Figure 9. Total and BYU GPA at Admissions

Table 6.

T1 Total and BYU GPA

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

Note: Maj = Major, PreM = Pre-major

# BYU Educator Preparation Program Annual Report

## 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.

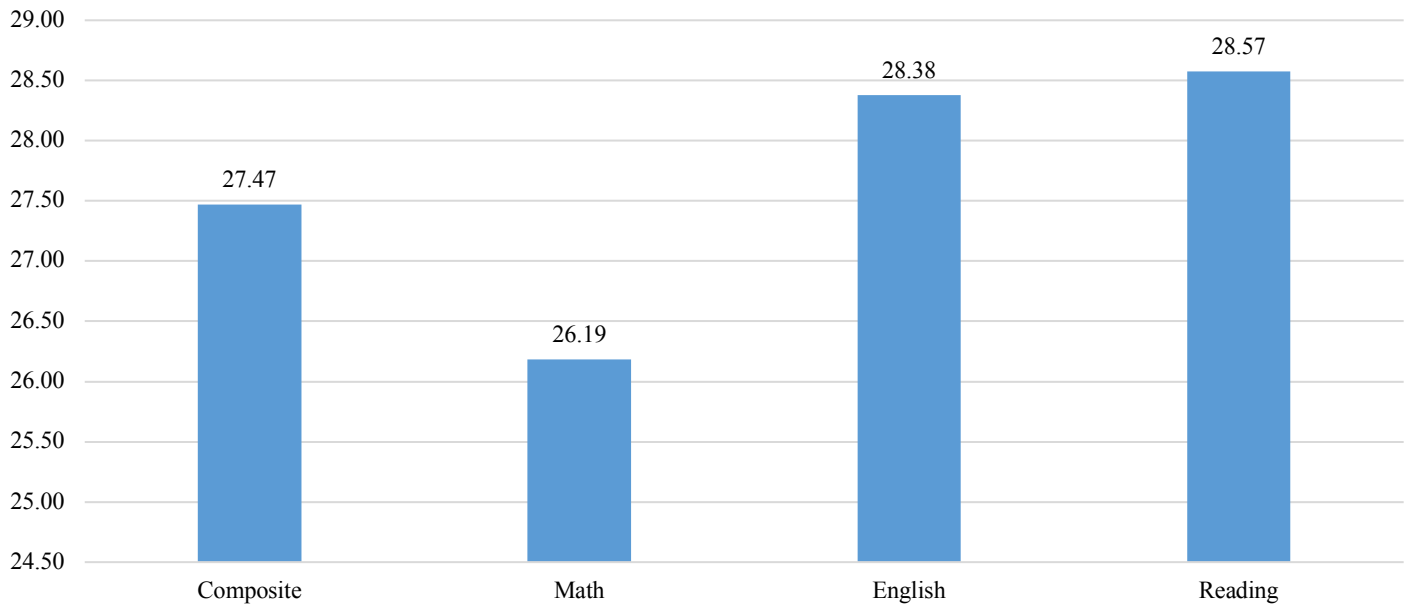


Figure 10. ACT Results

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.

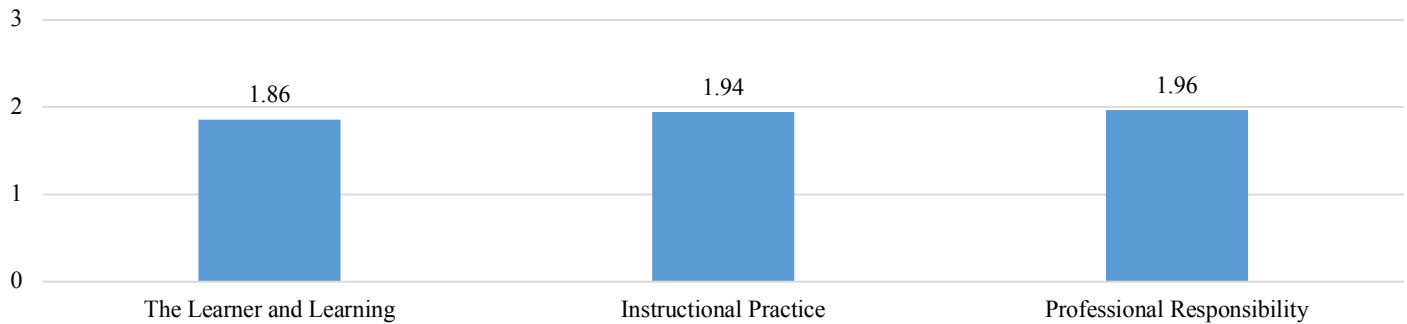
# BYU Educator Preparation Program Annual Report

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

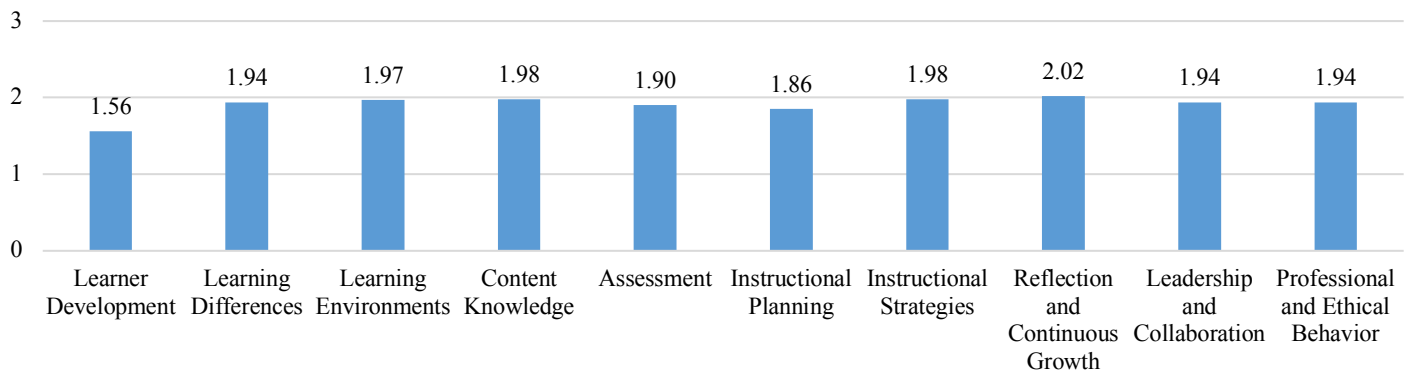


Figure 12. T1 UTESS by UET Standards

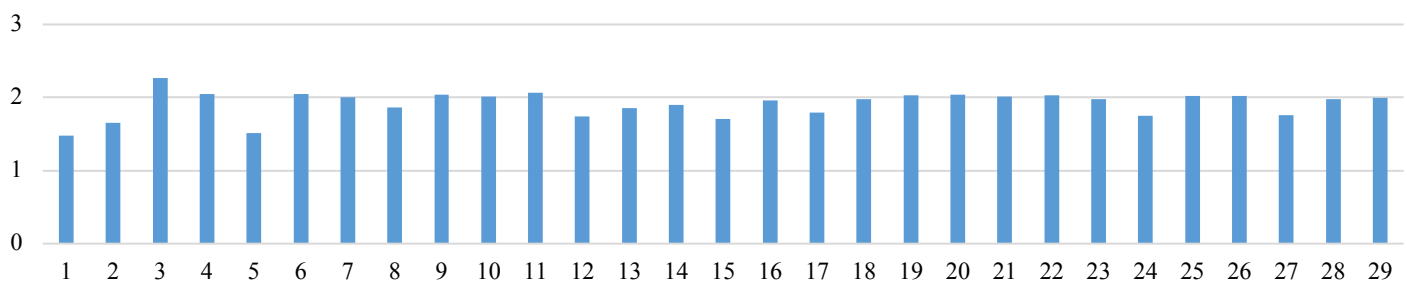


Figure 13. T1 UTESS by Items

# BYU Educator Preparation Program Annual Report

## 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.

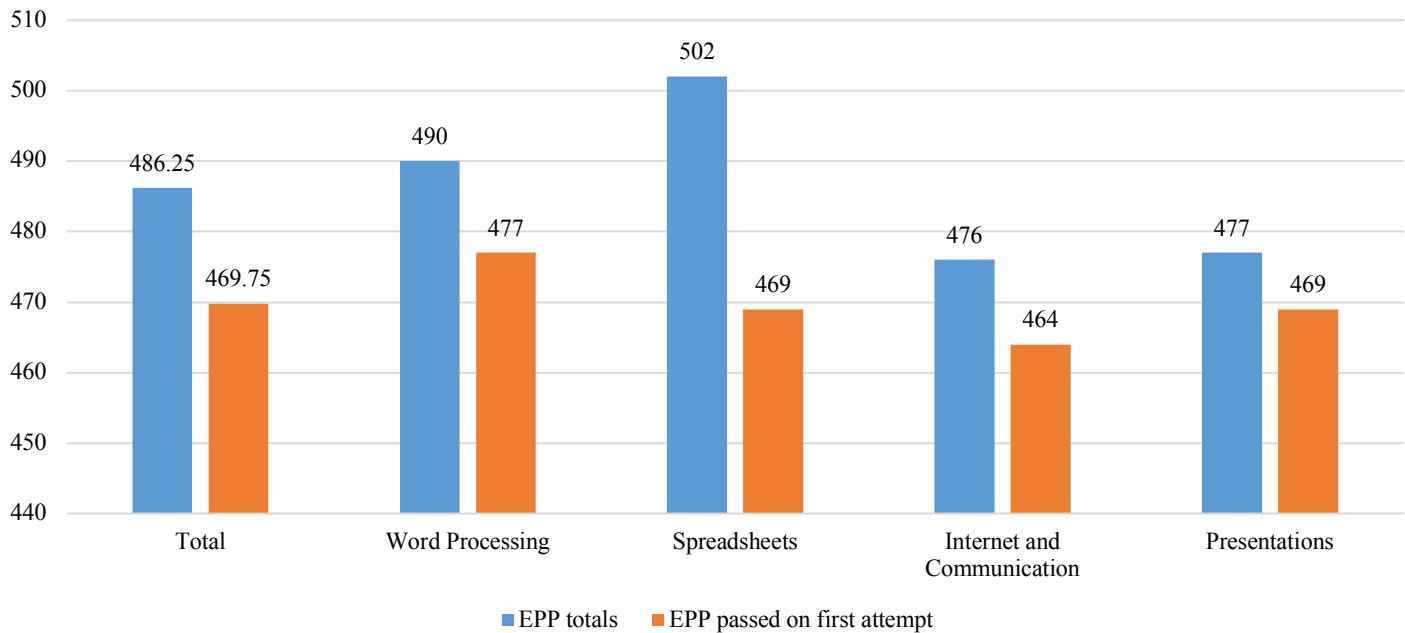


Figure 14. T1 TSA Results of Candidates Passing on the First Attempt.

Table 8.

T1 TSA Results of Candidates Passing on the First Attempt

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

# BYU Educator Preparation Program Annual Report

## 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

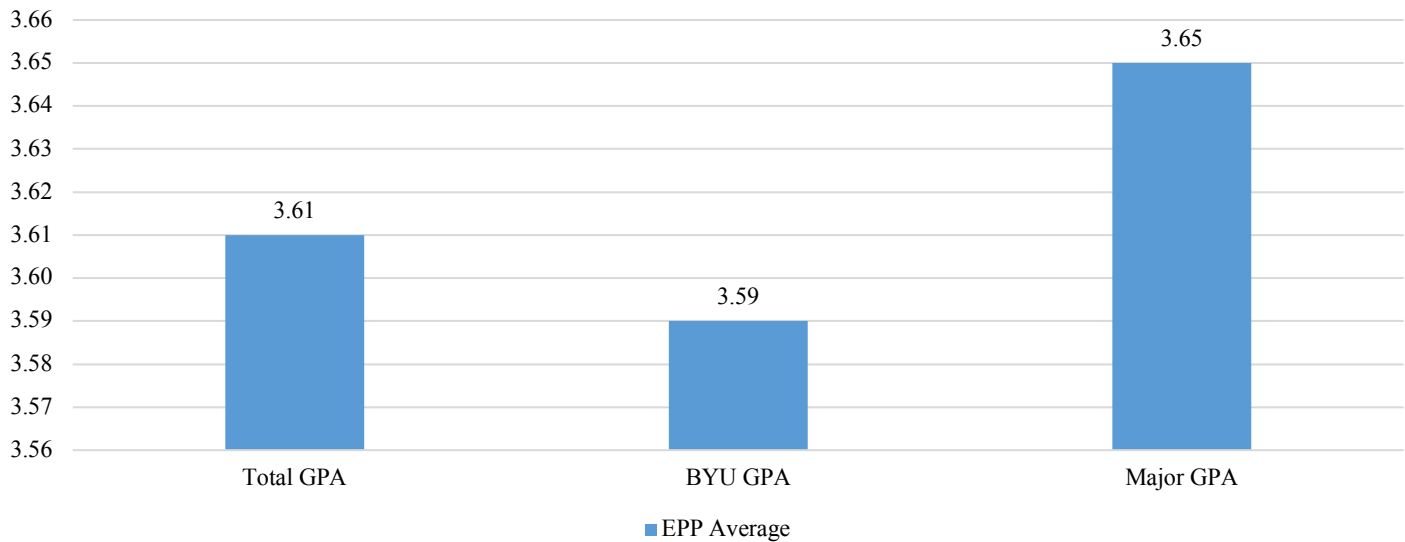


Figure 15. T2 Total, BYU, and Major GPA

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%

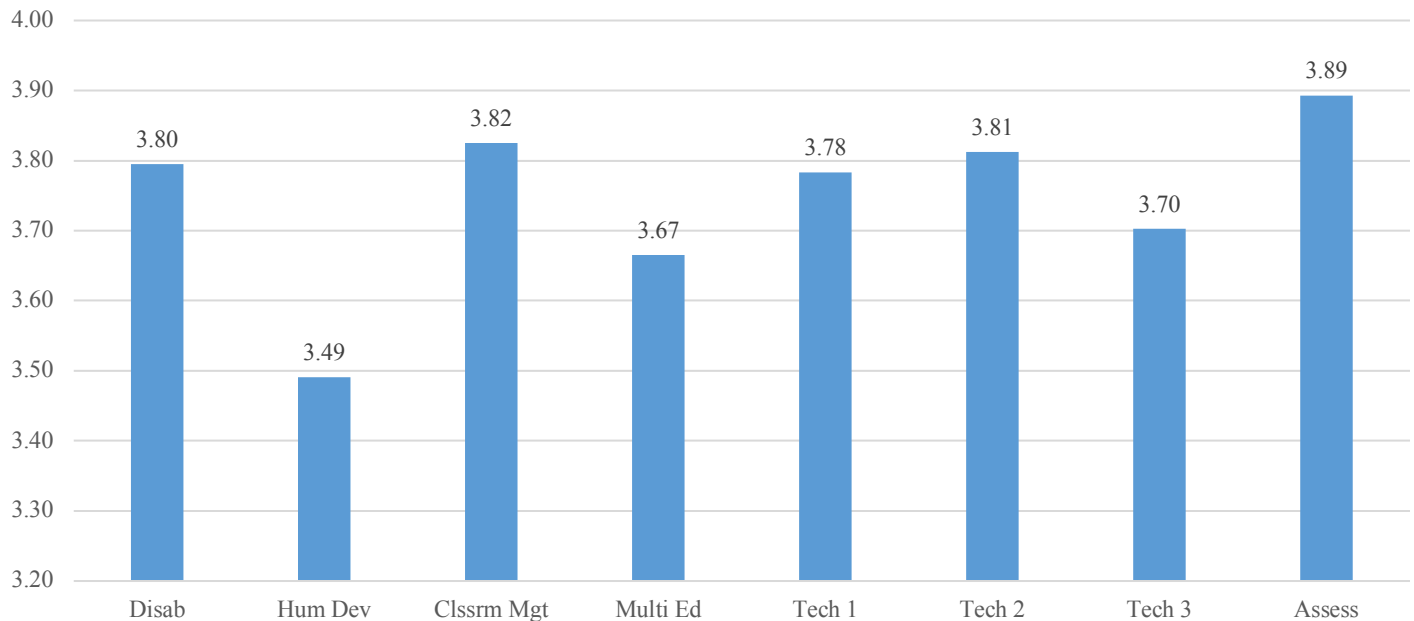
# BYU Educator Preparation Program Annual Report

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
<b>Min</b>	0	0	0	0	0	0	0.7	0
<b>Max</b>	4	4	4	4	4	4	4	4
<b>Average</b>	3.80	3.49	3.82	3.67	3.78	3.81	3.70	3.89
<b>St Dev</b>	0.43	0.75	0.52	0.67	0.71	0.52	0.62	0.40
<b>Count</b>	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



# BYU Educator Preparation Program Annual Report

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.

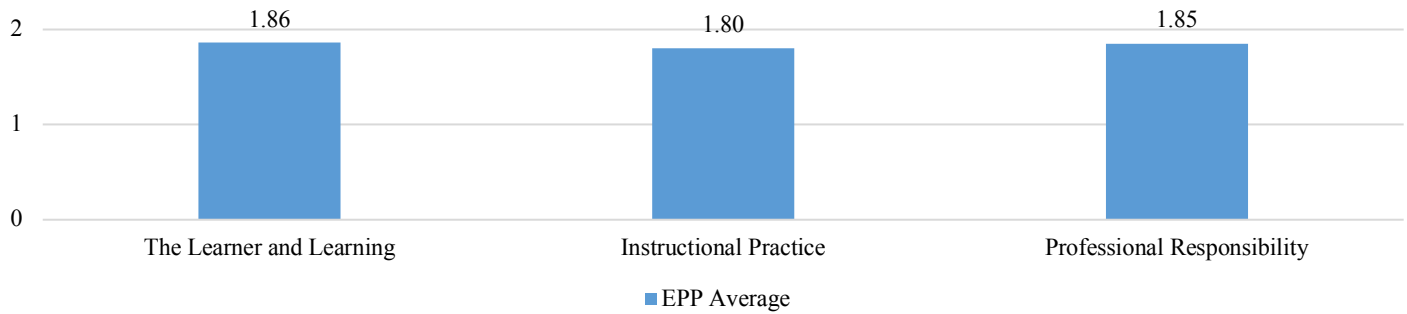


Figure 17. T2 PAES US by UETS Domains

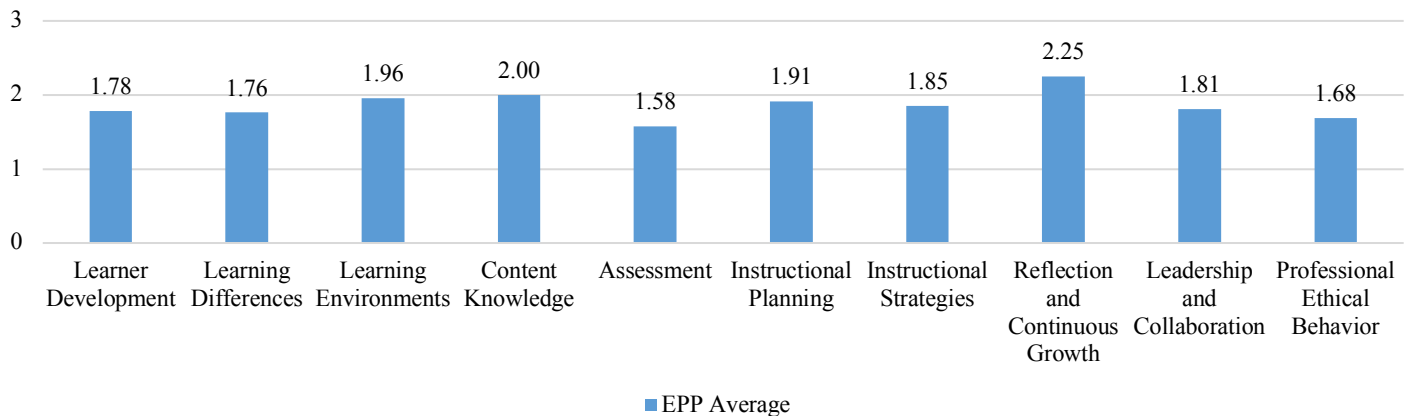


Figure 18. T2 PAES US by UET Standards

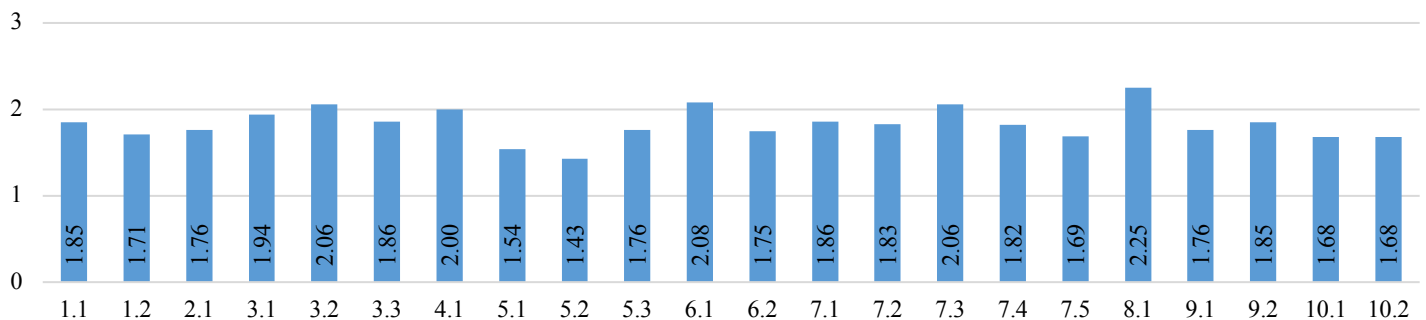


Figure 19. T2 PAES US by Items

# BYU Educator Preparation Program Annual Report

## 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

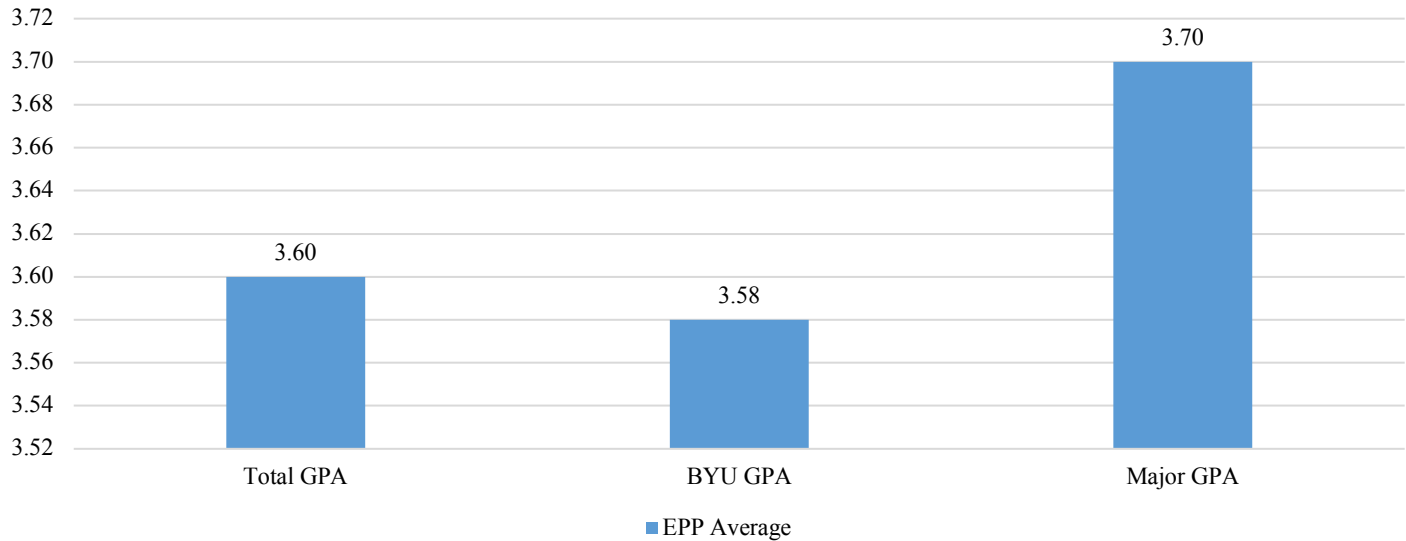


Figure 20. T3 Total, BYU, and Major GPA

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%

# BYU Educator Preparation Program Annual Report

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.

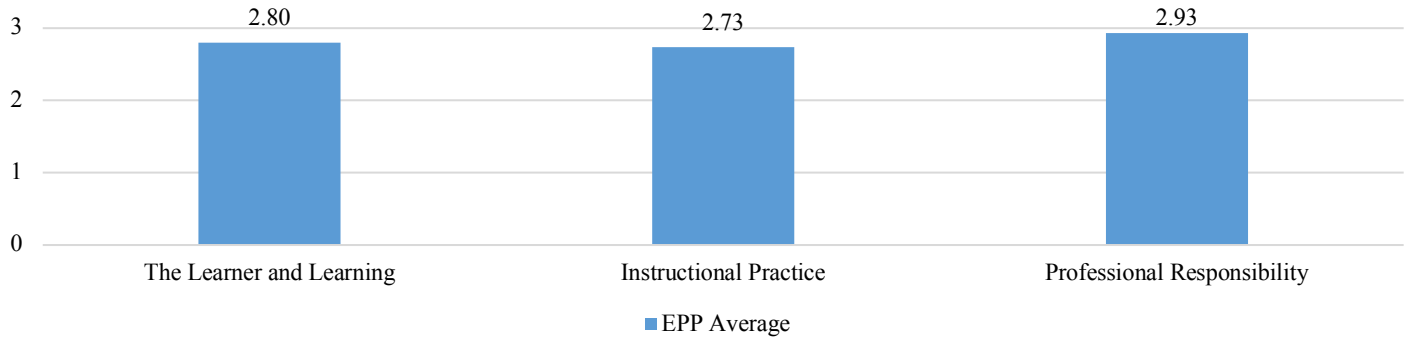


Figure 21. T3 PAES US by UETS Domains

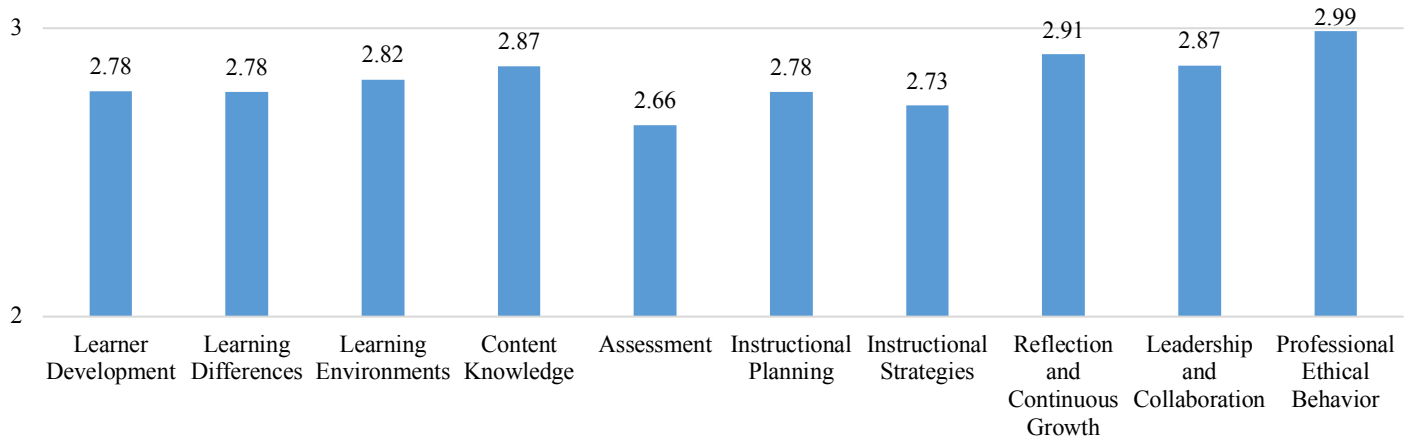


Figure 22. T3 PAES US by UET Standards

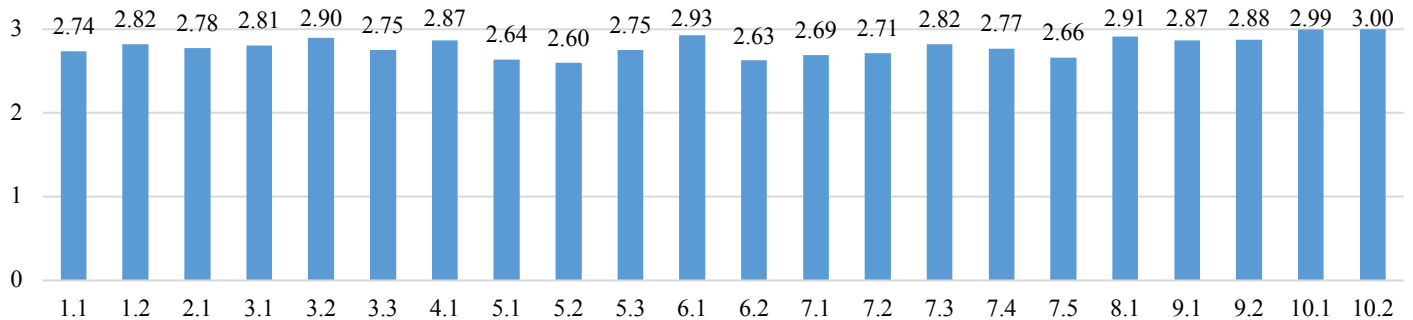


Figure 23. T3 PAES US by Items

# BYU Educator Preparation Program Annual Report

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.

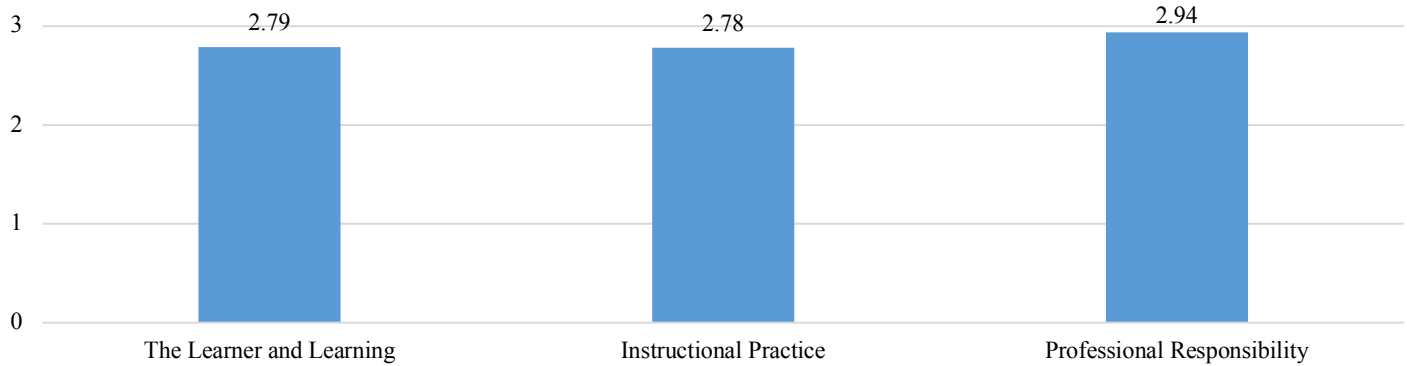


Figure 24. T3 PAES MT by UETS Domains

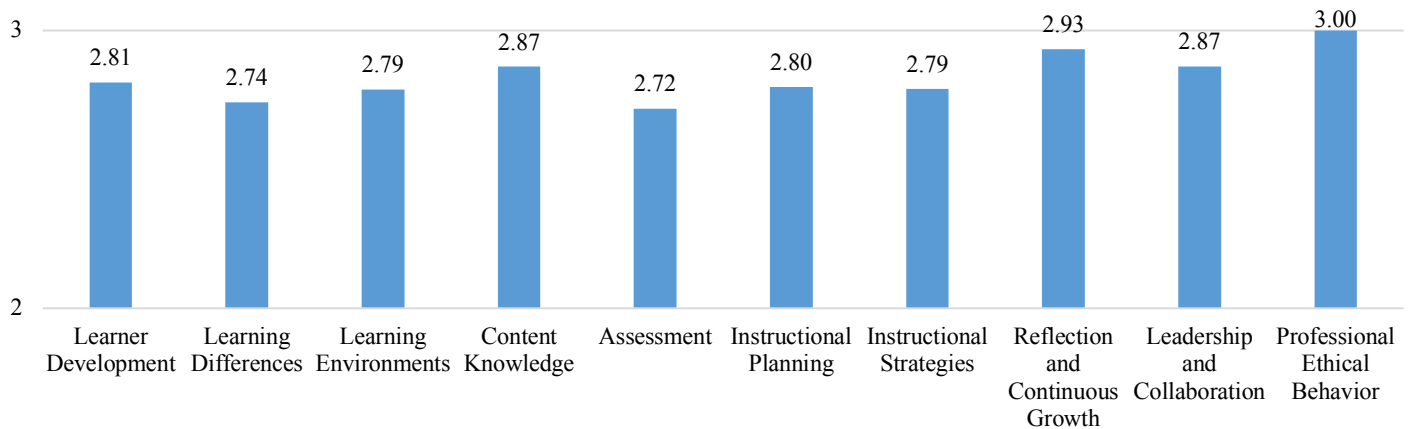


Figure 25. T3 PAES MT by UET Standards

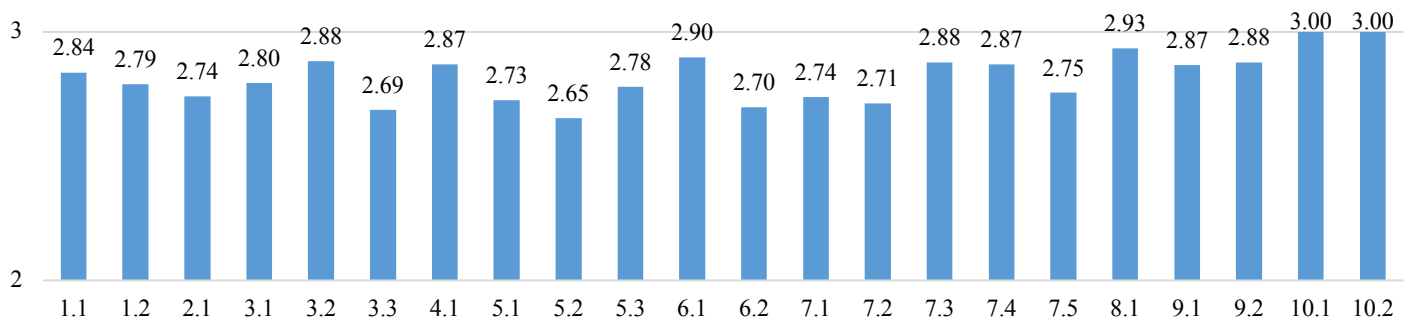


Figure 26. T3 PAES MT by Items

# BYU Educator Preparation Program Annual Report

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.

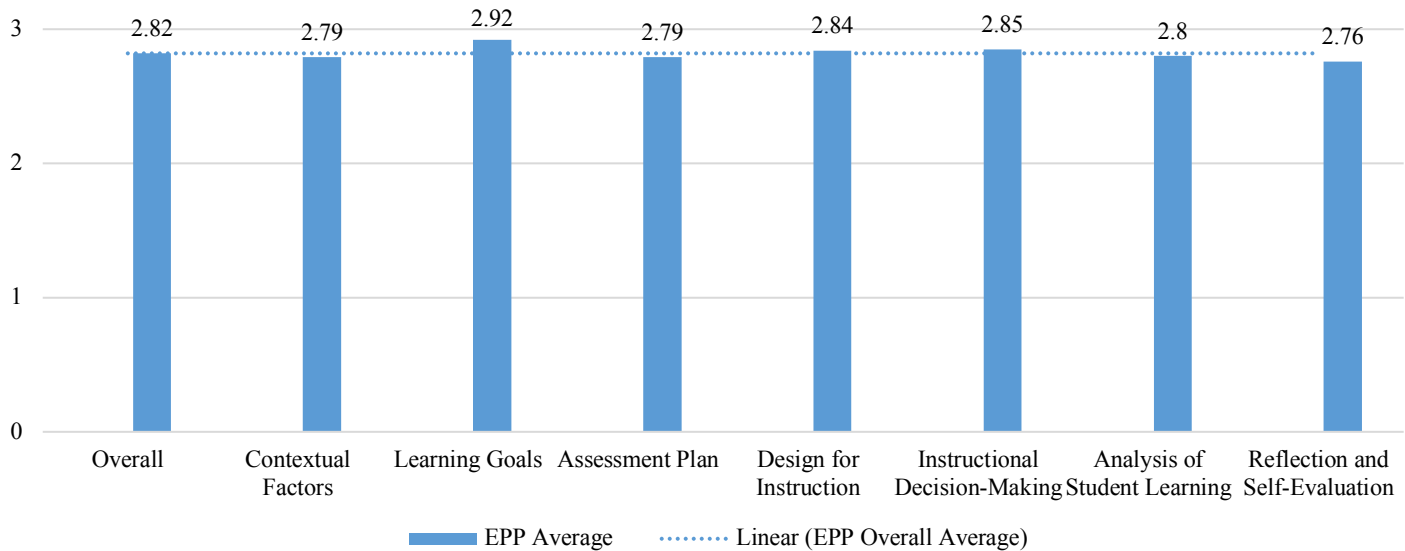


Figure 27. T3 RTWS

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

# BYU Educator Preparation Program Annual Report

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.

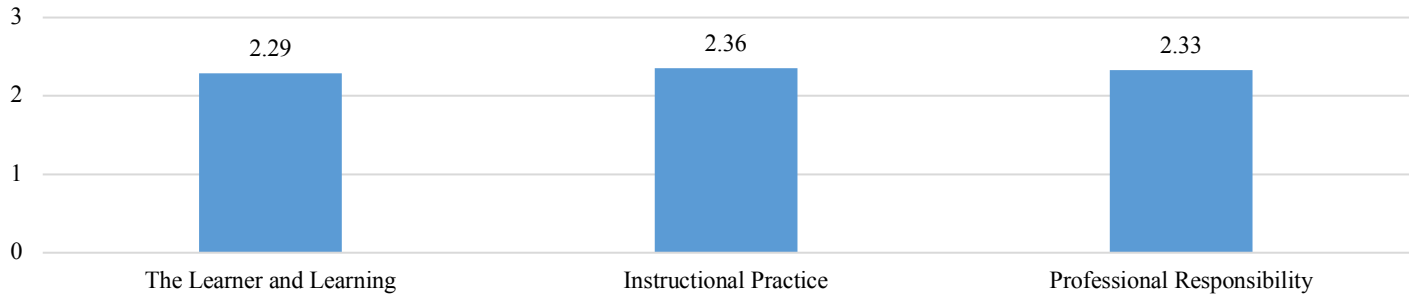


Figure 28. T3 UTESS by UETS Domains

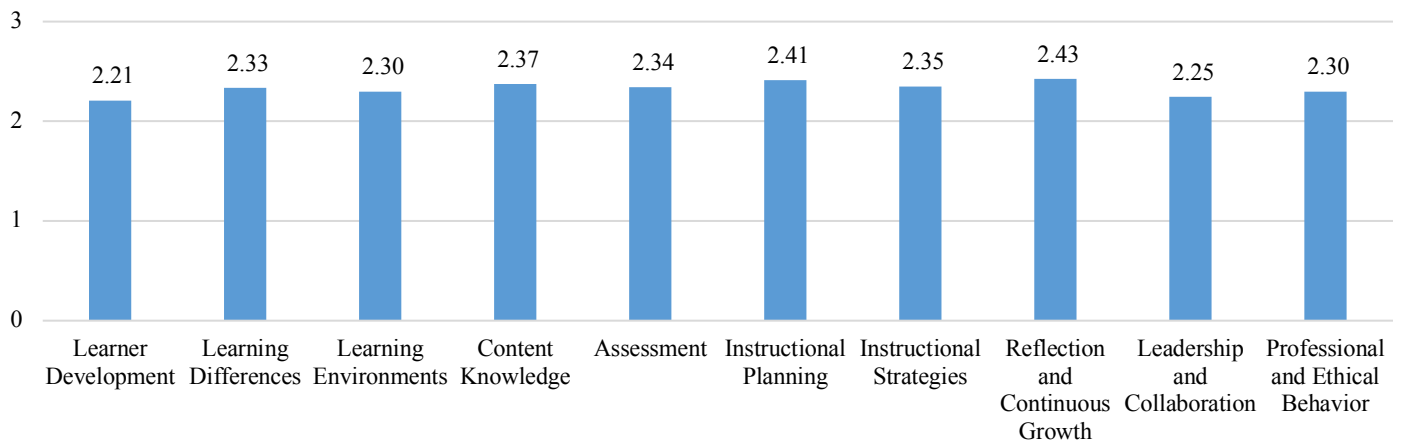


Figure 29. T3 UTESS by UET Standards

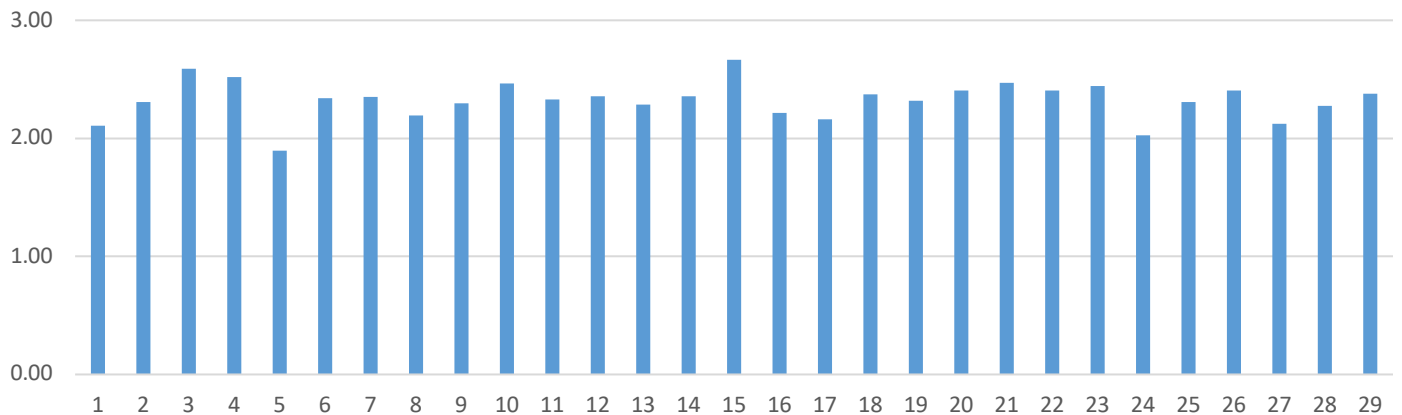


Figure 30. T3 UTESS by Items

# BYU Educator Preparation Program Annual Report

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.

# BYU Educator Preparation Program Annual Report

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.



# BYU Educator Preparation Program Annual Report

Aggregate Report for the Entire EPP

## Appendix A

### Administrative Overview

Table A.1.

*Program Flow*

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

Table A.2.

*Graduated and Licensed*

	Graduated	Licensed
<b>Count</b>	338	261
<b>% of T3</b>	52.72%	68.28%
<b>Total T3</b>	<b>495</b>	<b>495</b>

Table A.3.

*Clinical Experiences for T3 Candidates*

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

### Transition 1

### UTESS

Table A.4.

*T1 UTESS by UETS Domains*

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

# BYU Educator Preparation Program Annual Report

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## Appendix A

Table A.5.

*T1 UTESS by UET Standards*

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

# BYU Educator Preparation Program Annual Report

Aggregate Report for the Entire EPP

## Appendix A

<b>27</b>	1.76	0.86	430
<b>28</b>	1.98	0.85	430
<b>29</b>	1.99	0.83	430
<b>Overall</b>	<b>1.91</b>	<b>0.67</b>	<b>430</b>

## Transition 2

## PAES

Table A.7.

*T2 PAES US by UETS Domains*

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

Table A.8.

*T2 PAES US by UET Standards*

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

Table A.9.

*T2 PAES US by Items*

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

# BYU Educator Preparation Program Annual Report

Aggregate Report for the Entire EPP

## 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
<b>The Learner and Learning</b>	2.80	0.22	496
<b>Instructional Practice</b>	2.73	0.22	496
<b>Professional Responsibility</b>	2.93	0.14	496

Table A.11.

*T3 PAES US by UET Standards*

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

# BYU Educator Preparation Program Annual Report

Aggregate Report for the Entire EPP

## 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*

Domain	EPP Average	EPP St Dev	N
<b>The Learner and Learning</b>	2.79	0.22	514
<b>Instructional Practice</b>	2.78	0.20	514
<b>Professional Responsibility</b>	2.94	0.13	514

Table A.14.

*T3 PAES MT by UET Standards*

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

# BYU Educator Preparation Program Annual Report

Aggregate Report for the Entire EPP

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<b>Assessment</b>	2.72	0.32	514
<b>Instructional Planning</b>	2.80	0.29	514
<b>Instructional Strategies</b>	2.79	0.23	514
<b>Reflection and Continuous Growth</b>	2.93	0.25	514
<b>Leadership and Collaboration</b>	2.87	0.28	514
<b>Professional Ethical Behavior</b>	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
<b>The Learner and Learning</b>	2.29	0.40	353
<b>Instructional Practice</b>	2.36	0.36	353
<b>Professional Responsibility</b>	2.33	0.37	353

# BYU Educator Preparation Program Annual Report

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## Appendix A

Table A.17.

*T3 UTESS by UET Standards*

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

# BYU Educator Preparation Program Annual Report

Aggregate Report for the Entire EPP

## Appendix A

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





**BYU Educator Preparation Program  
2017 – 2018 Annual Report**

Report for Chemistry Education (BS)

Prepared by the EPP Support Team  
August 2018

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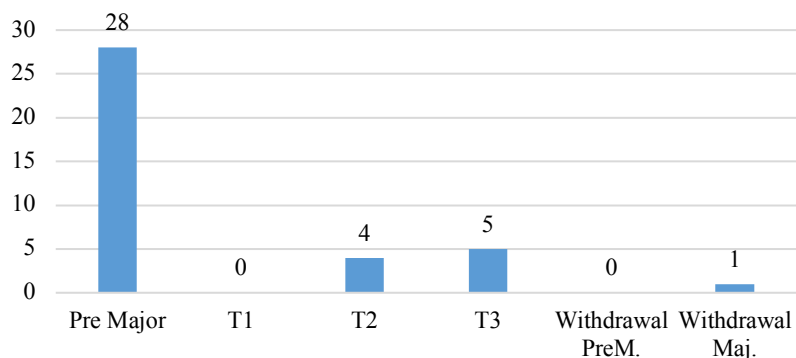
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# BYU Educator Preparation Program Annual Report

## Chemistry Education

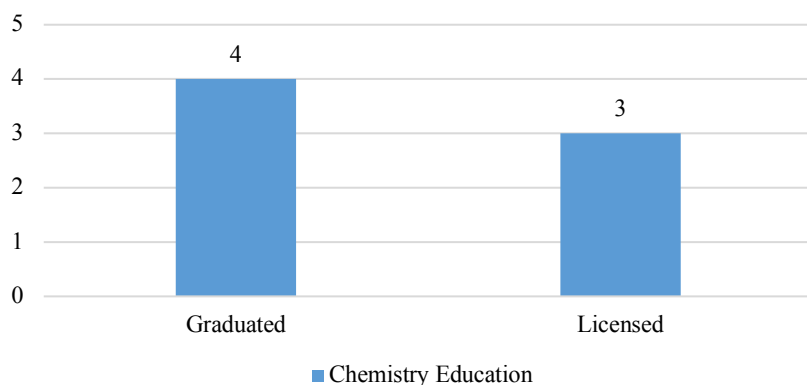
### Administrative Overview

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



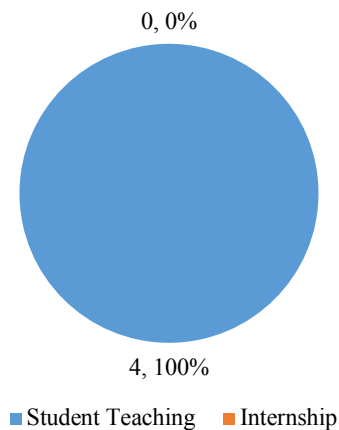
In 2017-2018, the Chemistry Education program had 28 candidates enrolled in its pre-major, zero candidates in Transition 1, four candidates in Transition 2, and five candidates in Transition 3.

Figure 1. Program Flow



Four students graduated from Chemistry Education. While many candidates pursue licensure, one 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 100% of the candidates choosing student teaching.

Figure 3. Clinical Experiences for T3 Candidates

# BYU Educator Preparation Program Annual Report

## Chemistry Education

### Biographic Overview

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

#### Gender

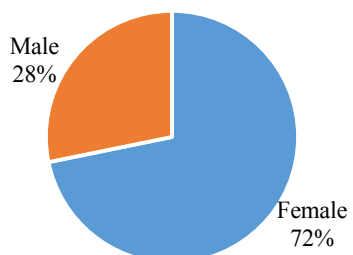


Table 1.

*Gender*

Gender	Count	Percent of Total
Female	28	71.79%
Male	11	28.21%
Total	39	100.00%
Missing	0	0.00%
Grand Total	39	100.00%

Figure 4. Gender

#### Socioeconomic Status

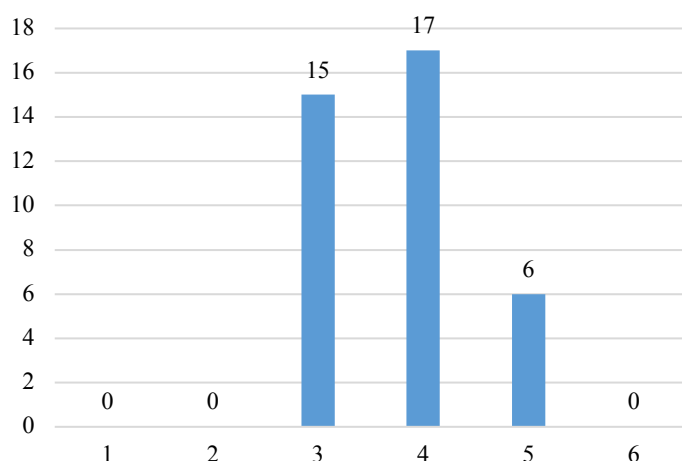


Table 2.

*Socioeconomic Status*

SES Category	Count	Percent of Total
SES 1	0	0.00%
SES 2	0	0.00%
SES 3	15	38.46%
SES 4	17	43.59%
SES 5	6	15.38%
SES 6	0	0.00%
Total	38	97.44%
Missing	1	2.56%
Grand Total	39	100.00%

Note: See Appendix A for SES Explanation

#### Marital Status

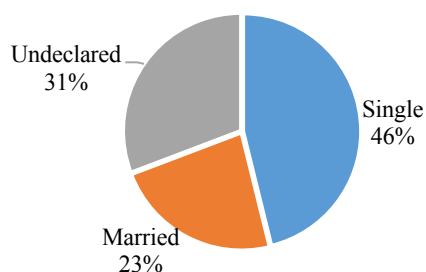


Table 3.

*Marital Status*

Marital Status	Count	Percent of Total
Single	18	46.15%
Married	9	23.08%
Undeclared	12	30.77%
Total	39	100.00%
Missing	0	0.00%
Grand Total	39	100.00%

Figure 6. Marital Status

# BYU Educator Preparation Program Annual Report

Chemistry Education

Biographic Overview

## Age

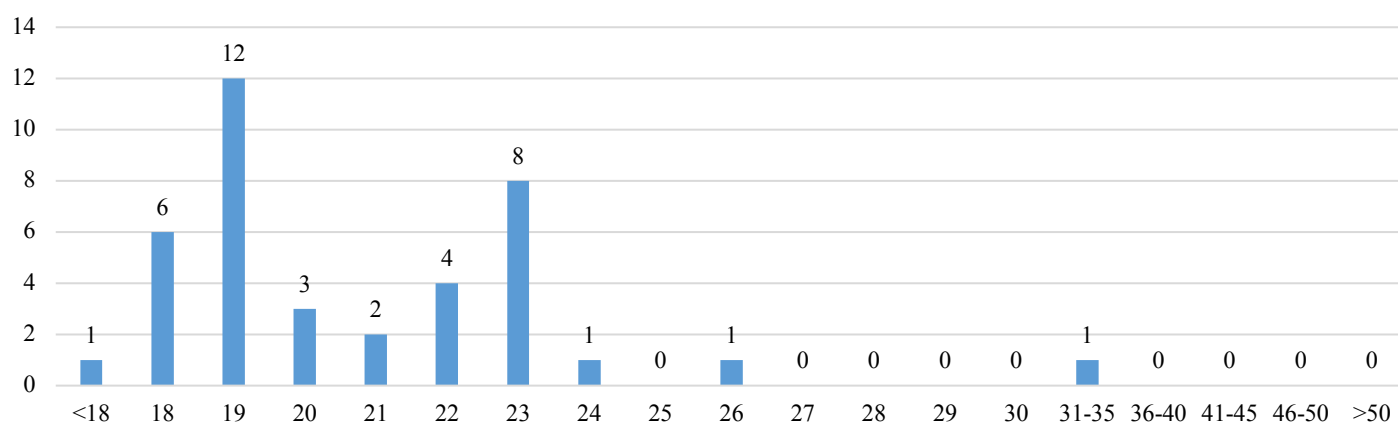


Figure 7. Age

Table 4.

Age

Age	Count	Percent of Total
<18	1	2.56%
18	6	15.38%
19	12	30.77%
20	3	7.69%
21	2	5.13%
22	4	10.26%
23	8	20.51%
24	1	2.56%
25	0	0.00%
26	1	2.56%
27	0	0.00%
28	0	0.00%
29	0	0.00%
30	0	0.00%
31-35	1	2.56%
36-40	0	0.00%
41-45	0	0.00%
46-50	0	0.00%
>50	0	0.00%
<b>Total</b>	<b>39</b>	<b>100.00%</b>
<b>Missing</b>	<b>0</b>	<b>0.00%</b>
<b>Grand Total</b>	<b>39</b>	<b>100.00%</b>

# BYU Educator Preparation Program Annual Report

## Chemistry Education

### Transition 1: Admissions

#### Ethnicity

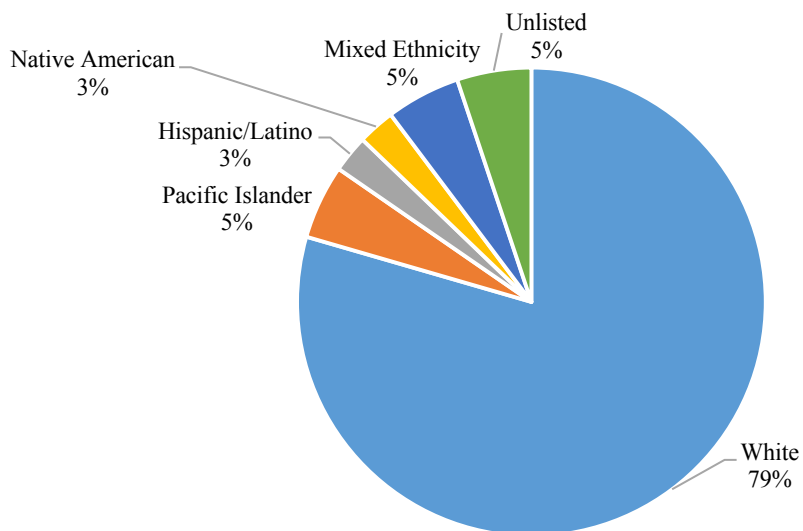


Figure 8. Ethnicity

Table 5.  
Ethnicity

Ethnicity	Count	Percent of Total
White	31	79.49%
Pacific Islander	2	5.13%
Hispanic/Latino	1	2.56%
Native American	1	2.56%
Mixed Ethnicity	2	5.13%
Unlisted	2	5.13%
Total	39	100.00%
Missing	0	0.00%
Grand Total	39	100.00%

# BYU Educator Preparation Program Annual Report

## Chemistry Education

### 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

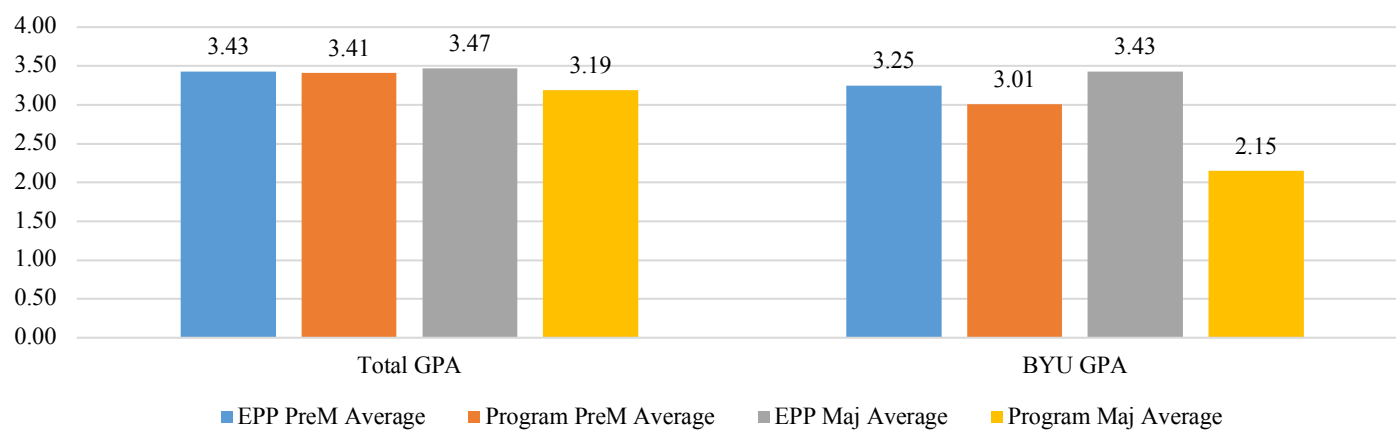


Figure 9. Total and BYU GPA at Admissions

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)
<b>Max</b>	4.00	4.00	4.00	3.19	4.00	3.90	4.00	2.15
<b>Min</b>	0.18	1.56	0.53	3.19	0.18	1.56	0.53	2.15
<b>Average</b>	3.43	3.41	3.47	3.19	3.25	3.01	3.43	2.15
<b>St Dev</b>	0.57	0.61	0.48	NA	0.65	0.70	0.51	NA
<b>Count</b>	1258	21.00	491	1.00	858	14.00	466	1
<b>% of Total</b>	77.94%	72%	96.46%	100%	53.16%	48%	91.55%	100%
<b>Missing</b>	356	8.00	18	0.00	756	15.00	43	0.00
<b>% of Total</b>	22.06%	28%	3.54%	0%	46.84%	52%	8.45%	0%

Note: M = Major, PRE = Pre-major

# BYU Educator Preparation Program Annual Report

## Chemistry Education

### Transition 1: Admissions

#### ACT

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

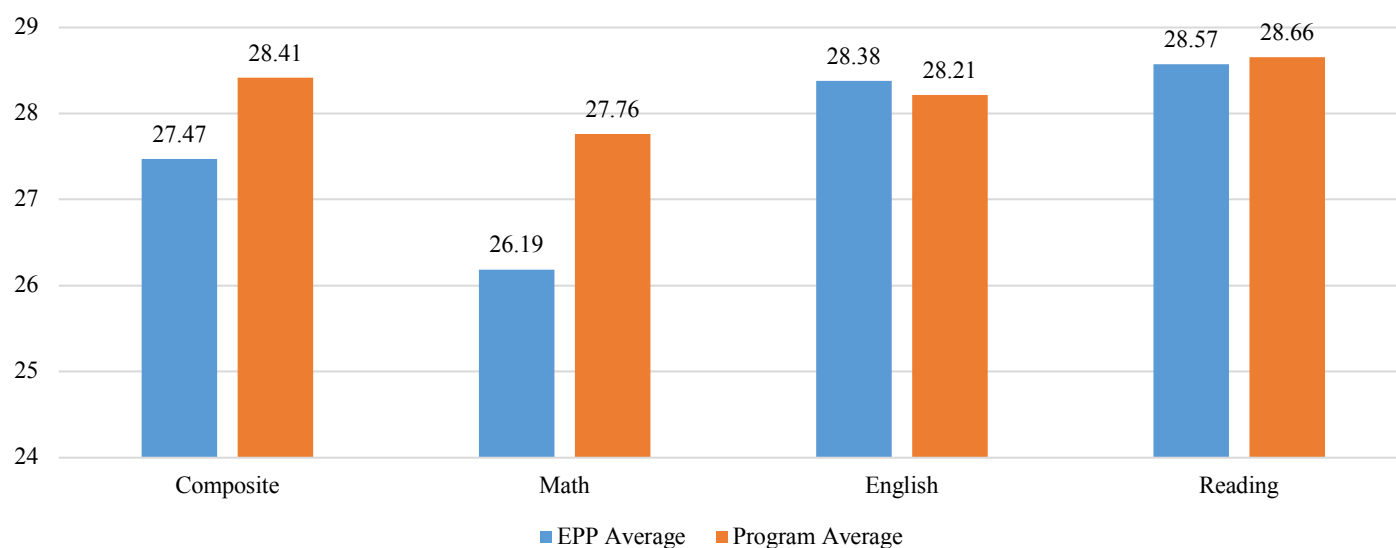


Figure 10. Pre-major ACT Results

Table 7.

Pre-major ACT Results

N = 29	EPP Average	Program Average	EPP St Dev	Program St Dev	Program Min	Program Max	Count	% of Total
Composite	27.47	28.41	3.66	3.38	21	35	29	100.00%
Math	26.19	27.76	3.78	3.00	23	35	29	100.00%
English	28.38	28.21	4.74	4.83	18	36	28	96.55%
Reading	28.57	28.66	4.66	5.09	19	36	29	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.



# BYU Educator Preparation Program Annual Report

## Chemistry Education

### Transition 1: Admissions

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

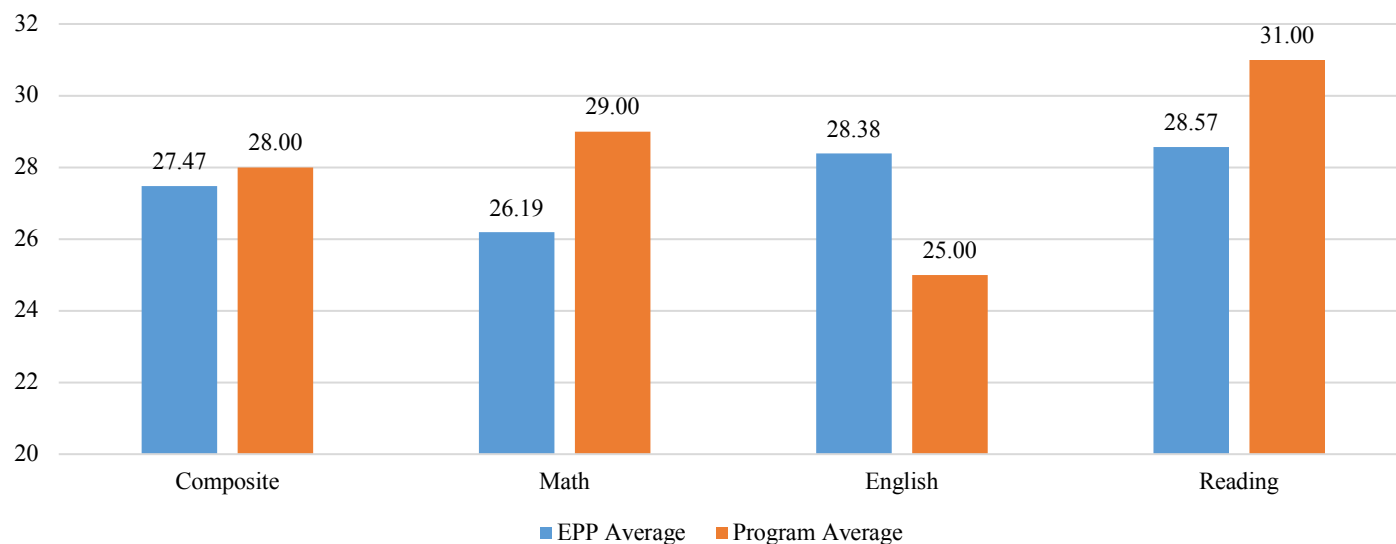


Figure 11. Major ACT Results

Table 8.

Major ACT Results

N = 1	EPP Average	Program Average	EPP St Dev	Program St Dev	Program Min	Program Max	Count	% of Total
Composite	27.47	28.00	3.66	0.00	28	28	1	100.00%
Math	26.19	29.00	3.78	0.00	29	29	1	100.00%
English	28.38	25.00	4.74	0.00	25	25	1	100.00%
Reading	28.57	31.00	4.66	0.00	31	31	1	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.

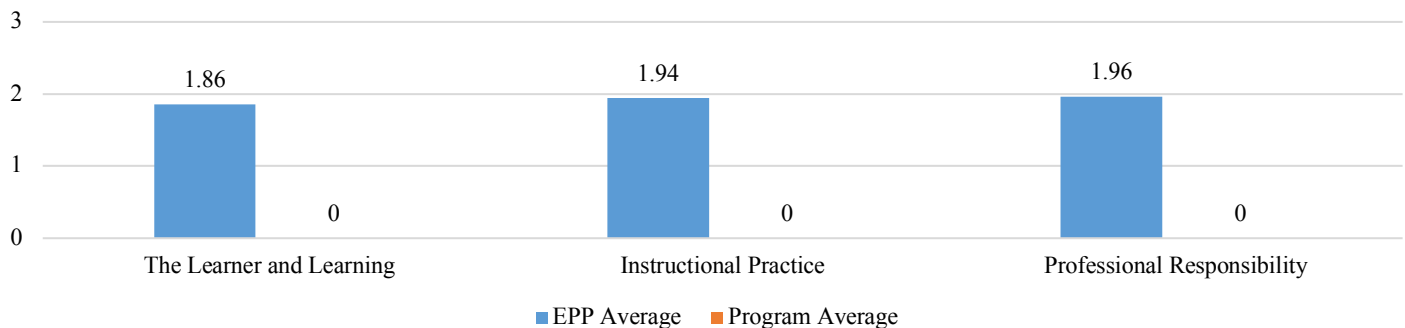
# BYU Educator Preparation Program Annual Report

## Chemistry Education

### 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.



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

Figure 12. T1 UTESS by UETS Domains

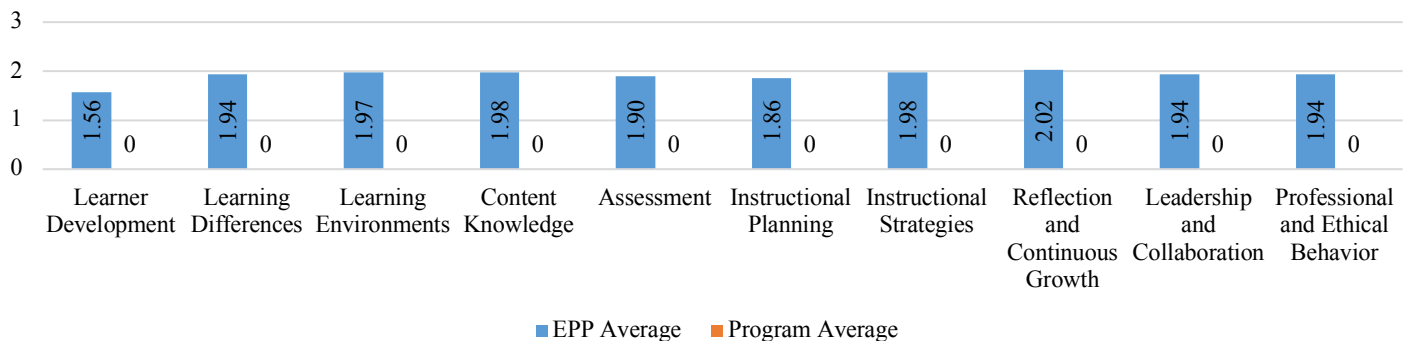


Figure 13. T1 UTESS by UET Standards

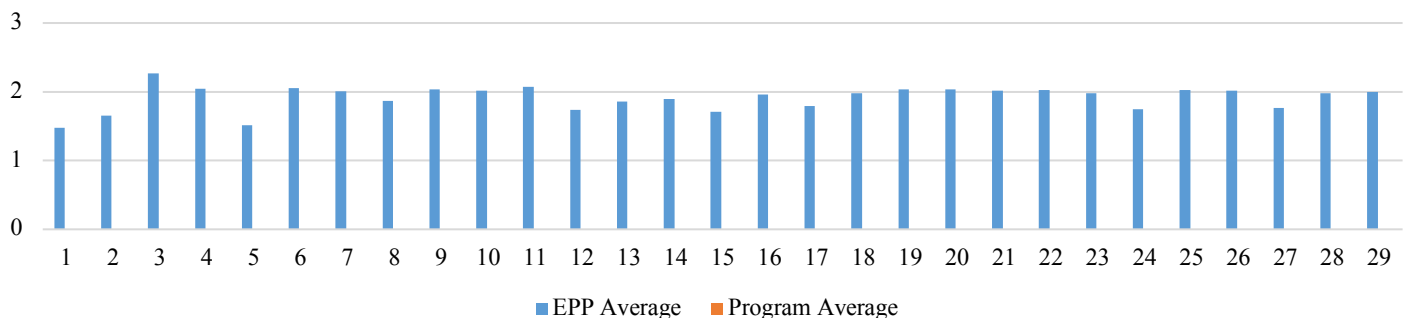


Figure 14. T1 UTESS by Items

# BYU Educator Preparation Program Annual Report

## Chemistry Education

### Transition 1: Admissions

#### TSA

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

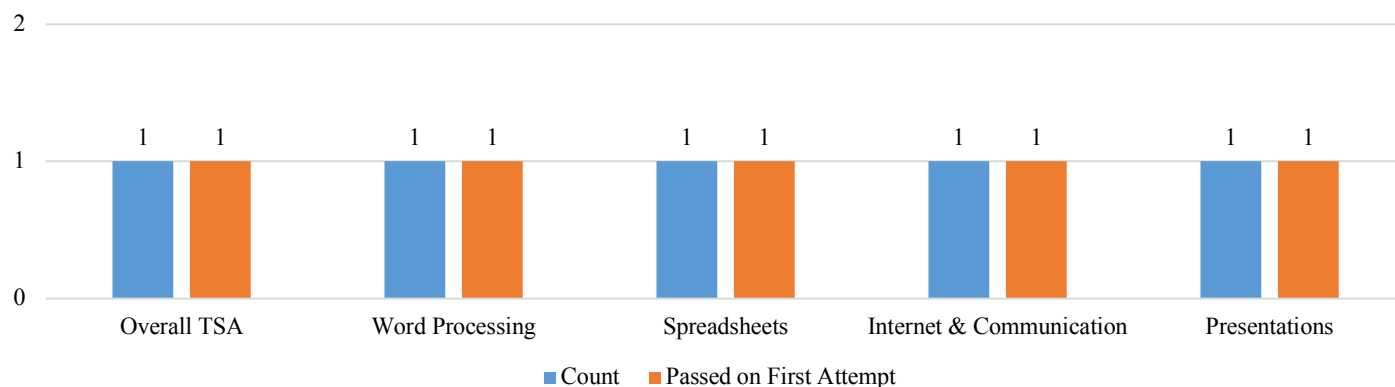


Figure 15. T1 TSA Results of Candidates Passing on the First Attempt.

Table 9.

T1 TSA Results of Candidates Passing on the First Attempt

N = 29	Co unt	Percent of Total	Passed on First Attempt	Percent of Passing on First Attempt	EPP Average to pass on first attempt
<b>Overall TSA</b>	1	3.45%	1	100.00%	86.28%
<b>Word Processing</b>	1	3.45%	1	100.00%	95.53%
<b>Spreadsheets</b>	1	3.45%	1	100.00%	92.95%
<b>Internet &amp; Communication</b>	1	3.45%	1	100.00%	98.29%
<b>Presentations</b>	1	3.45%	1	100.00%	97.41%

# BYU Educator Preparation Program Annual Report

## Chemistry Education

### 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

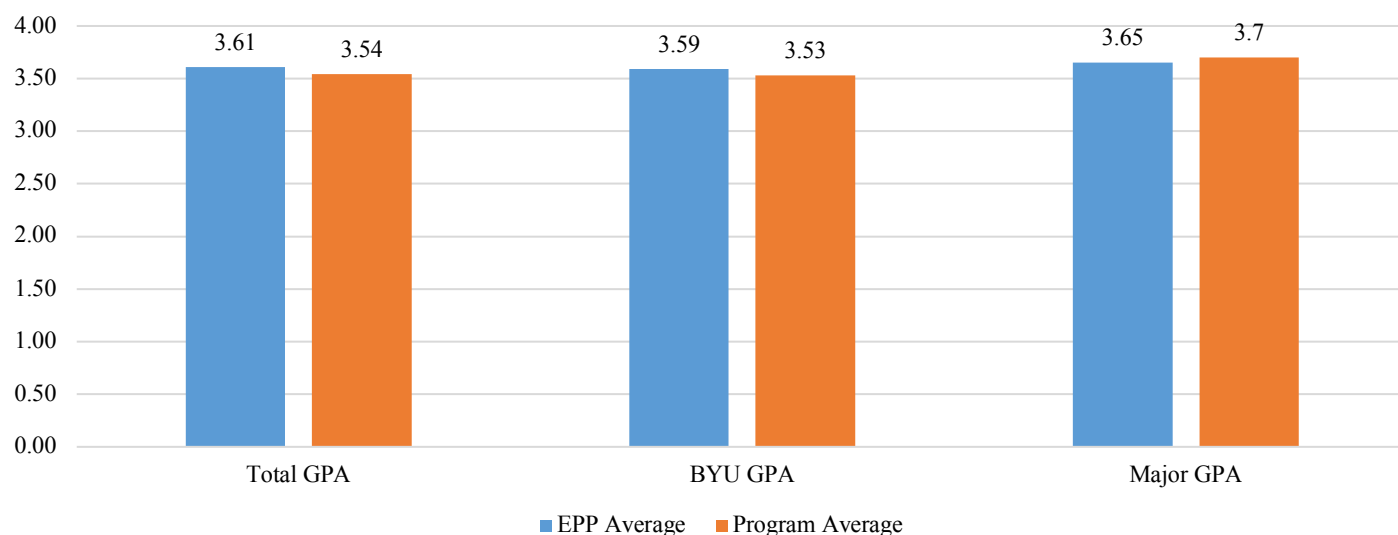


Figure 16. T2 Total, BYU, and Major GPA

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
<b>Max</b>	4.00	3.96	4.00	3.96	4.00	3.96
<b>Min</b>	1.77	2.77	1.36	2.75	1.00	3.1
<b>Average</b>	3.61	3.54	3.59	3.53	3.65	3.7
<b>St Dev</b>	0.30	0.53	0.33	0.53	0.31	0.18
<b>Count</b>	1099	4.00	1099	4.00	1094	3
<b>% of Total</b>	100.00%	100%	100.00%	100%	99.55%	100%
<b>Missing</b>	0	0.00	0	0.00	5	0.00
<b>% of Total</b>	0.00%	0%	0.00%	0%	0.45%	0%

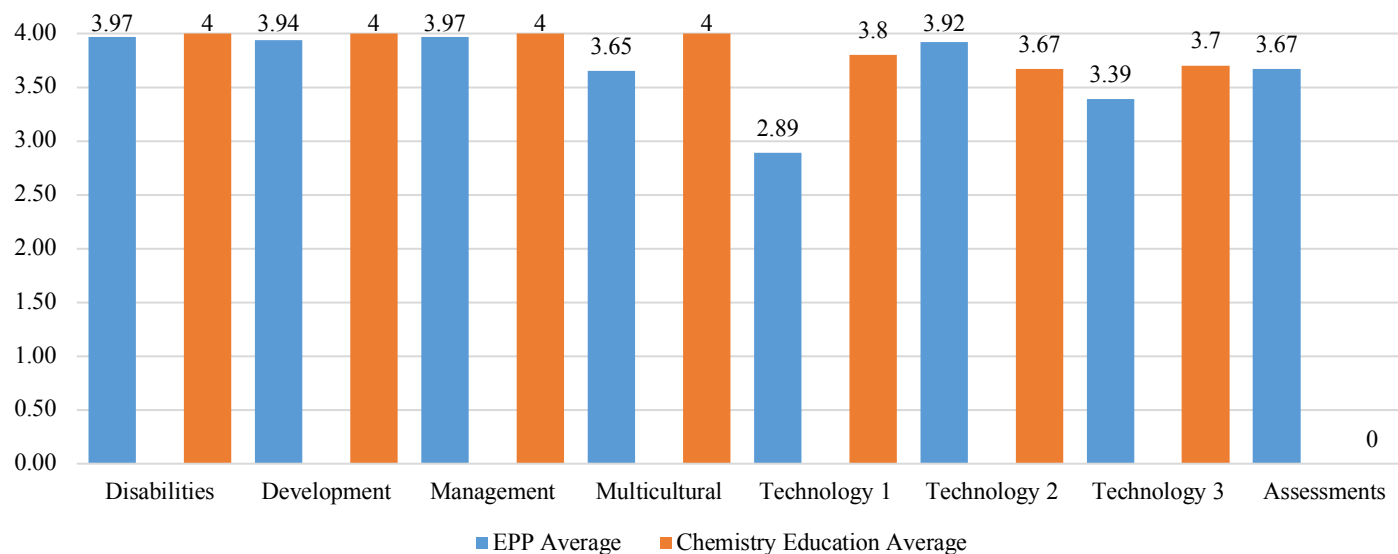
# BYU Educator Preparation Program Annual Report

## Chemistry Education

### 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	Classrm Mgt	Multi Ed	Tech 1	Tech 2	Tech 3	Assess
<b>EPP Average</b>	3.97	3.94	3.97	3.65	2.89	3.92	3.39	3.67
<b>Program Average</b>	4	4	4	4	3.8	3.67	3.7	N/A
<b>Count</b>	2	4	4	2	3	3	2	N/A
<b>St Dev</b>	0	0	0	0	0.58	0.58	0.42	N/A

Note: Disab = Disabilities, Hum Dev = Human Development, Classrm 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

# BYU Educator Preparation Program Annual Report

## Chemistry Education

### 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.

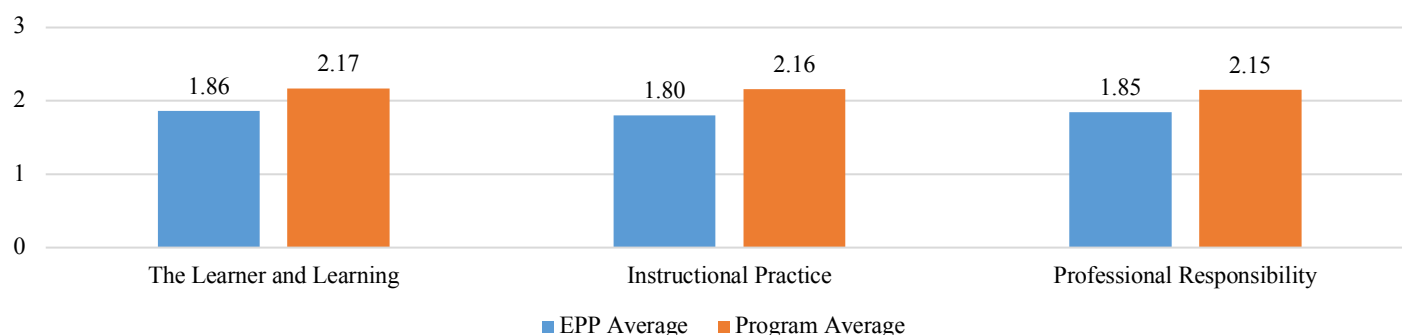


Figure 18. T2 PAES US by UETS Domains

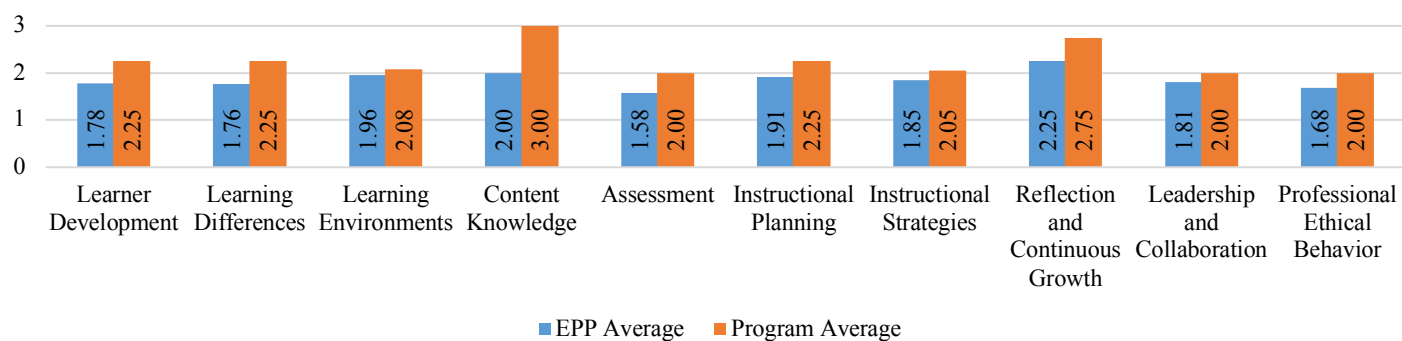


Figure 19. T2 PAES US by UET Standards

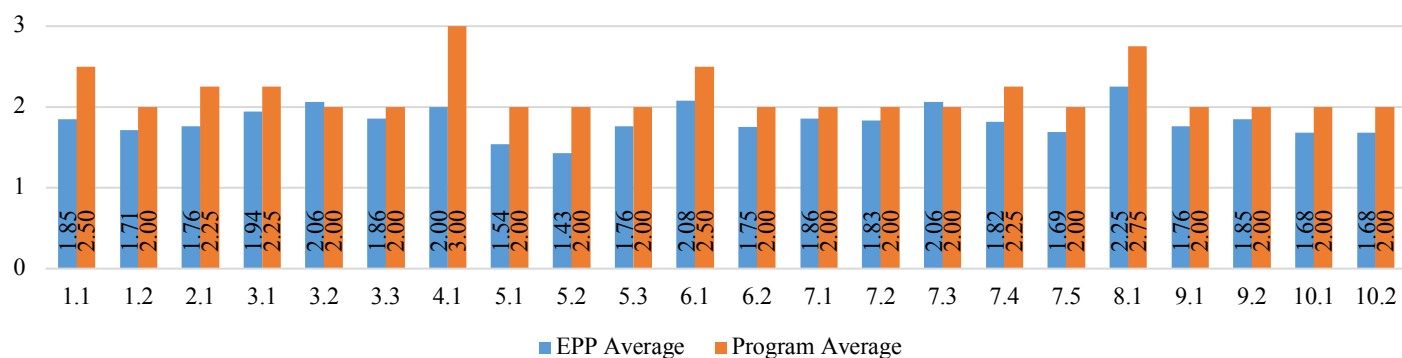


Figure 20. T2 PAES US by Items

# BYU Educator Preparation Program Annual Report

Chemistry Education

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

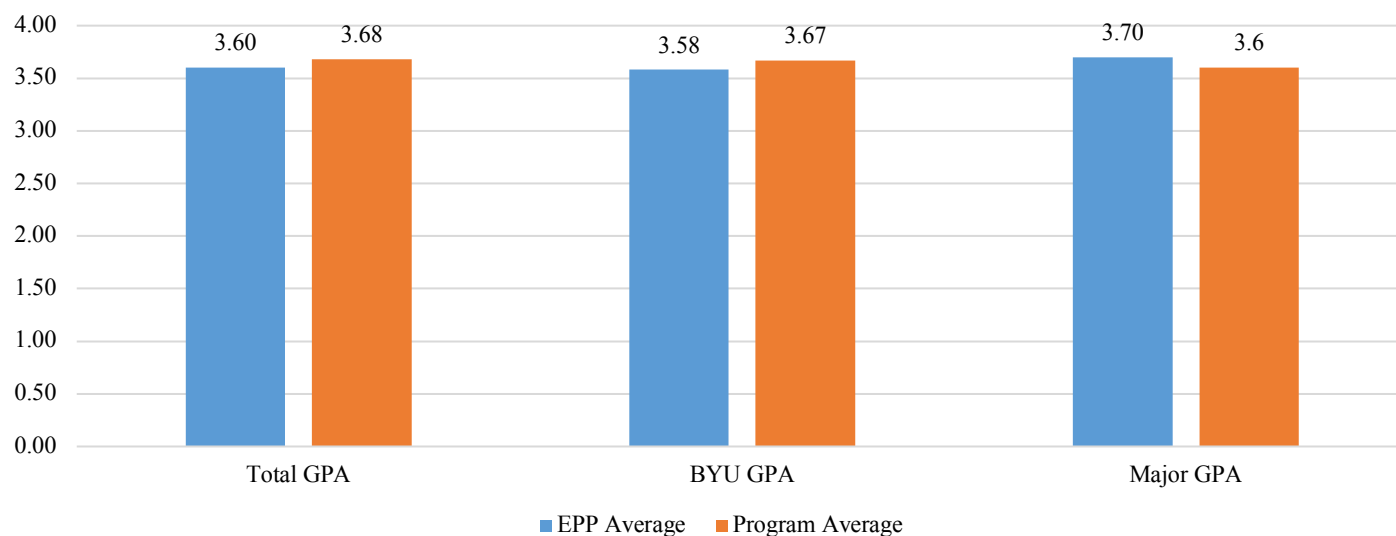


Figure 21. T3 Total, BYU, and Major GPA

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
<b>Max</b>	4.00	3.84	4.00	3.83	4.00	3.78
<b>Min</b>	2.30	3.46	2.12	3.5	2.70	3.44
<b>Average</b>	3.60	3.68	3.58	3.67	3.70	3.6
<b>St Dev</b>	0.29	0.15	0.31	0.16	0.26	0.14
<b>Count</b>	492	5	492	5	489	5
<b>% of Total</b>	100.00%	100%	100.00%	100%	99.39%	100%
<b>Missing</b>	0	0.00	0	0.00	3	0.00
<b>% of Total</b>	0.00%	0%	0.00%	0%	0.61%	0%

# BYU Educator Preparation Program Annual Report

## Chemistry Education

### Transition 3: Clinical

#### PAES US

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

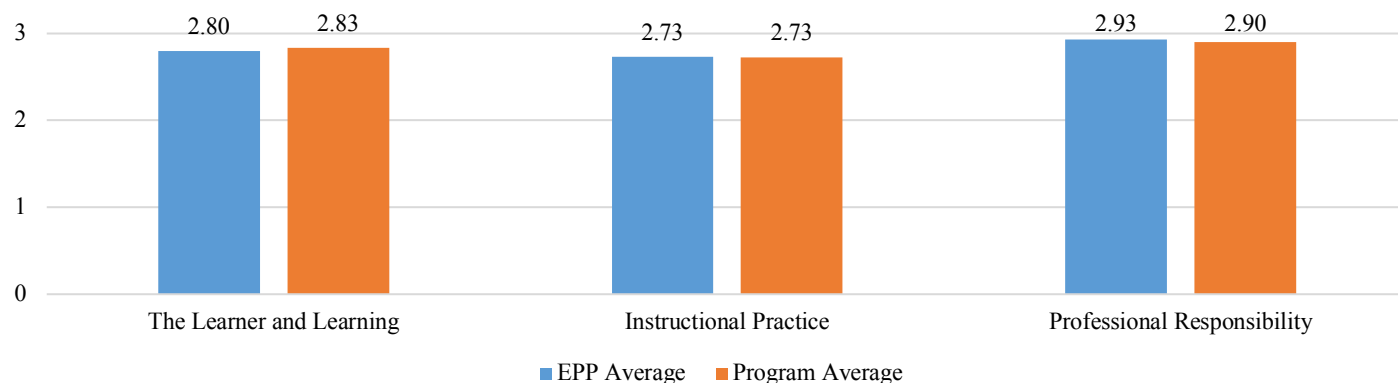


Figure 22. T3 PAES US by UETS Domains

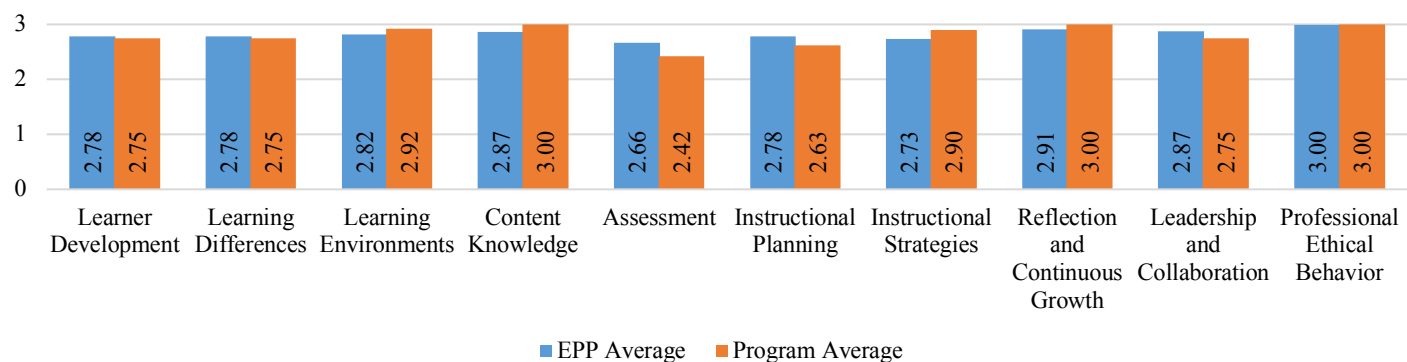


Figure 23. T3 PAES US by UET Standards

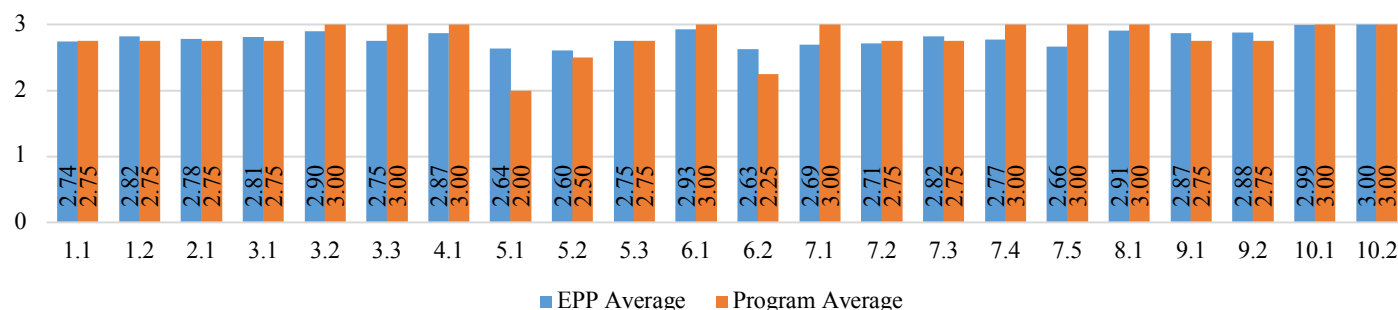


Figure 24. T3 PAES US by Items



# BYU Educator Preparation Program Annual Report

## Chemistry Education

### Transition 3: Clinical

#### PAES MT

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

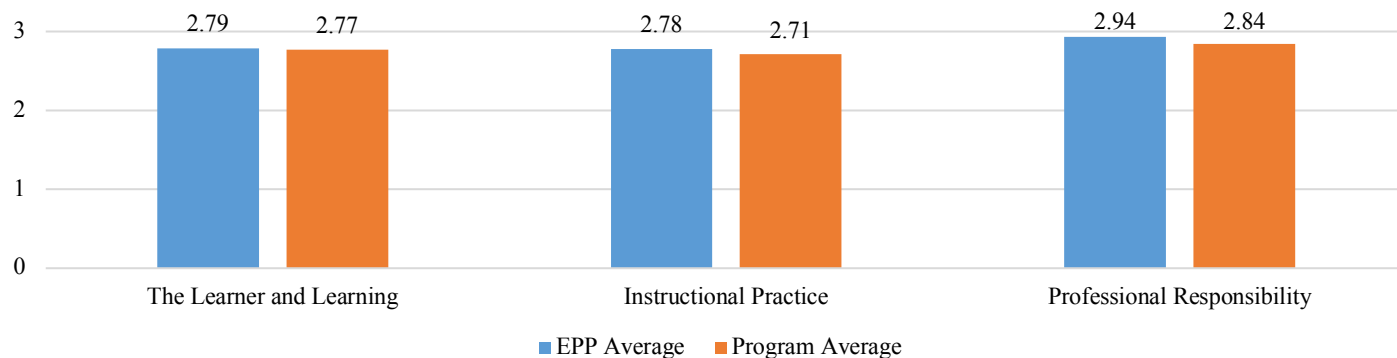


Figure 25. T3 PAES MT by UETS Domains

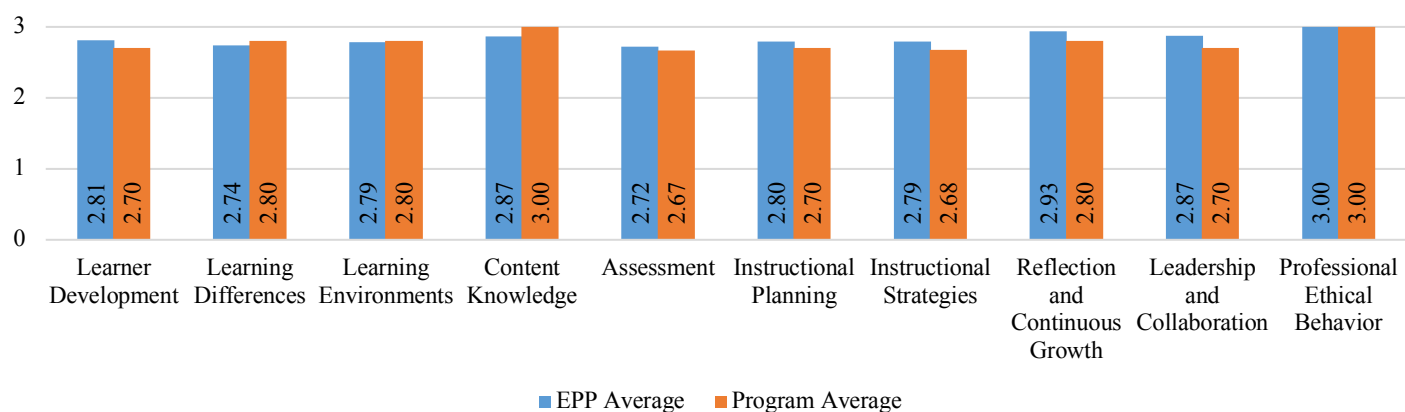


Figure 26. T3 PAES MT by UET Standards

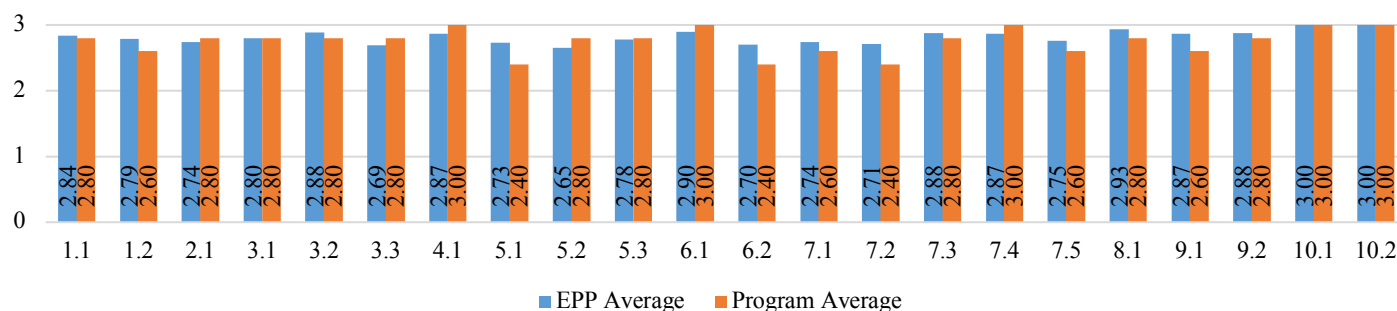


Figure 27. T3 PAES MT by Items

# BYU Educator Preparation Program Annual Report

Chemistry Education

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.

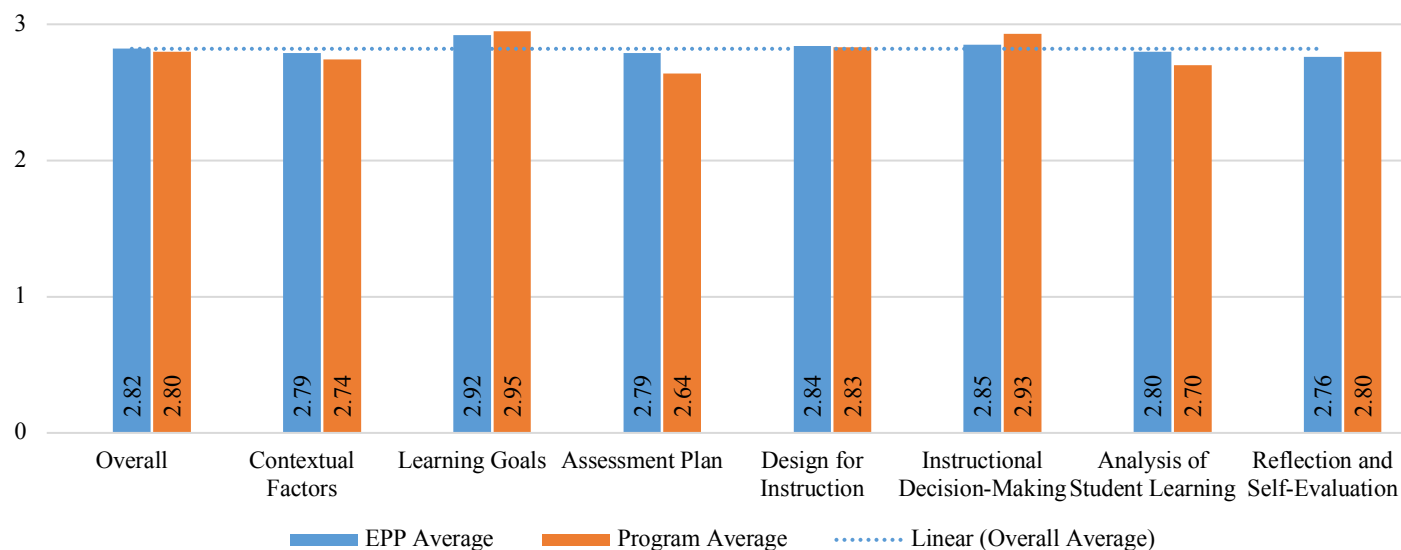


Figure 28. T3 RTWS

Table 13.

T3 RTWS

Section	EPP Average	Program Average	EPP St Dev	Program St Dev	N
Overall	2.82	2.80	0.15	0.08	5
Contextual Factors	2.79	2.74	0.05	0.00	5
Learning Goals	2.92	2.95	0.20	0.11	5
Assessment Plan	2.79	2.64	0.27	0.30	5
Design for Instruction	2.84	2.83	0.21	0.17	5
Instructional Decision-Making	2.85	2.93	0.31	0.33	5
Analysis of Student Learning	2.80	2.70	0.28	0.15	5
Reflection and Self-Evaluation	2.76	2.80	0.31	0.24	5

# BYU Educator Preparation Program Annual Report

## Chemistry Education

### 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.

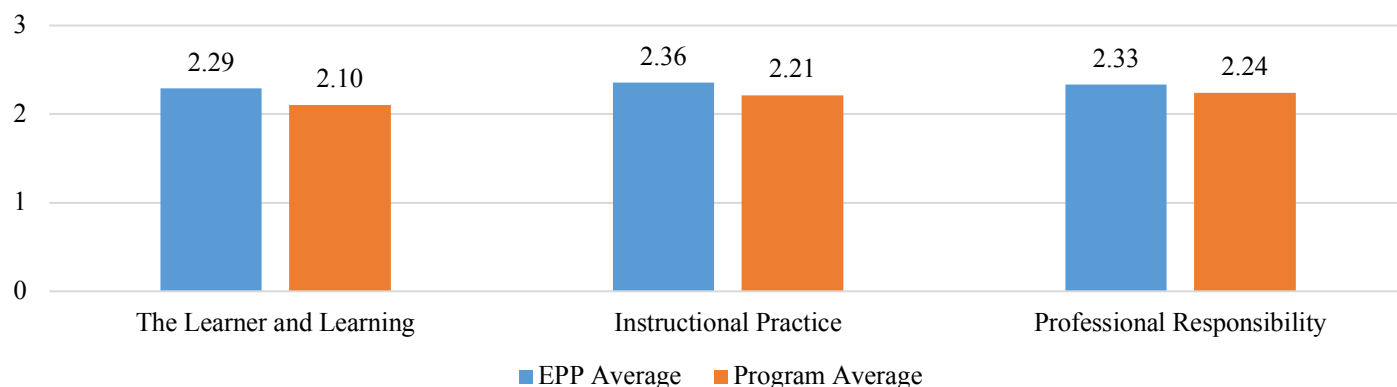


Figure 29. T1 UTESS by UETS Domains

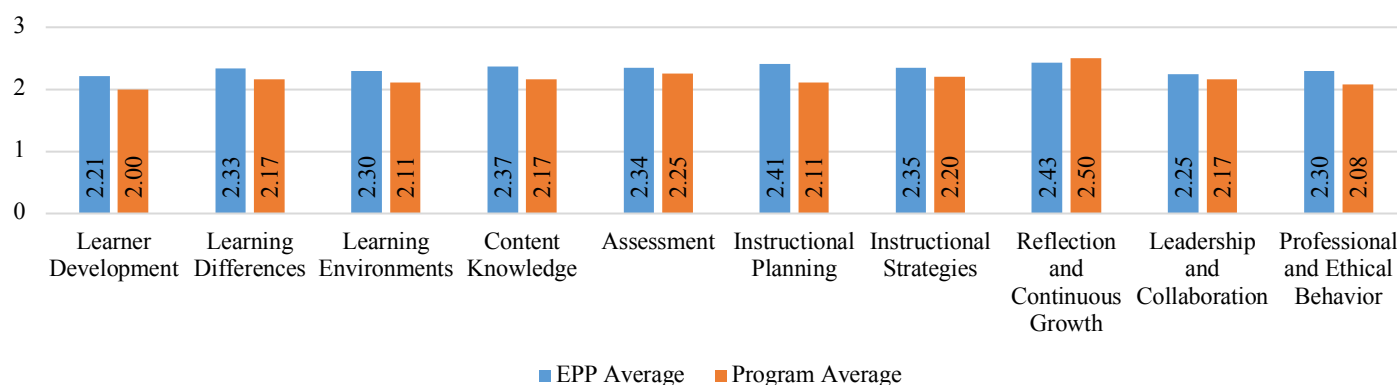


Figure 30. T1 UTESS by UET Standards

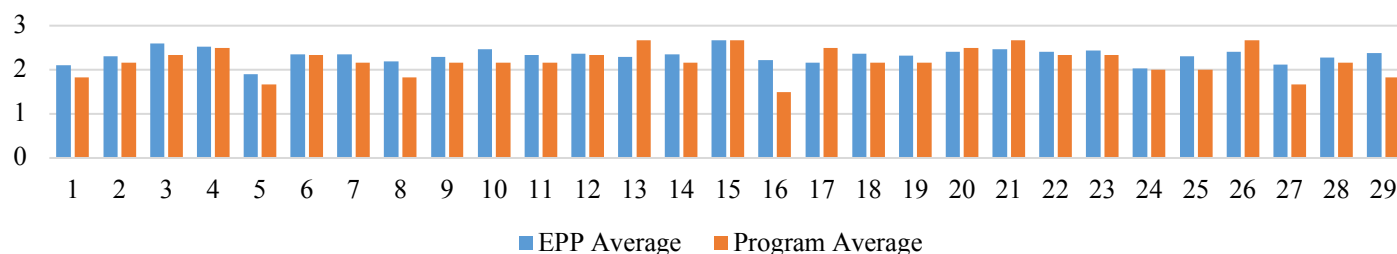


Figure 31. T1 UTESS by Items

# BYU Educator Preparation Program Annual Report

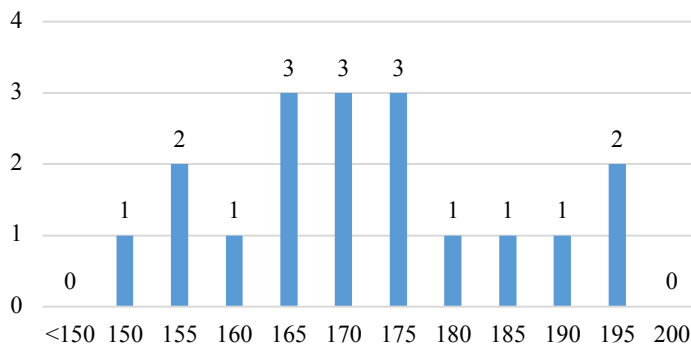
Chemistry Education

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 5245: Chemistry—Content Knowledge



Note: Praxis Test 5245 is scored out of 200 maximum points and a minimum passing score of 157

Figure 32. Praxis Test 5245 Results

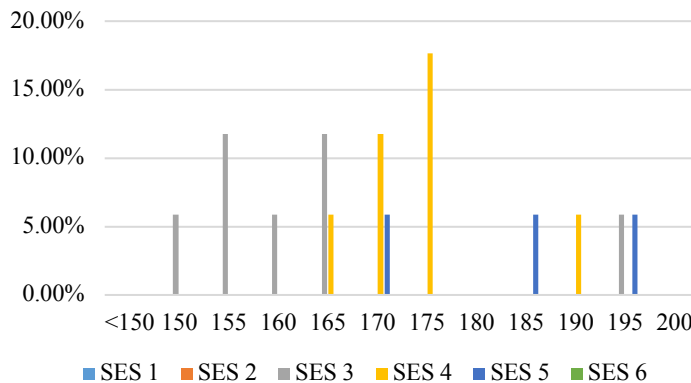


Figure 33. Praxis Test 5245 Results by SES

Table 14.

Praxis Test 5245 Results

Results	Frequency
<150	0
150-154	1
155-159	2
160-164	1
165-169	3
170-174	3
175-179	3
180-184	1
185-189	1
190-194	1
195-199	2
200	0
<b>Total</b>	<b>18</b>

Table 15.

SES Categories

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

# BYU Educator Preparation Program Annual Report

Chemistry Education

## Appendix A

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### 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. In several instances, the population size varies by as much as 5.41% 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; however, these inconsistencies do not exist in over 5.00% of the data. Therefore, the statistics shown below are within a 95.00% confidence interval, as estimated by the EPP office and staff.

# BYU Educator Preparation Program Annual Report

Chemistry Education

Appendix A

## Administrative Overview

Table A.1.

*Program Flow*

Transition	Pre-Major	T1	T2	T3	Withdrawal PreM	Withdrawal Maj	Grand Total
<b>Count</b>	28	0	4	5	0	1	<b>38</b>
<b>Withdrawal %</b>	-	-	-	-	0.00%	11.11%	<b>2.63%</b>
<b>% Total</b>	73.68%	0.00%	10.53%	13.16%	0.00%	3%	<b>100.00%</b>

Table A.2.

*Graduated and Licensed*

	Graduated	Licensed
<b>Count</b>	4	3
<b>% of T3</b>	80.00%	60.00%
<b>Total T3</b>	<b>5</b>	<b>5</b>

Table A.3.

*Clinical Experiences for T3 Candidates*

	Student Teaching	Internship	Missing	Total
<b>Count</b>	4	0	1	<b>5</b>

## Transition 1

## UTESS

Table A.4.

*T1 UTESS by UETS Domains*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	1.86	-	0.67	-	0
<b>Instructional Practice</b>	1.94	-	0.68	-	0
<b>Professional Responsibility</b>	1.96	-	0.70	-	0

# BYU Educator Preparation Program Annual Report

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### Appendix A

Table A.5.

*T1 UTESS by UET Standards*

UET Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	1.56	-	0.83	-	0
<b>Learning Differences</b>	1.94	-	0.73	-	0
<b>Learning Environments</b>	1.97	-	0.75	-	0
<b>Content Knowledge</b>	1.98	-	0.71	-	0
<b>Assessment</b>	1.90	-	0.78	-	0
<b>Instructional Planning</b>	1.86	-	0.78	-	0
<b>Instructional Strategies</b>	1.98	-	0.65	-	0
<b>Reflection and Continuous Growth</b>	2.02	-	0.73	-	0
<b>Leadership and Collaboration</b>	1.94	-	0.74	-	0
<b>Professional and Ethical Behavior</b>	1.94	-	0.74	-	0

Table A.6.

*T1 UTESS by Items*

Measure	EPP Average	Program Average	EPP St Dev	Program St Dev	N
1	1.47	-	0.88	-	0
2	1.66	-	0.89	-	0
3	2.27	-	0.82	-	0
4	2.04	-	0.88	-	0
5	1.52	-	0.92	-	0
6	2.05	-	0.82	-	0
7	2.00	-	0.86	-	0
8	1.86	-	0.83	-	0
9	2.03	-	0.81	-	0
10	2.01	-	0.79	-	0
11	2.07	-	0.82	-	0
12	1.74	-	0.90	-	0
13	1.85	-	0.86	-	0
14	1.90	-	0.87	-	0
15	1.71	-	0.98	-	0
16	1.96	-	0.83	-	0
17	1.79	-	0.85	-	0
18	1.98	-	0.79	-	0
19	2.03	-	0.78	-	0
20	2.04	-	0.84	-	0
21	2.01	-	0.89	-	0
22	2.03	-	0.79	-	0

# BYU Educator Preparation Program Annual Report

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23	1.98	-	0.80	-	0
24	1.75	-	0.87	-	0
25	2.02	-	0.83	-	0
26	2.02	-	0.86	-	0
27	1.76	-	0.86	-	0
28	1.98	-	0.85	-	0
29	1.99	-	0.83	-	0
<b>Overall</b>	<b>1.91</b>	<b>-</b>	<b>0.67</b>	<b>-</b>	<b>0</b>

## Transition 2

## PAES

Table A.7.

*T2 PAES US by UETS Domains*

Measure	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	1.86	2.17	0.5	0.19	4
<b>Instructional Practice</b>	1.8	2.16	0.49	0.09	4
<b>Professional Responsibility</b>	1.85	2.15	0.41	0.10	4

Table A.8.

*T2 PAES US by UET Standards*

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	1.78	2.25	0.49	0.29	4
<b>Learning Differences</b>	1.76	2.25	0.59	0.50	4
<b>Learning Environments</b>	1.96	2.08	0.59	0.17	4
<b>Content Knowledge</b>	2.00	3.00	0.65	0.00	4
<b>Assessment</b>	1.58	2.00	0.58	0.00	4
<b>Instructional Planning</b>	1.91	2.25	0.58	0.29	4
<b>Instructional Strategies</b>	1.85	2.05	0.49	0.10	4
<b>Reflection and Continuous Growth</b>	2.25	2.75	0.68	0.50	4



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<b>Leadership and Collaboration</b>	1.81	2.00	0.55	0.00	4
<b>Professional Ethical Behavior</b>	1.68	2.00	0.47	0.00	4

Table A.9.

*T2 PAES US by Items*

Measure	EPP Average	Program Average	EPP St Dev	Program St Dev	N
1.1	1.85	2.50	0.54	0.58	4
1.2	1.71	2.00	0.64	0.00	4
2.1	1.76	2.25	0.59	0.50	4
3.1	1.94	2.25	0.60	0.50	4
3.2	2.06	2.00	0.73	0.00	4
3.3	1.86	2.00	0.66	0.00	4
4.1	2	3.00	0.65	0.00	4
5.1	1.54	2.00	0.63	0.00	4
5.2	1.43	2.00	0.71	0.00	4
5.3	1.76	2.00	0.68	0.00	4
6.1	2.08	2.50	0.65	0.58	4
6.2	1.75	2.00	0.74	0.00	4
7.1	1.86	2.00	0.53	0.00	4
7.2	1.83	2.00	0.67	0.00	4
7.3	2.06	2.00	0.66	0.00	4
7.4	1.82	2.25	0.67	0.50	4
7.5	1.69	2.00	0.61	0.00	4
8.1	2.25	2.75	0.68	0.50	4
9.1	1.76	2.00	0.68	0.00	4
9.2	1.85	2.00	0.56	0.00	4
10.1	1.68	2.00	0.47	0.00	4
10.2	1.68	2.00	0.47	0.00	4

# BYU Educator Preparation Program Annual Report

Chemistry Education

Appendix A

## Transition 3

## PAES US

Table A.10.

*T3 PAES US by UETS Domains*

Measure	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	2.80	2.83	0.22	0.24	4
<b>Instructional Practice</b>	2.73	2.73	0.22	0.15	4
<b>Professional Responsibility</b>	2.93	2.90	0.14	0.20	4

Table A.11.

*T3 PAES US by UET Standards*

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	2.78	2.75	0.30	0.29	4
<b>Learning Differences</b>	2.78	2.75	0.42	0.50	4
<b>Learning Environments</b>	2.82	2.92	0.27	0.17	4
<b>Content Knowledge</b>	2.87	3.00	0.34	0.00	4
<b>Assessment</b>	2.66	2.42	0.35	0.32	4
<b>Instructional Planning</b>	2.78	2.63	0.29	0.25	4
<b>Instructional Strategies</b>	2.73	2.90	0.27	0.12	4
<b>Reflection and Continuous Growth</b>	2.91	3.00	0.29	0.00	4
<b>Leadership and Collaboration</b>	2.87	2.75	0.28	0.50	4
<b>Professional Ethical Behavior</b>	2.99	3.00	0.07	0.00	4

# BYU Educator Preparation Program Annual Report

## Chemistry Education

### Appendix A

Table A.12.

*T3 PAES US by Items*

Measure	EPP Average	Program Average	EPP St Dev	Program St Dev	N
1.1	2.74	2.75	0.44	0.50	4
1.2	2.82	2.75	0.38	0.50	4
2.1	2.78	2.75	0.42	0.50	4
3.1	2.81	2.75	0.39	0.50	4
3.2	2.90	3.00	0.31	0.00	4
3.3	2.75	3.00	0.44	0.00	4
4.1	2.87	3.00	0.34	0.00	4
5.1	2.64	2.00	0.48	0.00	4
5.2	2.60	2.50	0.50	0.58	4
5.3	2.75	2.75	0.44	0.50	4
6.1	2.93	3.00	0.26	0.00	4
6.2	2.63	2.25	0.50	0.50	4
7.1	2.69	3.00	0.47	0.00	4
7.2	2.71	2.75	0.47	0.50	4
7.3	2.82	2.75	0.39	0.50	4
7.4	2.77	3.00	0.45	0.00	4
7.5	2.66	3.00	0.49	0.00	4
8.1	2.91	3.00	0.29	0.00	4
9.1	2.87	2.75	0.34	0.50	4
9.2	2.88	2.75	0.33	0.50	4
10.1	2.99	3.00	0.00	0.00	4
10.2	3.00	3.00	0.00	0.00	4

## PAES MT

Table A.13.

*T3 PAES MT by UETS Domains*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	2.79	2.77	0.22	0.28	5
<b>Instructional Practice</b>	2.78	2.71	0.20	0.24	5
<b>Professional Responsibility</b>	2.94	2.84	0.13	0.17	5

# BYU Educator Preparation Program Annual Report

## Chemistry Education

### Appendix A

Table A.14.

*T3 PAES MT by UET Standards*

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	2.81	2.70	0.29	0.27	5
<b>Learning Differences</b>	2.74	2.80	0.44	0.45	5
<b>Learning Environments</b>	2.79	2.80	0.29	0.45	5
<b>Content Knowledge</b>	2.87	3.00	0.35	0.00	5
<b>Assessment</b>	2.72	2.67	0.32	0.24	5
<b>Instructional Planning</b>	2.80	2.70	0.29	0.27	5
<b>Instructional Strategies</b>	2.79	2.68	0.23	0.36	5
<b>Reflection and Continuous Growth</b>	2.93	2.80	0.25	0.45	5
<b>Leadership and Collaboration</b>	2.87	2.70	0.28	0.27	5
<b>Professional Ethical Behavior</b>	3.00	3.00	0.00	0.00	5

Table A.14.

*T3 PAESMT by Items*

Measure	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>1.1</b>	2.84	2.80	0.38	0.45	5
<b>1.2</b>	2.79	2.60	0.42	0.55	5
<b>2.1</b>	2.74	2.80	0.44	0.45	5
<b>3.1</b>	2.80	2.80	0.40	0.45	5
<b>3.2</b>	2.88	2.80	0.33	0.45	5
<b>3.3</b>	2.69	2.80	0.47	0.45	5
<b>4.1</b>	2.87	3.00	0.35	0.00	5
<b>5.1</b>	2.73	2.40	0.45	0.55	5
<b>5.2</b>	2.65	2.80	0.48	0.45	5
<b>5.3</b>	2.78	2.80	0.43	0.45	5
<b>6.1</b>	2.90	3.00	0.32	0.00	5
<b>6.2</b>	2.70	2.40	0.47	0.55	5
<b>7.1</b>	2.74	2.60	0.44	0.55	5
<b>7.2</b>	2.71	2.40	0.47	0.55	5
<b>7.3</b>	2.88	2.80	0.33	0.45	5
<b>7.4</b>	2.87	3.00	0.34	0.00	5

# BYU Educator Preparation Program Annual Report

## Chemistry Education

### Appendix A

<b>7.5</b>	2.75	2.60	0.45	0.55	5
<b>8.1</b>	2.93	2.80	0.25	0.45	5
<b>9.1</b>	2.87	2.60	0.36	0.55	5
<b>9.2</b>	2.88	2.80	0.34	0.45	5
<b>10.1</b>	3.00	3.00	0.00	0.00	5
<b>10.2</b>	3.00	3.00	0.00	0.00	5

## UTESS

Table A.15.

*T3 UTESS by UETS Domains*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	2.29	2.10	0.40	0.51	6
<b>Instructional Practice</b>	2.36	2.21	0.36	0.49	6
<b>Professional Responsibility</b>	2.33	2.24	0.37	0.48	6

Table A.16.

*T3 UTESS by UET Standards*

UET Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	2.21	2.00	0.83	0.55	6
<b>Learning Differences</b>	2.33	2.17	0.73	0.62	6
<b>Learning Environments</b>	2.30	2.11	0.75	0.46	6
<b>Content Knowledge</b>	2.37	2.17	0.71	0.51	6
<b>Assessment</b>	2.34	2.25	0.78	0.76	6
<b>Instructional Planning</b>	2.41	2.11	0.78	0.62	6
<b>Instructional Strategies</b>	2.35	2.20	0.65	0.44	6
<b>Reflection and Continuous Growth</b>	2.43	2.50	0.73	0.46	6
<b>Leadership and Collaboration</b>	2.25	2.17	0.74	0.59	6
<b>Professional and Ethical Behavior</b>	2.30	2.08	0.74	0.56	6

Table A.17.

*T3 UTESS by Items*

Measure	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>1</b>	2.11	1.83	0.65	0.75	6
<b>2</b>	2.31	2.17	0.65	0.41	6

# BYU Educator Preparation Program Annual Report

## Chemistry Education

### Appendix A

3	2.59	2.33	0.57	0.52	6
4	2.52	2.50	0.59	0.55	6
5	1.90	1.67	0.76	1.21	6
6	2.34	2.33	0.56	0.82	6
7	2.35	2.17	0.59	0.41	6
8	2.20	1.83	0.59	0.41	6
9	2.30	2.17	0.59	0.75	6
10	2.46	2.17	0.53	0.41	6
11	2.33	2.17	0.56	0.75	6
12	2.36	2.33	0.60	0.82	6
13	2.29	2.67	0.59	0.52	6
14	2.35	2.17	0.59	0.75	6
15	2.67	2.67	0.53	0.82	6
16	2.22	1.50	0.57	0.55	6
17	2.16	2.50	0.59	0.55	6
18	2.37	2.17	0.53	0.75	6
19	2.32	2.17	0.58	0.75	6
20	2.41	2.50	0.56	0.55	6
21	2.47	2.67	0.57	0.52	6
22	2.41	2.33	0.56	0.52	6
23	2.44	2.33	0.54	0.82	6
24	2.03	2.00	0.66	0.89	6
25	2.31	2.00	0.56	0.63	6
26	2.41	2.67	0.56	0.82	6
27	2.12	1.67	0.61	0.52	6
28	2.27	2.17	0.60	0.75	6
29	2.38	1.83	0.55	0.41	6
Overall	2.32	2.20	0.35	0.51	6

## Praxis

### Praxis Test 5245: Chemistry—Content Knowledge

Table A.18.

*Praxis Test 5245: Chemistry—Content Knowledge Overall Results*

	Max	Average	Min	St Dev
Score	197	173.72	150	13.44
N Size	18	18	18	18
N Missing	0	0	0	0
Percentage	100.00%	100.00%	100.00%	100.00%

Note: Praxis Test 5245 is scored out of 200 maximum points and a minimum passing score of 157

# BYU Educator Preparation Program Annual Report

## Chemistry Education

### Appendix A

Table A.19.

*Praxis Test 5245: Chemistry—Content Knowledge Section Results*

	Points Available	Max	Average	Min	St Dev	N Size	Missing	Percentage
<b>Basic Principles of Matter and Energy; Thermodynamics</b>	14.00	14	10.22	7	1.99	18	0	100.00%
<b>Atomic and Nuclear Structure</b>	12.00	12	10.33	8	1.08	18	0	100.00%
<b>Nomenclature; Chemical Composition; Bonding and Structure</b>	15.00	14	11.61	7	1.82	18	0	100.00%
<b>Chemical Reactions; Periodicity</b>	20.00	19	15.06	6	3.11	18	0	100.00%
<b>Solutions and Solubility; Acid-Base Chemistry</b>	15.00	15	11.17	6	2.23	18	0	100.00%
<b>Scientific Inquiry and Social Perspectives of Science</b>	12.00	12	9.50	6	1.76	18	0	100.00%
<b>Scientific Procedures and Techniques</b>	12.00	12	10.11	8	1.13	18	0	100.00%

Table A.20.

*Praxis Test 5245: Chemistry—Content Knowledge Attempts*

	First attempt	Second attempt	Third attempt	Total
<b>N Size</b>	18	1	-	<b>18</b>
<b>Count</b>	18	1	-	<b>18</b>
<b>Missing</b>	0	0	-	<b>0</b>
<b>Passed</b>	17	0	-	<b>17</b>
<b>Failed</b>	1	1	-	<b>1</b>
<b>% Who Passed the Attempt</b>	94.44%	0.00%	-	<b>-</b>
<b>% Who Passed the Test</b>	94.44%	0.00%	-	<b>94.44%</b>

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

# BYU Educator Preparation Program Annual Report

## Chemistry Education

### Appendix A

Table A.21.

*Praxis Test 5245: Chemistry—Content Knowledge Results sorted by Socioeconomic Status*

Category	<150	150-154	155-159	160-164	165-169	170-174	175-179	180-184	185-189	190-194	195-199	200	Total
<b>SES 1</b>	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
<b>SES 2</b>	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
<b>SES 3</b>	0	1	2	1	2	0	0	0	0	0	1	0	<b>7</b>
<b>SES 4</b>	0	0	0	0	1	2	3	0	0	1	0	0	<b>7</b>
<b>SES 5</b>	0	0	0	0	0	1	0	0	1	0	1	0	<b>3</b>
<b>SES 6</b>	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
<b>Total</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>17</b>

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





**BYU Educator Preparation Program  
2017 – 2018 Annual Report**

Report for Earth & Space Science Education (BS)

Prepared by the EPP Support Team  
August 2018

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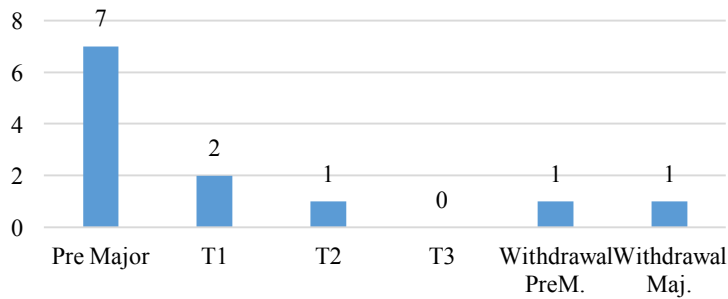
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# BYU Educator Preparation Program Annual Report

## Earth and Space Science

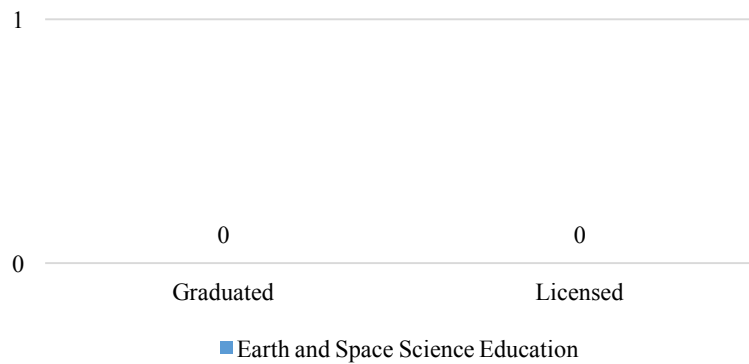
### Administrative Overview

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



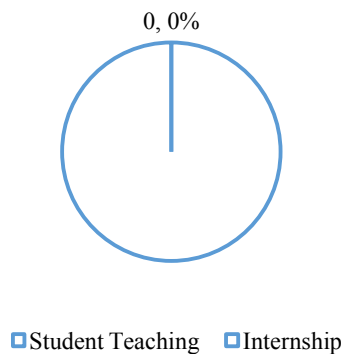
In 2017-2018, the Earth and Space Science program had seven candidates enrolled in its pre-major, two candidates in Transition 1, one candidate in Transition 2, and zero candidates in Transition 3.

Figure 1. Program Flow



No students graduated from Earth and Space Science or obtained licensure.

Figure 2. Graduated and Licensed



There are currently no student teachers or interns in the Earth and Space Science program.

Figure 3. Clinical Experiences for T3 Candidates

# BYU Educator Preparation Program Annual Report

## Earth and Space Science

### Biographic Overview

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

#### Gender

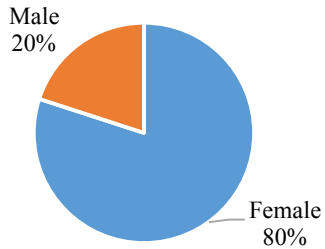


Figure 4. Gender

Table 1.

Gender

Gender	Count	Percent of Total
Female	8	80.00%
Male	2	20.00%
Total	10	100.00%
Missing	0	0.00%
Grand Total	10	100.00%

#### Socioeconomic Status

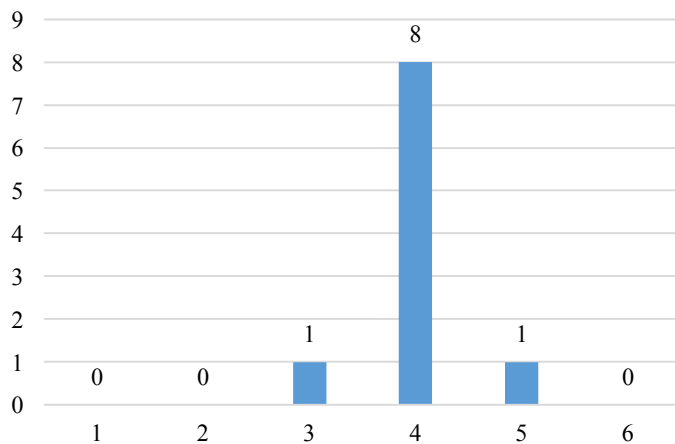


Figure 5. Socioeconomic Status

Table 2.

Socioeconomic Status

SES Category	Count	Percent of Total
1	0	0.00%
2	0	0.00%
3	1	10.00%
4	8	80.00%
5	1	10.00%
6	0	0.00%
Total	10	100.00%
Missing	0	0.00%
Grand Total	10	100.00%

#### Marital Status

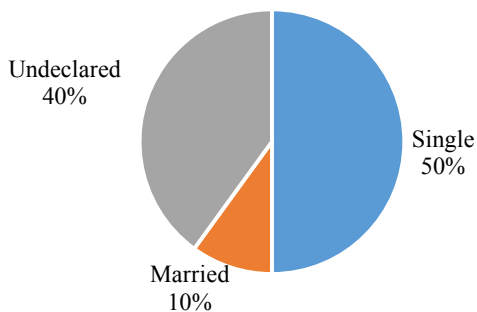


Figure 6. Marital Status

Table 3.

Marital Status

Marital Status	Count	Percent of Total
Single	5	50.00%
Married	1	10.00%
Undeclared	4	40.00%
Total	10	100.00%
Missing	0	0.00%
Grand Total	10	100.00%

# BYU Educator Preparation Program Annual Report

Earth and Space Science

Biographic Overview

## Age

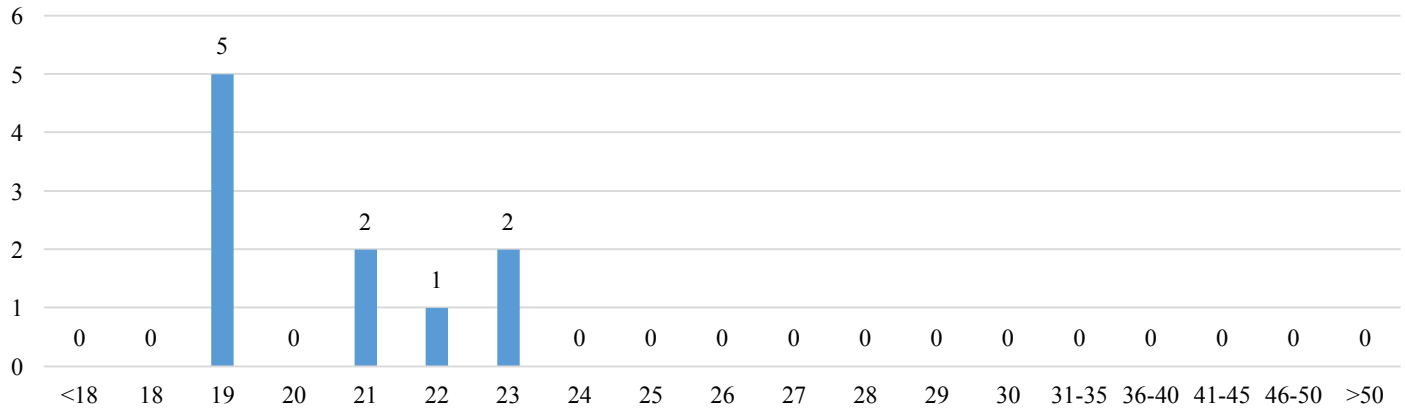


Figure 7 Age

Table 4.

Age

Age	Count	Percent of Total
<18	0	0.00%
18	0	0.00%
19	5	50.00%
20	0	0.00%
21	2	20.00%
22	1	10.00%
23	2	20.00%
24	0	0.00%
25	0	0.00%
26	0	0.00%
27	0	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	0	0.00%
46-50	0	0.00%
>50	0	0.00%
<b>Total</b>	<b>10</b>	<b>100.00%</b>
<b>Missing</b>	<b>0</b>	<b>0.00%</b>
<b>Grand Total</b>	<b>10</b>	<b>100.00%</b>

# BYU Educator Preparation Program Annual Report

Earth and Space Science

Transition 1: Admissions

## Ethnicity

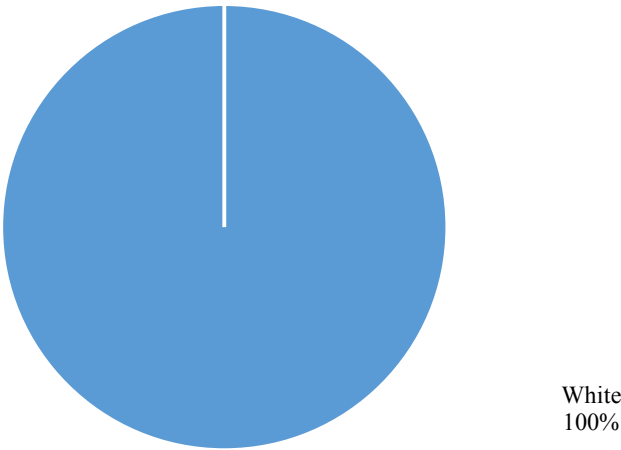


Figure 8. Ethnicity

Table 5.

Ethnicity

Ethnicity	Count	Percent of Total
White	10	100.00%
Total	10	100.00%
Missing	0	0.00%
Grand Total	10	100.00%

# BYU Educator Preparation Program Annual Report

## Earth and Space Science

### 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

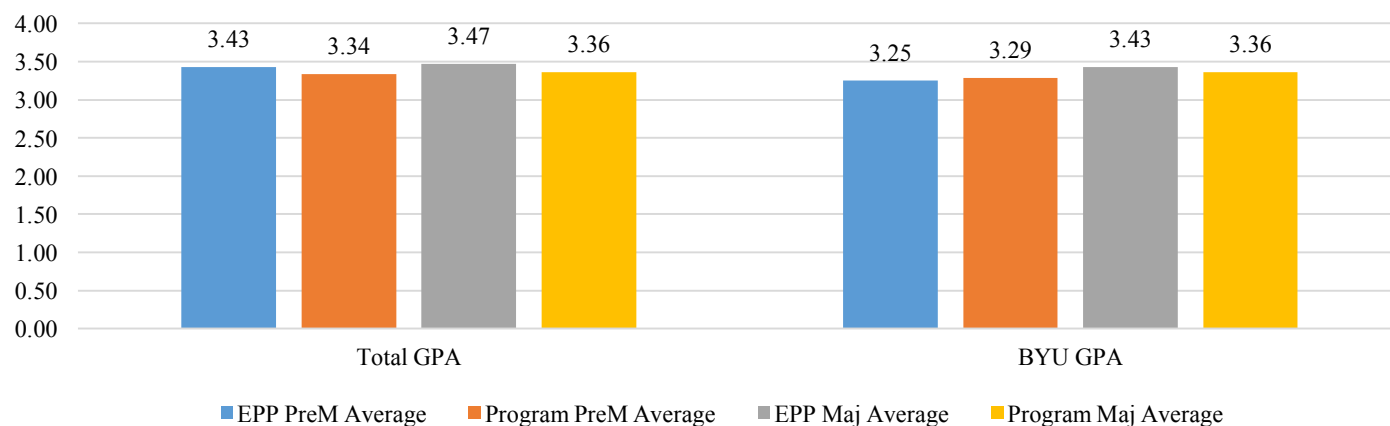


Figure 9. Total and BYU GPA at Admissions

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)
<b>Max</b>	4.00	4.00	4.00	3.71	4.00	4.00	4.00	3.71
<b>Min</b>	0.18	1.57	0.53	3.01	0.18	1.57	0.53	3.01
<b>Average</b>	3.43	3.34	3.47	3.36	3.25	3.29	3.43	3.36
<b>St Dev</b>	0.57	1.00	0.48	0.49	0.65	1.15	0.51	0.49
<b>Count</b>	1258	5	491	2	858	4	466	2
<b>% of Total</b>	77.94%	71.43%	96.46%	100.00%	53.16%	57.14%	91.55%	100.00%
<b>Missing</b>	356	2	18	0	756	3	43	0
<b>% of Total</b>	22.06%	28.57%	3.54%	0.00%	46.84%	42.86%	8.45%	0.00%

Note: Maj = major, PreM = Pre-major

# BYU Educator Preparation Program Annual Report

Earth and Space Science

Transition 1: Admissions

## ACT

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

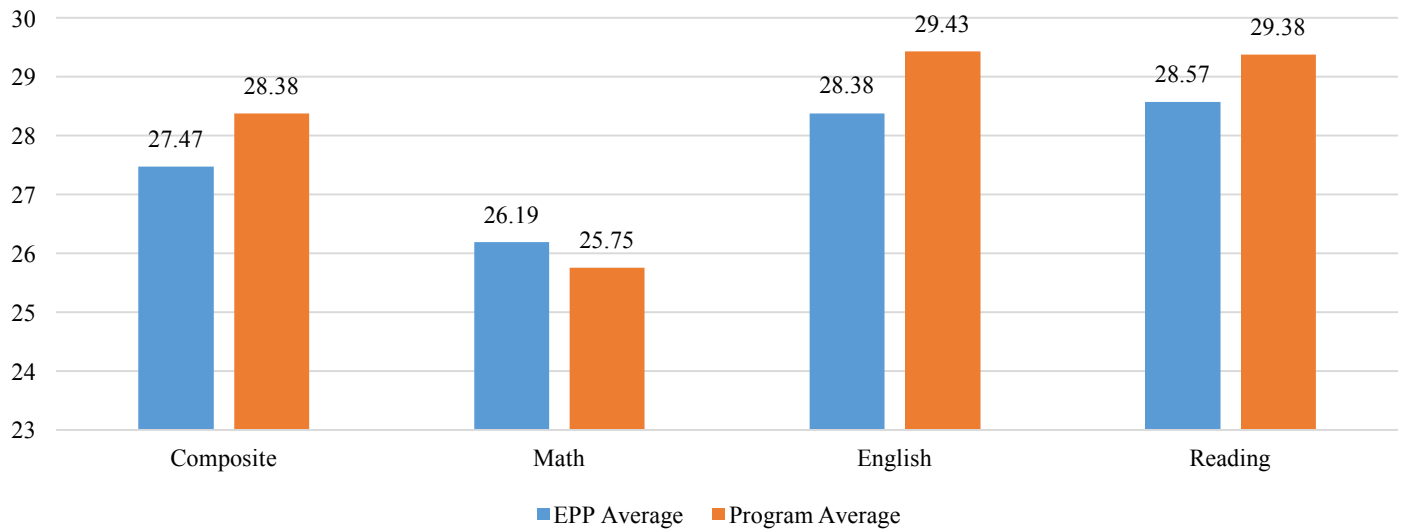


Figure 10. Pre-major ACT Results

Table 7.

Pre-major ACT Results

N = 8	EPP Average	Program Average	EPP St Dev	Program St Dev	Program Min	Program Max	Count	% of Total
Composite	27.47	28.38	3.66	3.54	23	34	8	100.00%
Math	26.19	25.75	3.78	3.58	19	31	8	100.00%
English	28.38	29.43	4.74	4.31	24	35	7	87.50%
Reading	28.57	29.38	4.66	3.58	23	35	8	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.



# BYU Educator Preparation Program Annual Report

Earth and Space Science

Transition 1: Admissions

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

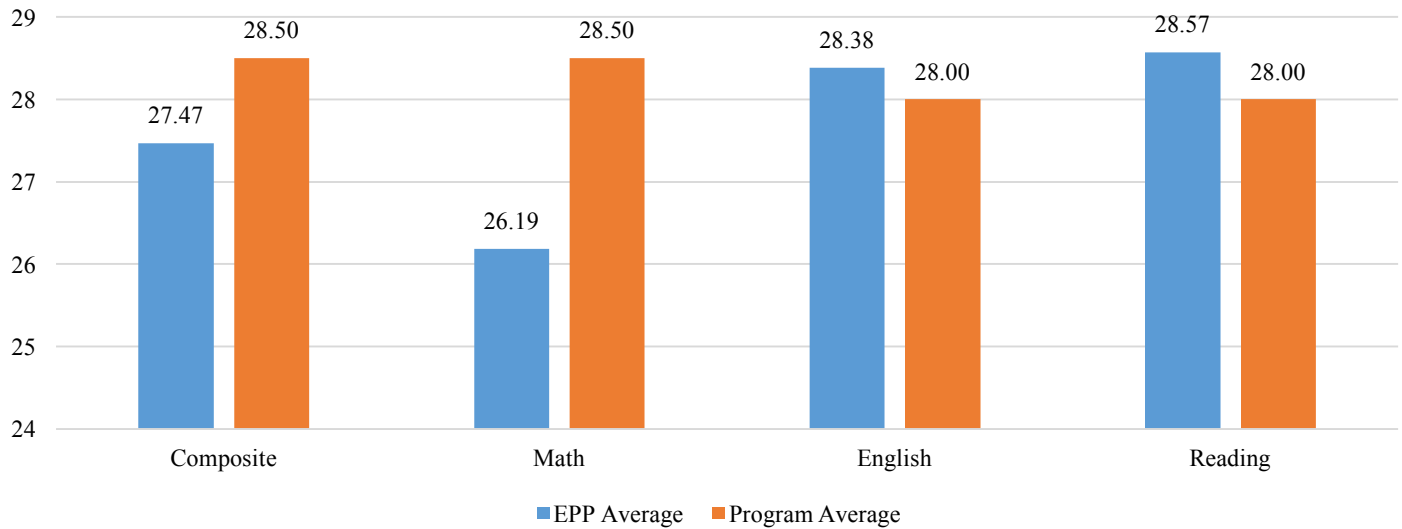


Figure 11. Major ACT Results

Table 8.

Major ACT Results

N = 2	EPP Average	Program Average	EPP St Dev	Program St Dev	Program Min	Program Max	Count	% of Total
Composite	27.47	28.50	3.66	3.54	26	31	2	100.00%
Math	26.19	28.50	3.78	2.12	27	30	2	100.00%
English	28.38	28.00	4.74	0.00	28	28	1	50.00%
Reading	28.57	28.00	4.66	2.83	26	30	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.

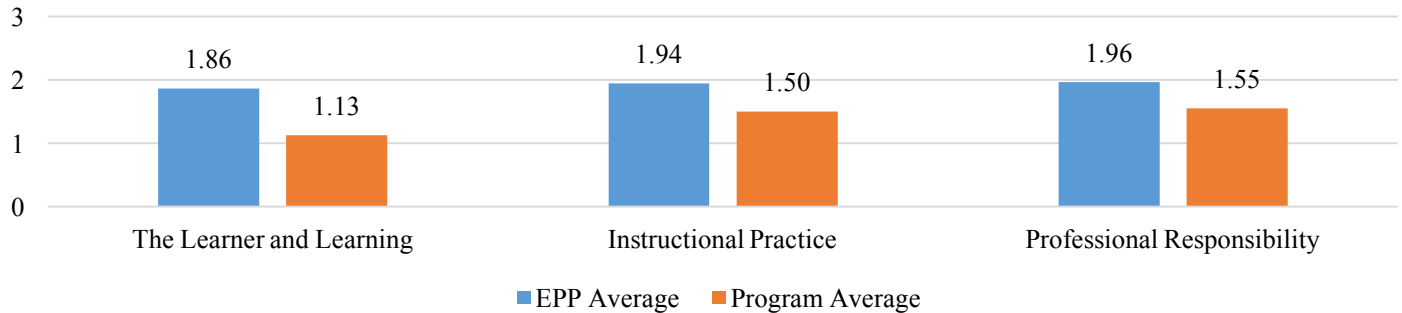
# BYU Educator Preparation Program Annual Report

Earth and Space Science

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.



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

Figure 12. T1 UTESS by UETS Domains

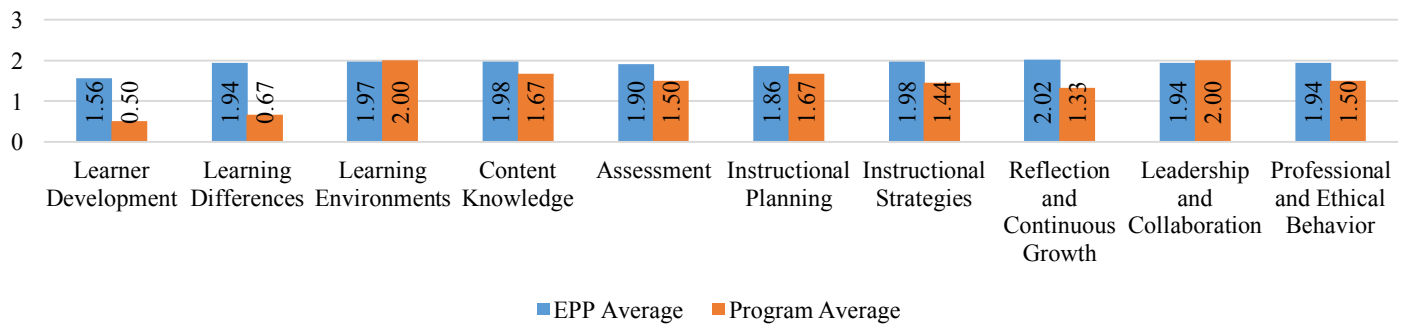
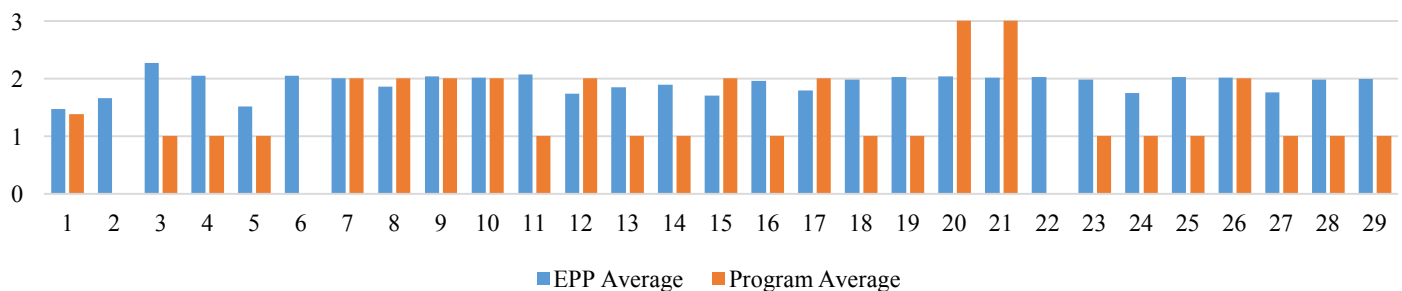


Figure 13. T1 UTESS by UET Standards



# BYU Educator Preparation Program Annual Report

Earth and Space Science

Transition 1: Admissions

Figure 14. T1 UTESS by Items

## TSA

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

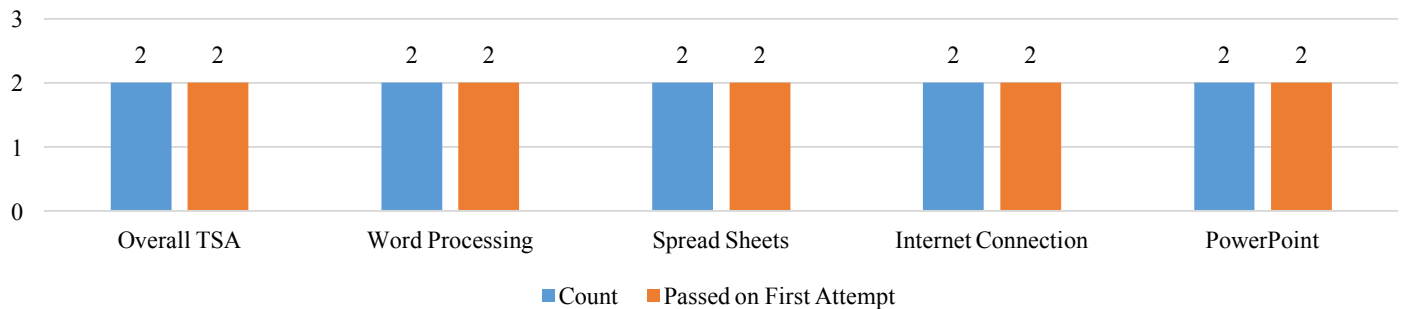


Figure 15. T1 TSA Results of Candidates Passing on the First Attempt.

Table 9.

T1 TSA Results of Candidates Passing on the First Attempt

N = 9	Count	Percent of Total	Passed on First Attempt	Percent of Passing on First Attempt	EPP Average to pass on first attempt
<b>Overall TSA</b>	2	22.22%	2	100.00%	86.28%
<b>Word Processing</b>	2	22.22%	2	100.00%	95.53%
<b>Spreadsheets</b>	2	22.22%	2	100.00%	92.95%
<b>Internet Connection</b>	2	22.22%	2	100.00%	98.29%
<b>PowerPoint</b>	2	22.22%	2	100.00%	97.41%

# BYU Educator Preparation Program Annual Report

Earth and Space Science

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

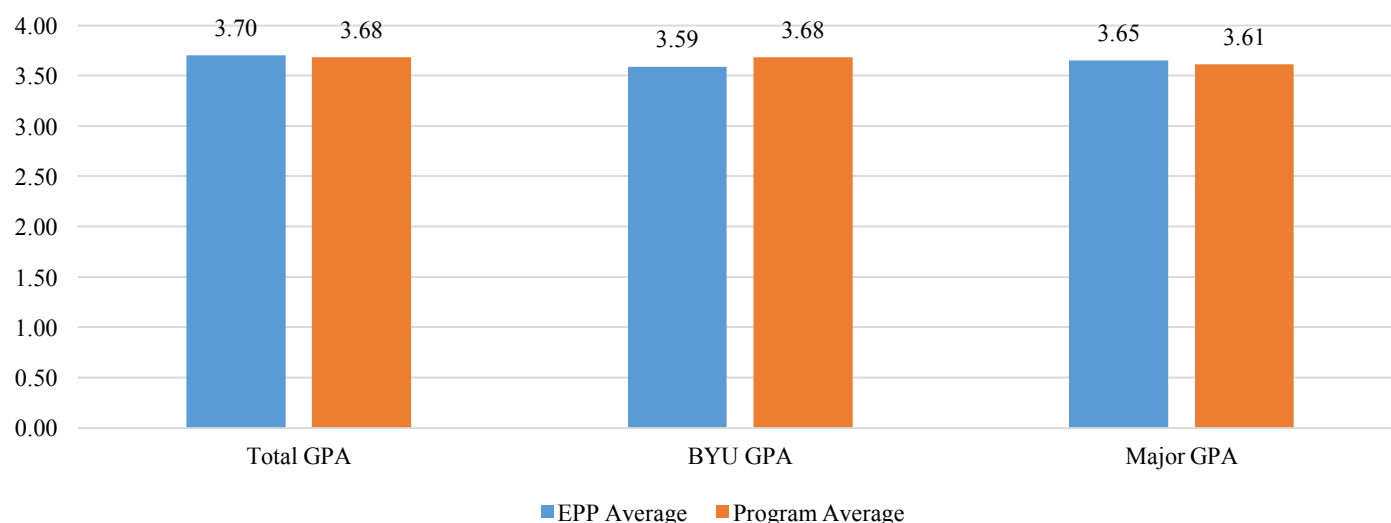


Figure 16. T2 Total, BYU, and Major GPA

Table 10.

T2 Total, BYU, and Major GPA

Column1	EPP Major GPA	Program Total GPA	EPP BYU GPA	Program BYU GPA	EPP Major GPA	Program Major GPA
Max	4.00	3.68	4.00	3.68	4.00	3.61
Min	2.70	3.68	1.36	3.68	1.00	3.61
Average	3.70	3.68	3.59	3.68	3.65	3.61
St Dev	0.26	NA	0.33	NA	0.31	NA
Count	489	1	1099	1.00	1094	1
% of Total	99.39%	100%	100.00%	100%	99.55%	100%
Missing	3	0	0	0	5	0
% of Total	0.61%	0%	0.00%	0%	0.45%	0%

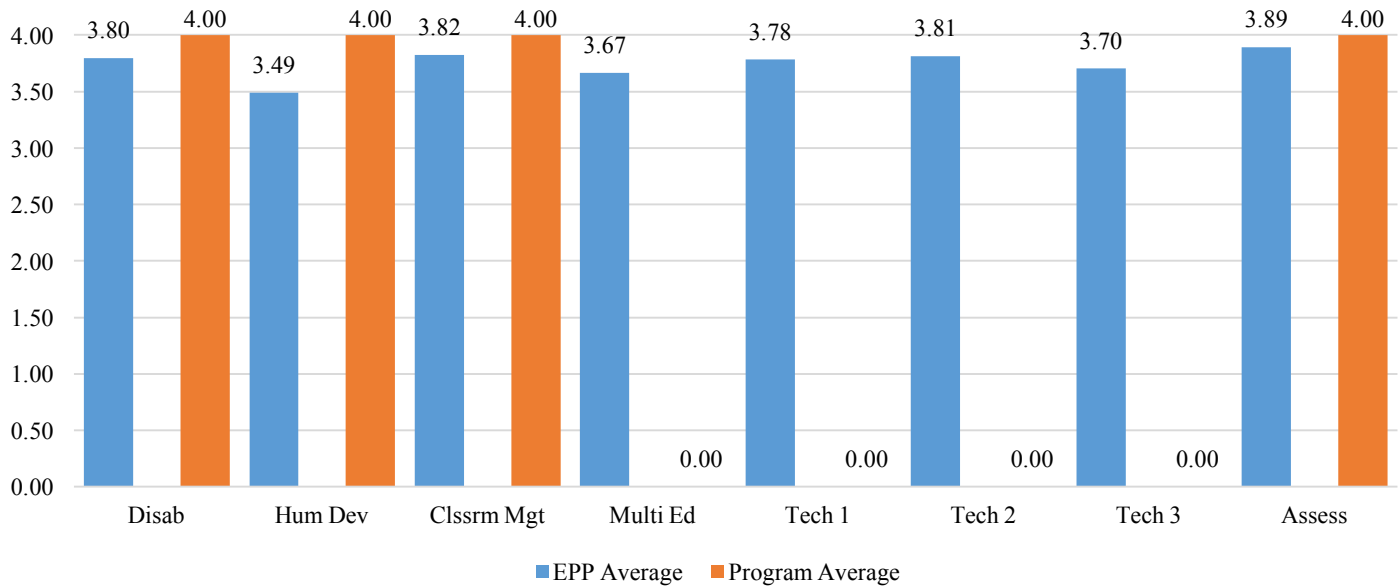
# BYU Educator Preparation Program Annual Report

Earth and Space Science

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
<b>EPP Average</b>	3.80	3.49	3.82	3.67	3.78	3.81	3.70	3.89
<b>Program Average</b>	4.00	4.00	4.00	-	-	-	-	4.00
<b>Course Count</b>	2	1	2	-	-	-	-	1
<b>St Dev</b>	0.00	0.00	0.00	-	-	-	-	0.00

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

# BYU Educator Preparation Program Annual Report

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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.

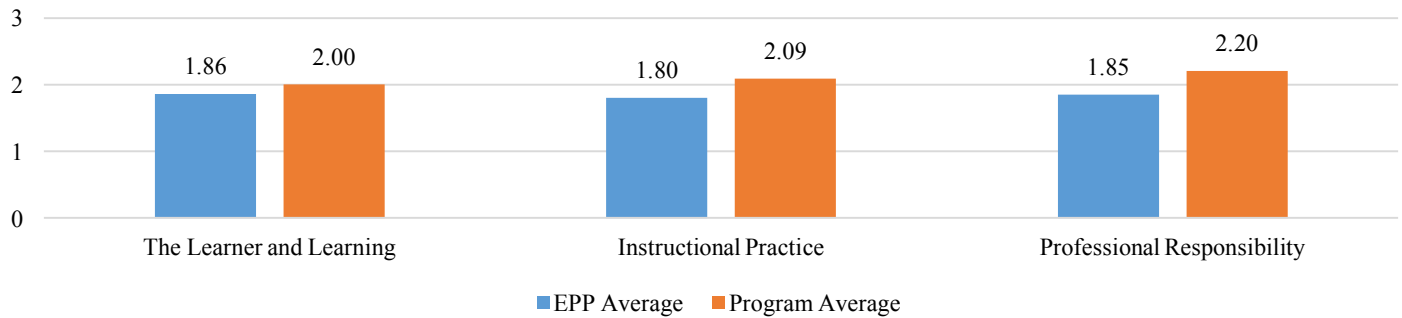


Figure 18. T2 PAES US by UETS Domains

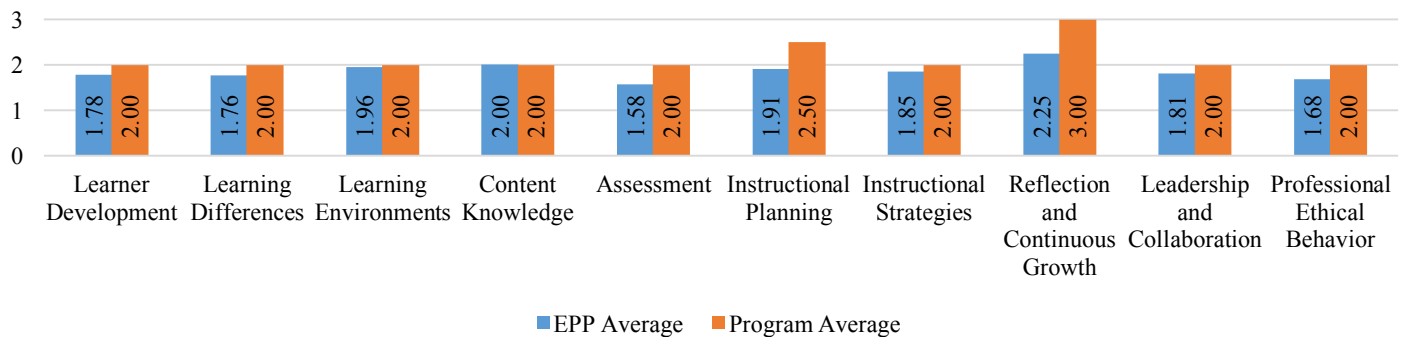


Figure 19. T2 PAES US by UET Standards

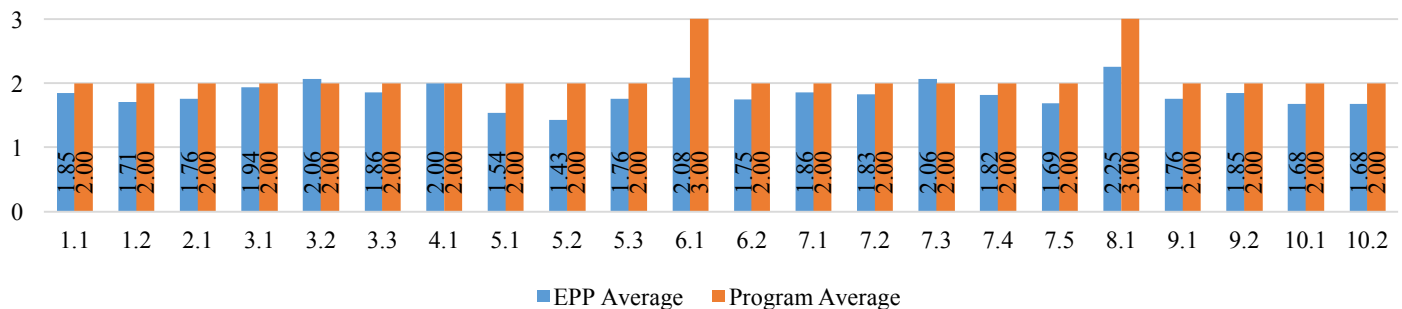


Figure 20. T2 PAES US by Items

# BYU Educator Preparation Program Annual Report

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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

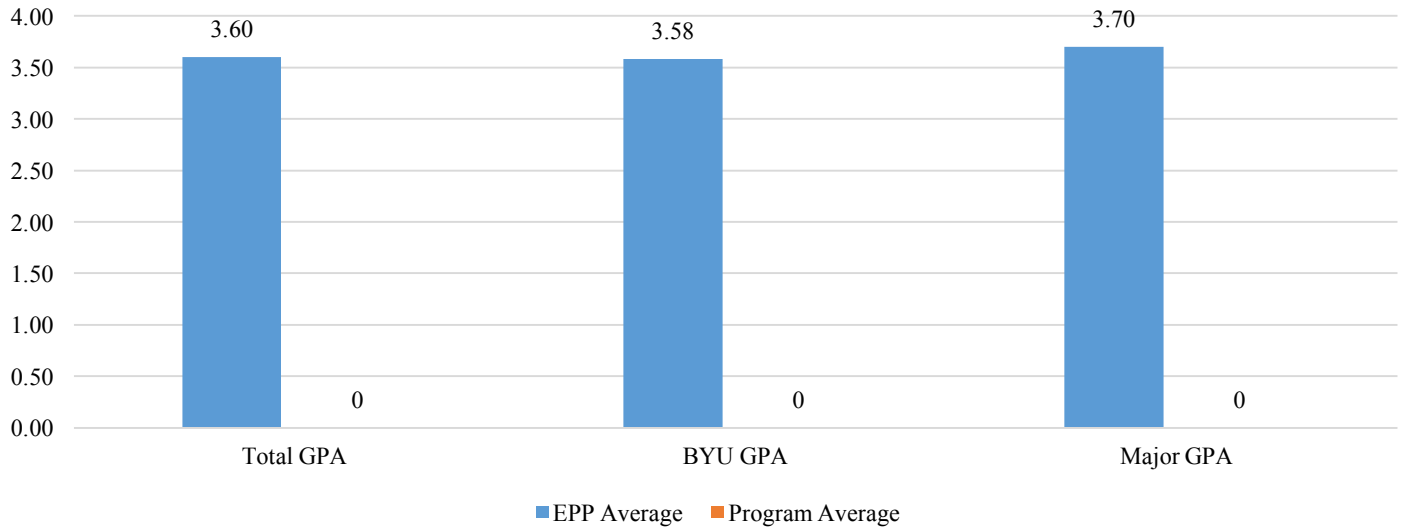


Figure 21. T3 GPA

Table 12. T3 GPA

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

# BYU Educator Preparation Program Annual Report

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Transition 3: Clinical

## PAES US

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

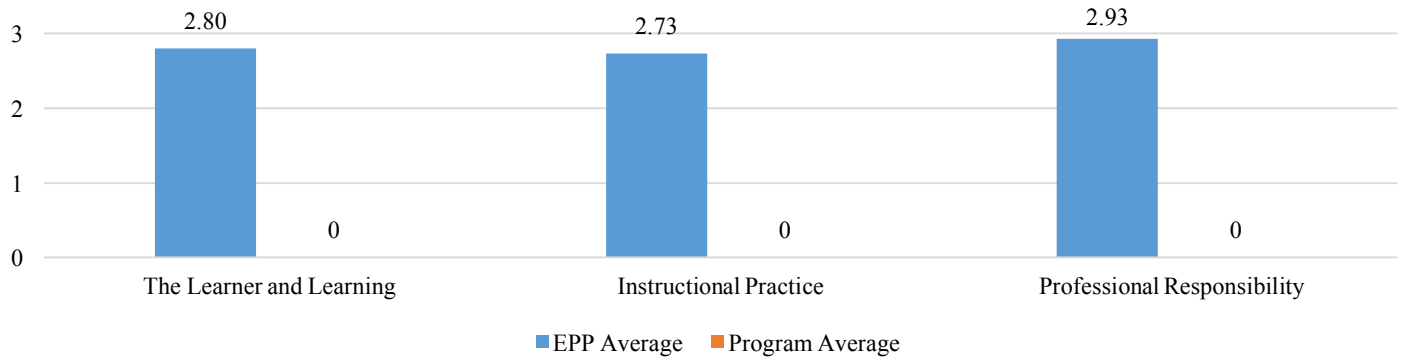


Figure 22. T3 PAES US by UETS Domains

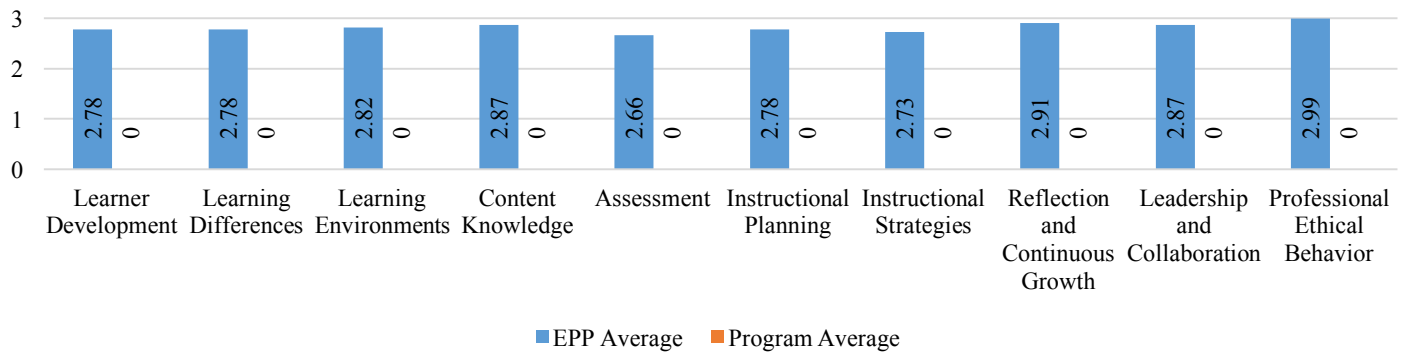


Figure 23. T3 PAES US by UET Standards

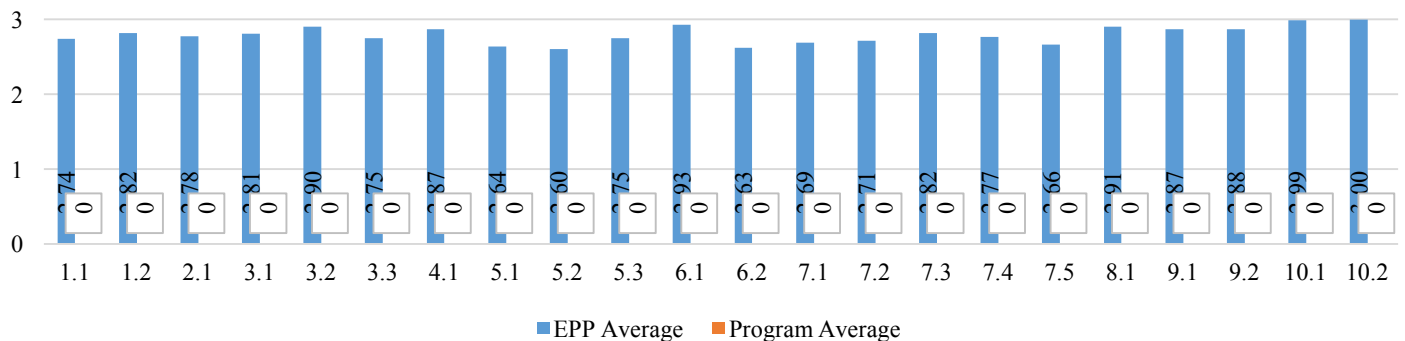


Figure 24. T3 PAES US by Items



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Transition 3: Clinical

## PAES MT

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

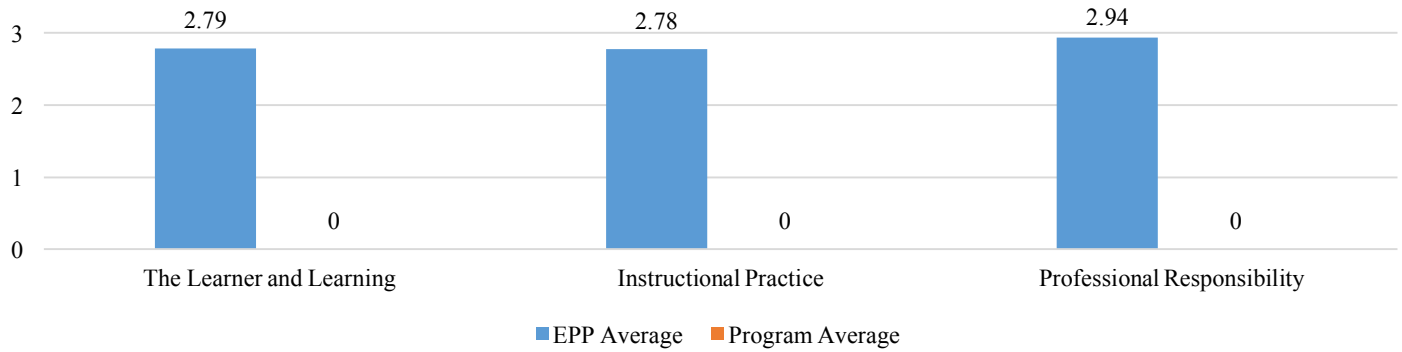


Figure 25. T3 PAES MT by UETS Domains

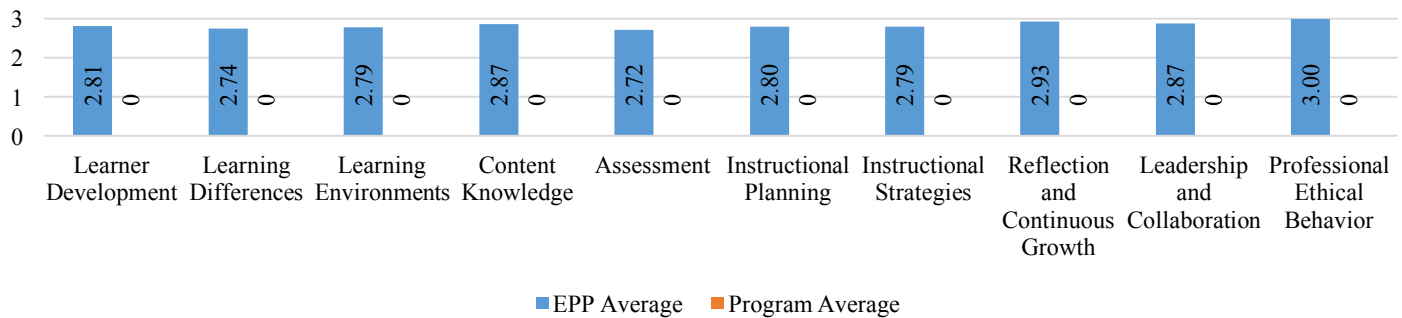


Figure 26. T3 PAES MT by UET Standards

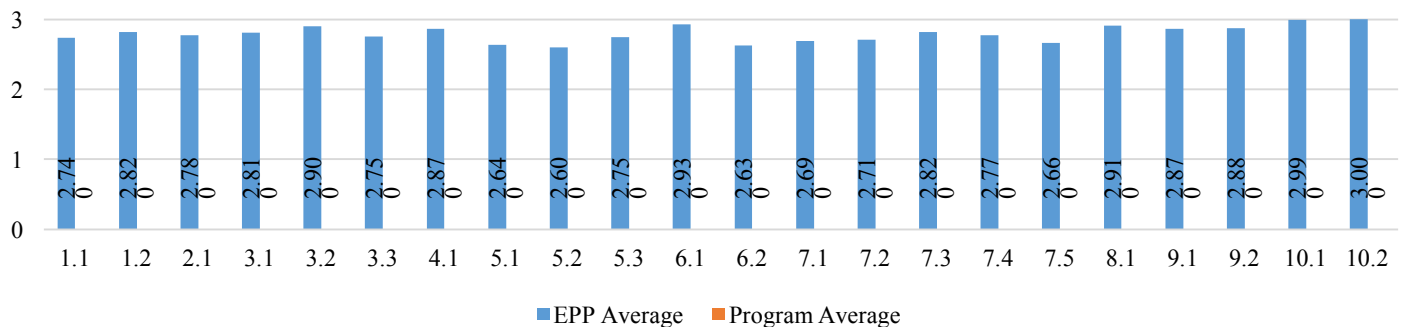


Figure 27. T3 PAES MT by Items

# BYU Educator Preparation Program Annual Report

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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.

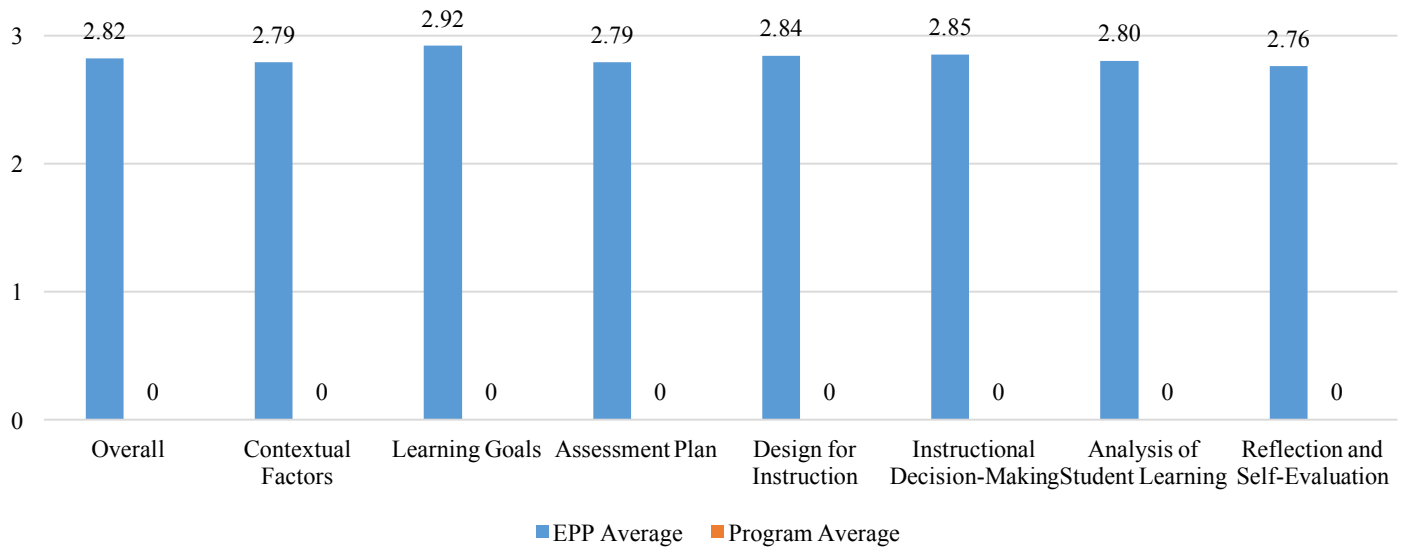


Figure 28. T3 RTWS

Table 13. RTWS

Section	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Overall</b>	2.82	-	0.15	-	0
<b>Contextual Factors</b>	2.79	-	0.05	-	0
<b>Learning Goals</b>	2.92	-	0.20	-	0
<b>Assessment Plan</b>	2.79	-	0.27	-	0
<b>Design for Instruction</b>	2.84	-	0.21	-	0
<b>Instructional Decision-Making</b>	2.85	-	0.31	-	0
<b>Analysis of Student Learning</b>	2.80	-	0.28	-	0
<b>Reflection and Self-Evaluation</b>	2.76	-	0.31	-	0

# BYU Educator Preparation Program Annual Report

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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.

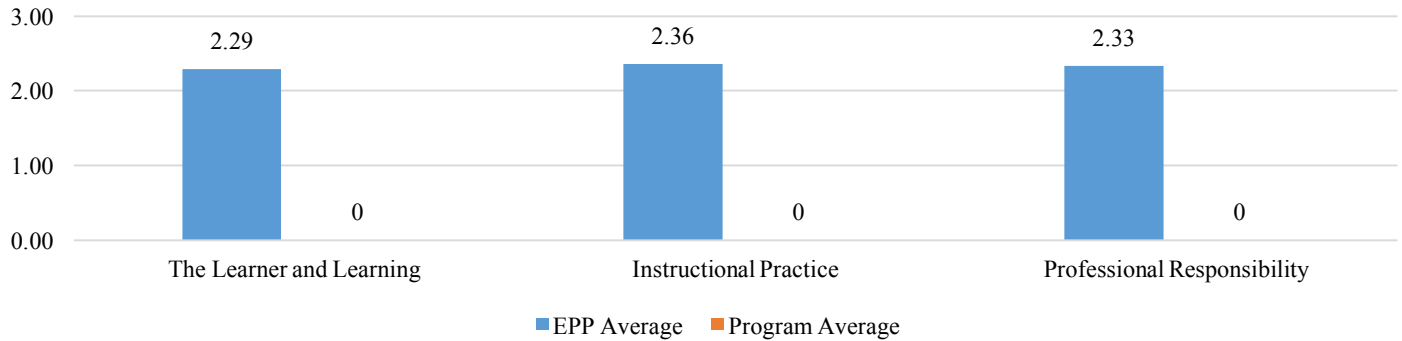


Figure 29. T3 UTESS by UETS Domains

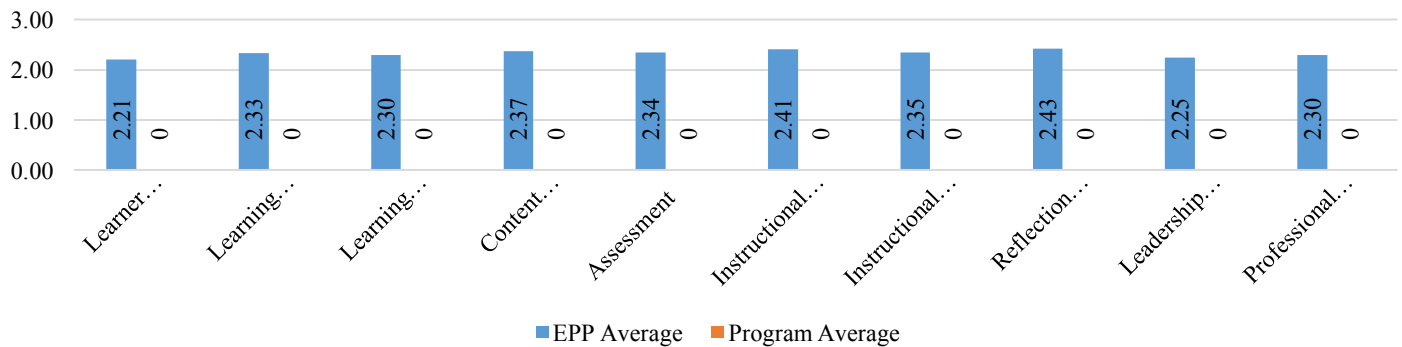


Figure 30. T3 UTESS by UET Standards

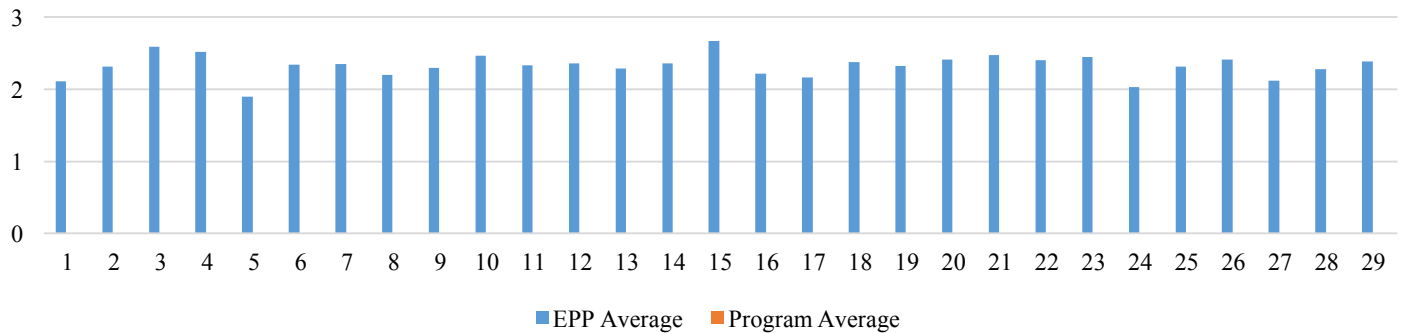


Figure 31. T3 UTESS by Items

# BYU Educator Preparation Program Annual Report

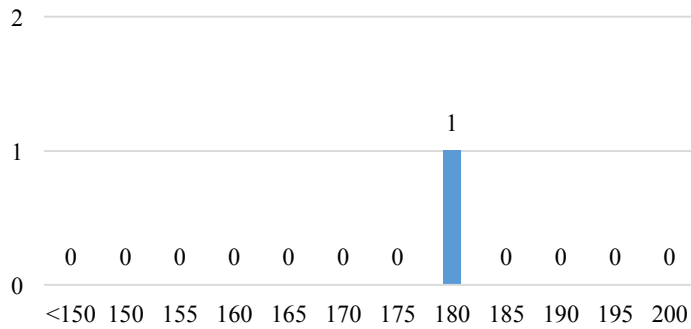
Earth and Space Science

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 5571: Earth and Space Sciences—Content Knowledge



Note: Test 5571 is scored out of 200 maximum points and a minimum passing score of 153

Figure 32. Praxis Test 5571 Results

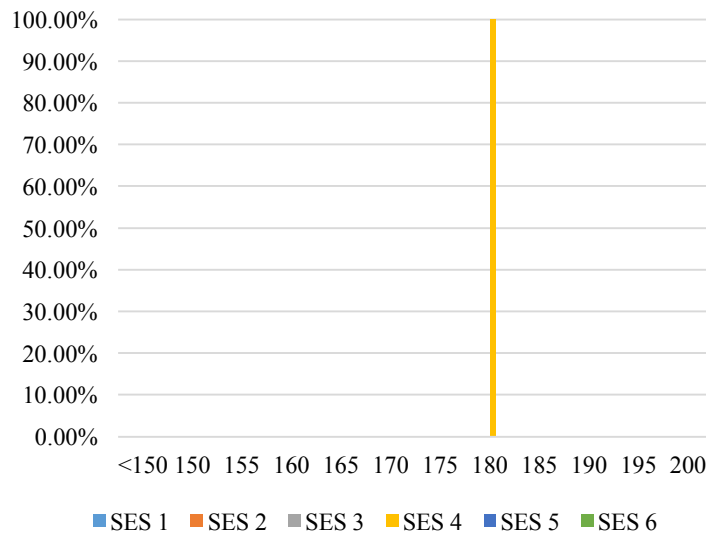


Table 14.

Praxis Test 5571 Results

Result	Frequency
<150	0
150-154	0
155-159	0
160-164	0
165-169	0
170-174	0
175-179	0
180-184	1
185-189	0
190-194	0
195-199	0
200	0
<b>Total</b>	<b>1</b>

Table 15.

SES Categories

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

Figure 33. Praxis Test 5571 Results by SES

# BYU Educator Preparation Program Annual Report

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Appendix A

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## 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 10.00 % 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.

# BYU Educator Preparation Program Annual Report

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## Appendix A

### Administrative Overview

Table A.1.

*Program Flow*

Transition	Pre-Major	T1	T2	T3	Withdrawal PreM	Withdrawal Maj	Grand Total
<b>Count</b>	7	2	1	0	1	1	12
<b>Withdrawal %</b>	-	-	-	-	14.29%	33.33%	16.67%
<b>% Total</b>	58.33%	16.67%	8.33%	0.00%	8.33%	8.33%	100.00%

Table A.2.

*Graduated and Licensed*

	Graduated	Licensed
<b>Count</b>	0	0
<b>% of T3</b>	0.00%	0.00%
<b>Total T3</b>	0	0

Table A.3.

*Clinical Experiences for T3 Candidates*

	Student Teaching	Internship	Missing	Total
<b>Count</b>	0	0	0	0
<b>Percent of Total</b>	0.00%	0.00%	0.00%	100.00%

### Transition 1

### UTESS

Table A.4.

*T1 UTESS by UETS Domains*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	1.86	1.13	0.67	0.00	1
<b>Instructional Practice</b>	1.94	1.50	0.68	0.00	1
<b>Professional Responsibility</b>	1.96	1.55	0.70	0.00	1

# BYU Educator Preparation Program Annual Report

## Earth and Space Science

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Table A.5.

*T1 UTESS by UET Standards*

UET Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	1.56	0.50	0.83	0.00	1
<b>Learning Differences</b>	1.94	0.67	0.73	0.00	1
<b>Learning Environments</b>	1.97	2.00	0.75	0.00	1
<b>Content Knowledge</b>	1.98	1.67	0.71	0.00	1
<b>Assessment</b>	1.90	1.50	0.78	0.00	1
<b>Instructional Planning</b>	1.86	1.67	0.78	0.00	1
<b>Instructional Strategies</b>	1.98	1.44	0.65	0.00	1
<b>Reflection and Continuous Growth</b>	2.02	1.33	0.73	0.00	1
<b>Leadership and Collaboration</b>	1.94	2.00	0.74	0.00	1
<b>Professional and Ethical Behavior</b>	1.94	1.50	0.74	0.00	1

Table A.6.

*T1 UTESS by Items*

Measure	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>1</b>	1.47	1.38	0.88	0.00	1
<b>2</b>	1.66	0.00	0.89	0.00	1
<b>3</b>	2.27	1.00	0.82	0.00	1
<b>4</b>	2.04	1.00	0.88	0.00	1
<b>5</b>	1.52	1.00	0.92	0.00	1
<b>6</b>	2.05	0.00	0.82	0.00	1
<b>7</b>	2.00	2.00	0.86	0.00	1
<b>8</b>	1.86	2.00	0.83	0.00	1
<b>9</b>	2.03	2.00	0.81	0.00	1
<b>10</b>	2.01	2.00	0.79	0.00	1
<b>11</b>	2.07	1.00	0.82	0.00	1
<b>12</b>	1.74	2.00	0.90	0.00	1
<b>13</b>	1.85	1.00	0.86	0.00	1
<b>14</b>	1.90	1.00	0.87	0.00	1
<b>15</b>	1.71	2.00	0.98	0.00	1
<b>16</b>	1.96	1.00	0.83	0.00	1

# BYU Educator Preparation Program Annual Report

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17	1.79	2.00	0.85	0.00	1
18	1.98	1.00	0.79	0.00	1
19	2.03	1.00	0.78	0.00	1
20	2.04	3.00	0.84	0.00	1
21	2.01	3.00	0.89	0.00	1
22	2.03	0.00	0.79	0.00	1
23	1.98	1.00	0.80	0.00	1
24	1.75	1.00	0.87	0.00	1
25	2.02	1.00	0.83	0.00	1
26	2.02	2.00	0.86	0.00	1
27	1.76	1.00	0.86	0.00	1
28	1.98	1.00	0.85	0.00	1
29	1.99	1.00	0.83	0.00	1
<b>Overall</b>	<b>1.91</b>	<b>3.00</b>	<b>0.67</b>	<b>0.00</b>	<b>1</b>

## Transition 2

## PAES US

Table A.7.

*T2 PAES US by UETS Domains*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	1.86	2.00	0.50	0.00	1
<b>Instructional Practice</b>	1.80	2.09	0.49	0.00	1
<b>Professional Responsibility</b>	1.85	2.20	0.41	0.00	1

Table A.8.

*T2 PAES US by UET Standards*

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	1.78	2.00	0.49	0.00	1
<b>Learning Differences</b>	1.76	2.00	0.59	0.00	1
<b>Learning Environments</b>	1.96	2.00	0.59	0.00	1
<b>Content Knowledge</b>	2.00	2.00	0.65	0.00	1
<b>Assessment</b>	1.58	2.00	0.58	0.00	1



# BYU Educator Preparation Program Annual Report

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### Appendix A

<b>Instructional Planning</b>	1.91	2.50	0.58	0.00	1
<b>Instructional Strategies</b>	1.85	2.00	0.49	0.00	1
<b>Reflection and Continuous Growth</b>	2.25	3.00	0.68	0.00	1
<b>Leadership and Collaboration</b>	1.81	2.00	0.55	0.00	1
<b>Professional Ethical Behavior</b>	1.68	2.00	0.47	0.00	1

Table A.9.

*T2 PAES US by Items*

Measure	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>1.1</b>	1.85	2.00	0.54	0.00	1
<b>1.2</b>	1.71	2.00	0.64	0.00	1
<b>2.1</b>	1.76	2.00	0.59	0.00	1
<b>3.1</b>	1.94	2.00	0.60	0.00	1
<b>3.2</b>	2.06	2.00	0.73	0.00	1
<b>3.3</b>	1.86	2.00	0.66	0.00	1
<b>4.1</b>	2.00	2.00	0.65	0.00	1
<b>5.1</b>	1.54	2.00	0.63	0.00	1
<b>5.2</b>	1.43	2.00	0.71	0.00	1
<b>5.3</b>	1.76	2.00	0.68	0.00	1
<b>6.1</b>	2.08	3.00	0.65	0.00	1
<b>6.2</b>	1.75	2.00	0.74	0.00	1
<b>7.1</b>	1.86	2.00	0.53	0.00	1
<b>7.2</b>	1.83	2.00	0.67	0.00	1
<b>7.3</b>	2.06	2.00	0.66	0.00	1
<b>7.4</b>	1.82	2.00	0.67	0.00	1
<b>7.5</b>	1.69	2.00	0.61	0.00	1
<b>8.1</b>	2.25	3.00	0.68	0.00	1
<b>9.1</b>	1.76	2.00	0.68	0.00	1
<b>9.2</b>	1.85	2.00	0.56	0.00	1
<b>10.1</b>	1.68	2.00	0.47	0.00	1
<b>10.2</b>	1.68	2.00	0.47	0.00	1

# BYU Educator Preparation Program Annual Report

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Appendix A

## Transition 3

### PAES US

Table A.10. *T3 PAES US by UETS Domains*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	2.80	-	0.22	-	0
<b>Instructional Practice</b>	2.73	-	0.22	-	0
<b>Professional Responsibility</b>	2.93	-	0.14	-	0

Table A.11. *T3 PAES US by UET Standards*

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	2.78	-	0.30	-	0
<b>Learning Differences</b>	2.78	-	0.42	-	0
<b>Learning Environments</b>	2.82	-	0.27	-	0
<b>Content Knowledge</b>	2.87	-	0.34	-	0
<b>Assessment</b>	2.66	-	0.35	-	0
<b>Instructional Planning</b>	2.78	-	0.29	-	0
<b>Instructional Strategies</b>	2.73	-	0.27	-	0
<b>Reflection and Continuous Growth</b>	2.91	-	0.29	-	0
<b>Leadership and Collaboration</b>	2.87	-	0.28	-	0
<b>Professional Ethical Behavior</b>	2.99	-	0.07	-	0

Table A.12. *T3 PAES US by Items*

Measure	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>1.1</b>	2.74	-	0.44	-	0
<b>1.2</b>	2.82	-	0.38	-	0
<b>2.1</b>	2.78	-	0.42	-	0
<b>3.1</b>	2.81	-	0.39	-	0
<b>3.2</b>	2.90	-	0.31	-	0
<b>3.3</b>	2.75	-	0.44	-	0
<b>4.1</b>	2.87	-	0.34	-	0
<b>5.1</b>	2.64	-	0.48	-	0
<b>5.2</b>	2.60	-	0.50	-	0
<b>5.3</b>	2.75	-	0.44	-	0
<b>6.1</b>	2.93	-	0.26	-	0

# BYU Educator Preparation Program Annual Report

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<b>6.2</b>	2.63	-	0.50	-	0
<b>7.1</b>	2.69	-	0.47	-	0
<b>7.2</b>	2.71	-	0.47	-	0
<b>7.3</b>	2.82	-	0.39	-	0
<b>7.4</b>	2.77	-	0.45	-	0
<b>7.5</b>	2.66	-	0.49	-	0
<b>8.1</b>	2.91	-	0.29	-	0
<b>9.1</b>	2.87	-	0.34	-	0
<b>9.2</b>	2.88	-	0.33	-	0
<b>10.1</b>	2.99	-	0.07	-	0
<b>10.2</b>	3.00	-	0.00	-	0

## PAES MT

Table A.13. *T3 PAES MT by UETS Domains*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	2.79	-	0.22	-	0
<b>Instructional Practice</b>	2.78	-	0.20	-	0
<b>Professional Responsibility</b>	2.94	-	0.13	-	0

Table A.14. *T3 PAES MT by UET Standards*

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	2.81	-	0.29	-	0
<b>Learning Differences</b>	2.74	-	0.44	-	0
<b>Learning Environments</b>	2.79	-	0.29	-	0
<b>Content Knowledge</b>	2.87	-	0.35	-	0
<b>Assessment</b>	2.72	-	0.32	-	0
<b>Instructional Planning</b>	2.80	-	0.29	-	0
<b>Instructional Strategies</b>	2.79	-	0.23	-	0
<b>Reflection and Continuous Growth</b>	2.93	-	0.25	-	0
<b>Leadership and Collaboration</b>	2.87	-	0.28	-	0
<b>Professional Ethical Behavior</b>	3.00	-	0.00	-	0

# BYU Educator Preparation Program Annual Report

## Earth and Space Science

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Table A.15. *T3 PAES MT by Items*

Measure	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>1.1</b>	2.84	-	0.38	-	0
<b>1.2</b>	2.79	-	0.42	-	0
<b>2.1</b>	2.74	-	0.44	-	0
<b>3.1</b>	2.80	-	0.40	-	0
<b>3.2</b>	2.88	-	0.33	-	0
<b>3.3</b>	2.69	-	0.47	-	0
<b>4.1</b>	2.87	-	0.35	-	0
<b>5.1</b>	2.73	-	0.45	-	0
<b>5.2</b>	2.65	-	0.48	-	0
<b>5.3</b>	2.78	-	0.43	-	0
<b>6.1</b>	2.90	-	0.32	-	0
<b>6.2</b>	2.70	-	0.47	-	0
<b>7.1</b>	2.74	-	0.44	-	0
<b>7.2</b>	2.71	-	0.47	-	0
<b>7.3</b>	2.88	-	0.33	-	0
<b>7.4</b>	2.87	-	0.34	-	0
<b>7.5</b>	2.75	-	0.45	-	0
<b>8.1</b>	2.93	-	0.25	-	0
<b>9.1</b>	2.87	-	0.36	-	0
<b>9.2</b>	2.88	-	0.34	-	0
<b>10.1</b>	3.00	-	0.00	-	0
<b>10.2</b>	3.00	-	0.00	-	0

## UTESS

Table A.16. *T3 UTESS by UETS Domains*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	2.29	-	0.40	-	0
<b>Instructional Practice</b>	2.36	-	0.36	-	0
<b>Professional Responsibility</b>	2.33	-	0.37	-	0

Table A.17. *T3 UTESS by UET Standards*

UET Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	2.21	-	0.83	-	0
<b>Learning Differences</b>	2.33	-	0.73	-	0
<b>Learning Environments</b>	2.30	-	0.75	-	0
<b>Content Knowledge</b>	2.37	-	0.71	-	0
<b>Assessment</b>	2.34	-	0.78	-	0

# BYU Educator Preparation Program Annual Report

## Earth and Space Science

### Appendix A

<b>Instructional Planning</b>	2.41	-	0.78	-	0
<b>Instructional Strategies</b>	2.35	-	0.65	-	0
<b>Reflection and Continuous Growth</b>	2.43	-	0.73	-	0
<b>Leadership and Collaboration</b>	2.25	-	0.74	-	0
<b>Professional and Ethical Behavior</b>	2.30	-	0.74	-	0

Table A.18. T3 UTESS by Items

Measure	EPP Average	Program Average	EPP St Dev	Program St Dev	N
1	2.11	-	0.65	-	0
2	2.31	-	0.65	-	0
3	2.59	-	0.57	-	0
4	2.52	-	0.59	-	0
5	1.90	-	0.76	-	0
6	2.34	-	0.56	-	0
7	2.35	-	0.59	-	0
8	2.20	-	0.59	-	0
9	2.30	-	0.59	-	0
10	2.46	-	0.53	-	0
11	2.33	-	0.56	-	0
12	2.36	-	0.60	-	0
13	2.29	-	0.59	-	0
14	2.35	-	0.59	-	0
15	2.67	-	0.53	-	0
16	2.22	-	0.57	-	0
17	2.16	-	0.59	-	0
18	2.37	-	0.53	-	0
19	2.32	-	0.58	-	0
20	2.41	-	0.56	-	0
21	2.47	-	0.57	-	0
22	2.41	-	0.56	-	0
23	2.44	-	0.54	-	0
24	2.03	-	0.66	-	0
25	2.31	-	0.56	-	0
26	2.41	-	0.56	-	0
27	2.12	-	0.61	-	0
28	2.27	-	0.60	-	0
29	2.38	-	0.55	-	0
<b>Overall</b>	<b>2.32</b>	<b>-</b>	<b>0.35</b>	<b>-</b>	<b>0</b>

# BYU Educator Preparation Program Annual Report

## Earth and Space Science

### Appendix A

#### Praxis

#### Praxis Test 5571: Earth and Space Sciences—Content Knowledge

Table A.19.

*Praxis Test 5571: Earth and Space Sciences—Content Knowledge Overall Results*

	Max	Average	Min	St Dev
<b>Score</b>	184	184	184	-
<b>N Size</b>	1	1	1	1
<b>N Missing</b>	0	0	0	0
<b>Percentage</b>	100.00%	100.00%	100.00%	100.00%

Note: Test 5571 is scored out of 200 maximum points and a minimum passing score of 153.

Table A.20.

*Praxis Test 5571: Earth and Space Sciences—Content Knowledge Section Results*

	Points Available	Max	Average	Min	St Dev	N Size	Missing	Percentage
<b>Basic Principles and Processes</b>	11.00	10	10.00	10	-	1	0	100.00%
<b>Tectonics and Internal Earth Processes</b>	16.00	14	14.00	14	-	1	0	100.00%
<b>Earth Materials and Surface Processes</b>	23.00	19	19.00	19	-	1	0	100.00%
<b>History of the Earth and its Life-Forms</b>	14.00	13	13.00	13	-	1	0	100.00%
<b>Earth's Atmosphere and Hydrosphere</b>	19.00	17	17.00	17	-	1	0	100.00%
<b>Astronomy</b>	14.00	11	11.00	11	-	1	0	100.00%

Table A.21.

*Praxis Test 5571: Earth and Space Sciences—Content Knowledge Attempts*

	First attempt	Second attempt	Third attempt	Total
<b>N Size</b>	1	-	-	1
<b>Count</b>	1	-	-	1
<b>Missing</b>	0	-	-	0
<b>Passed</b>	1	-	-	1
<b>Failed</b>	0	-	-	0
<b>% Who Passed The Attempt</b>	100.00%	-	-	-
<b>% Who Passed the Test</b>	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.

# BYU Educator Preparation Program Annual Report

## Earth and Space Science

### Appendix A

Table A.22.

*Praxis Test 5571: Earth and Space Sciences—Content Knowledge Results sorted by Socioeconomic Status*

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

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



# **BYU Educator Preparation Program 2017 – 2018 Annual Report**

**Report for Mathematics Education (BS)**

Prepared by the EPP Support Team  
August 2018



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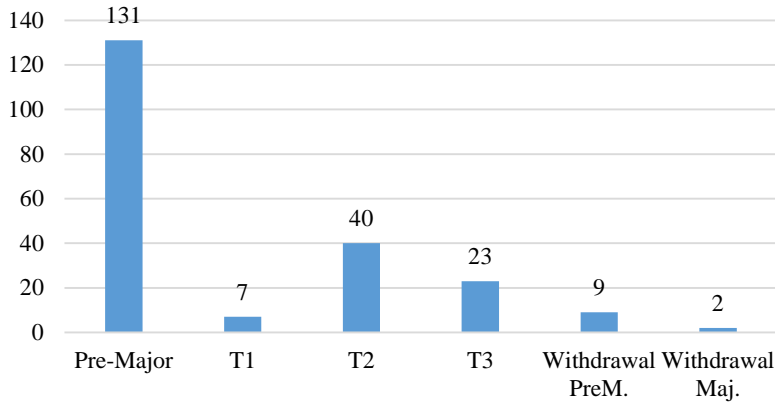
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# BYU Educator Preparation Program Annual Report

## Mathematics Education

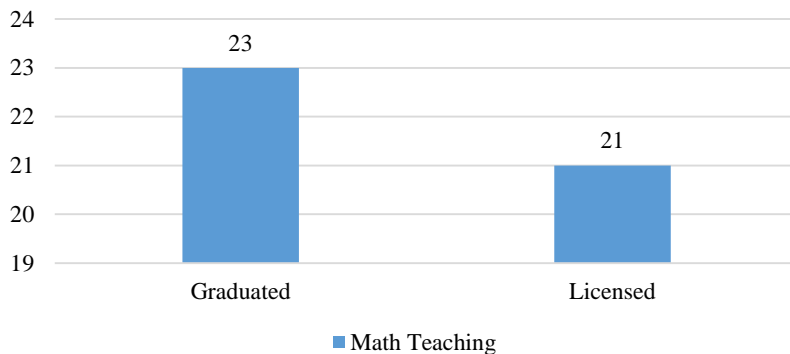
### Administrative Overview

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



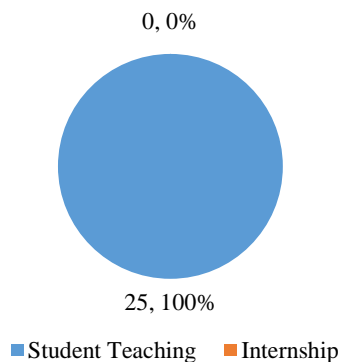
In 2017-2018, the Mathematics Education program had 131 candidates enrolled in its pre-major, seven candidates in Transition 1, 40 candidates in Transition 2, and 23 candidates in Transition 3.

Figure 1. Program Flow



Twenty-three students graduated from Mathematics Education. While many candidates pursue licensure, two 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 100% of the candidates choosing student teaching.

Figure 3. Clinical Experiences for T3 Candidates

# BYU Educator Preparation Program Annual Report

## Mathematics Education

### Biographic Overview

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

#### Gender

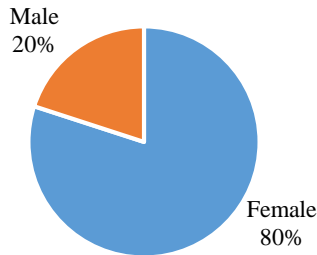


Figure 4. Gender

Table 1.

Gender

Gender	Count	Percent of Total
Female	168	80.00%
Male	42	20.00%
Total	210	100.00%
Missing	0	0.00%
Grand Total	210	100.00%

#### Socioeconomic Status

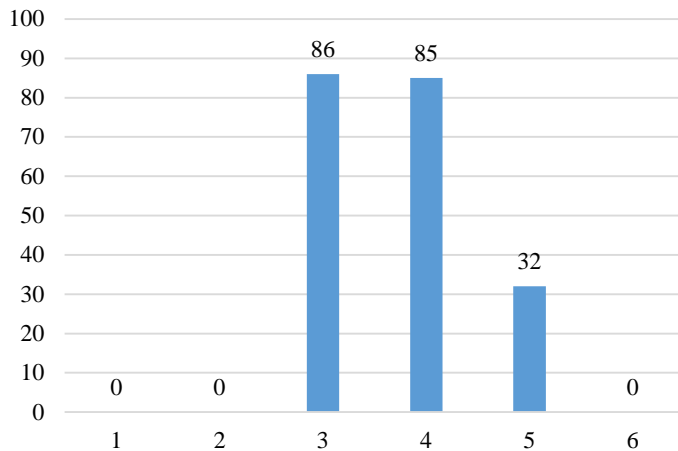


Figure 5. Socioeconomic Status

Table 2.

Socioeconomic Status

SES Category	Count	Percent of Total
SES 1	0	0.00%
SES 2	0	0.00%
SES 3	86	40.95%
SES 4	85	40.48%
SES 5	32	15.24%
SES 6	0	0.00%
Total	203	96.67%
Missing	7	3.33%
Grand Total	210	100.00%

Note: See Appendix A for SES explanation

#### Marital Status

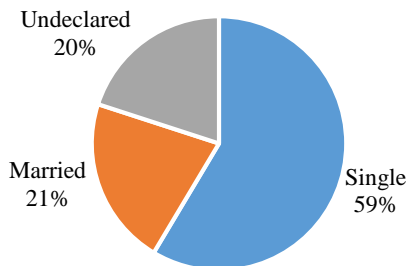


Figure 6. Marital Status

Table 3.

Marital Status

Marital Status	Count	Percent of Total
Single	123	58.57%
Married	45	21.43%
Undeclared	42	20.00%
Total	210	100.00%
Missing	0	0.00%
Grand Total	210	100.00%

# BYU Educator Preparation Program Annual Report

## Mathematics Education

### Biographic Overview

#### Age

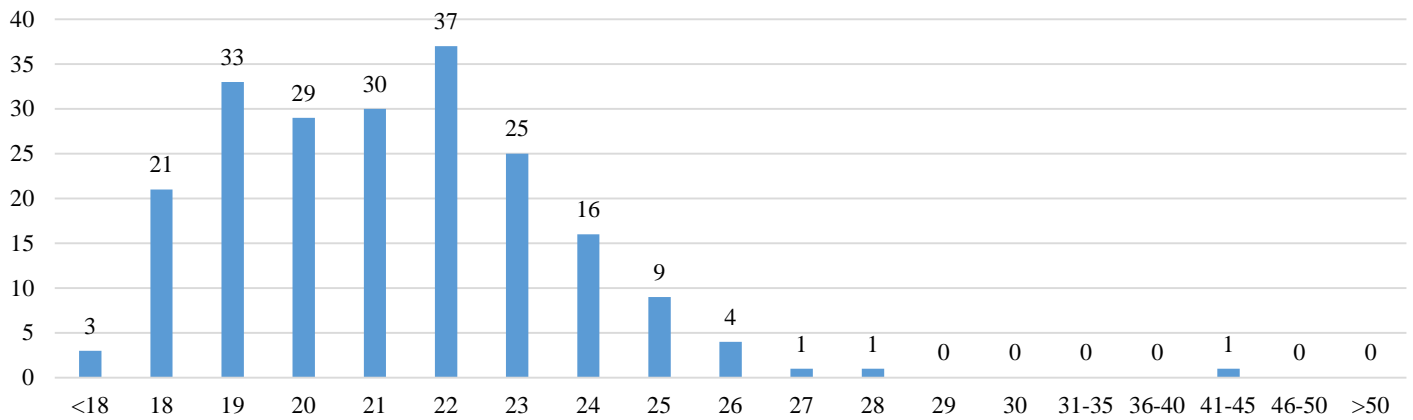


Figure 7. Age

Table 4.

#### Age

Age	Count	Percent of Total
<18	3	1.43%
18	21	10.00%
19	33	15.71%
20	29	13.81%
21	30	14.29%
22	37	17.62%
23	25	11.90%
24	16	7.62%
25	9	4.29%
26	4	1.90%
27	1	0.48%
28	1	0.48%
29	0	0.00%
30	0	0.00%
31-35	0	0.00%
36-40	0	0.00%
41-45	1	0.48%
46-50	0	0.00%
>50	0	0.00%
<b>Total</b>	<b>210</b>	<b>100.00%</b>
<b>Missing</b>	<b>0</b>	<b>0.00%</b>
<b>Grand Total</b>	<b>210</b>	<b>100.00%</b>

# BYU Educator Preparation Program Annual Report

## Mathematics Education

### Biographic Overview

#### Ethnicity

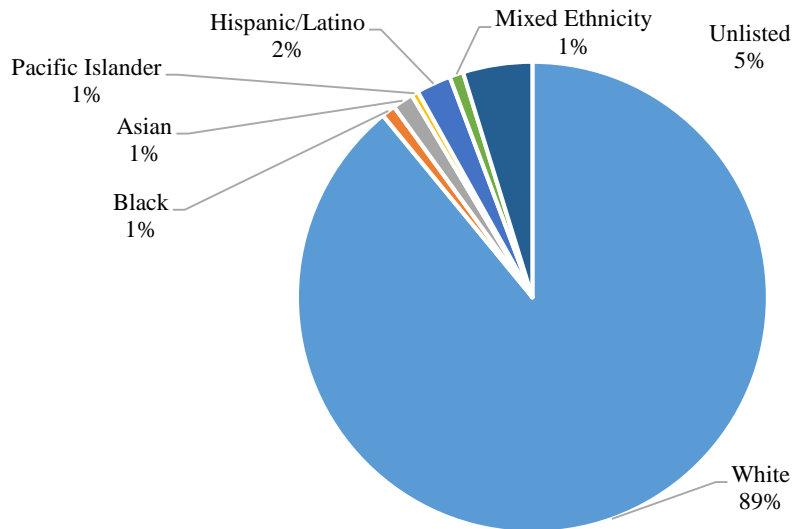


Figure 8. Ethnicity

Table 5.  
Ethnicity

Ethnicity	Count	Percent of Total
White	187	89.05%
Black	2	0.95%
Asian	3	1.43%
Pacific Islander	1	0.48%
Hispanic/Latino	5	2.38%
Mixed Ethnicity	2	0.95%
Unlisted	10	4.76%
Total	210	100.00%
Missing	0	0.00%
Grand Total	210	100.00%

# BYU Educator Preparation Program Annual Report

## Mathematics Education

### 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

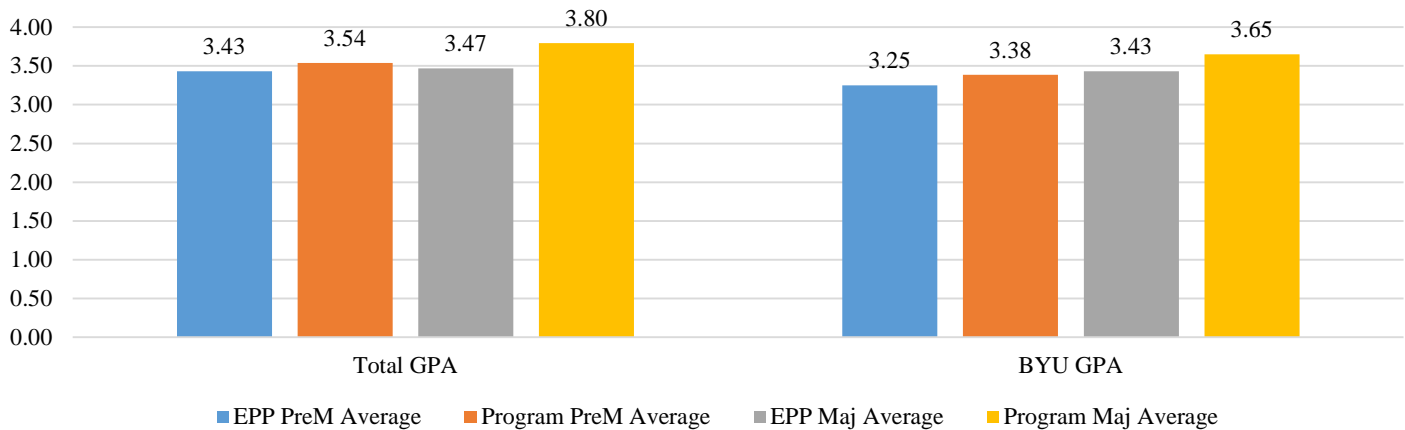


Figure 9. Total and BYU GPA at Admissions

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)
<b>Max</b>	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
<b>Min</b>	0.18	2.01	0.53	3.48	0.18	1.96	0.53	2.90
<b>Average</b>	3.43	3.54	3.47	3.80	3.25	3.38	3.43	3.65
<b>St Dev</b>	0.57	0.46	0.48	0.18	0.65	0.56	0.51	0.41
<b>Count</b>	1258	110	491	9	858	68	466	9
<b>% of Total</b>	77.94%	83.00%	96.46%	90.00%	53.16%	51.00%	91.55%	90.00%
<b>Missing</b>	356	23	18	1	756	65	43	1
<b>% of Total</b>	22.06%	17.00%	3.54%	10.00%	46.84%	49.00%	8.45%	10.00%

Note: Maj = Major, PreM = Pre-major

# BYU Educator Preparation Program Annual Report

## Mathematics Education

### Transition 1: Admissions

#### ACT

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

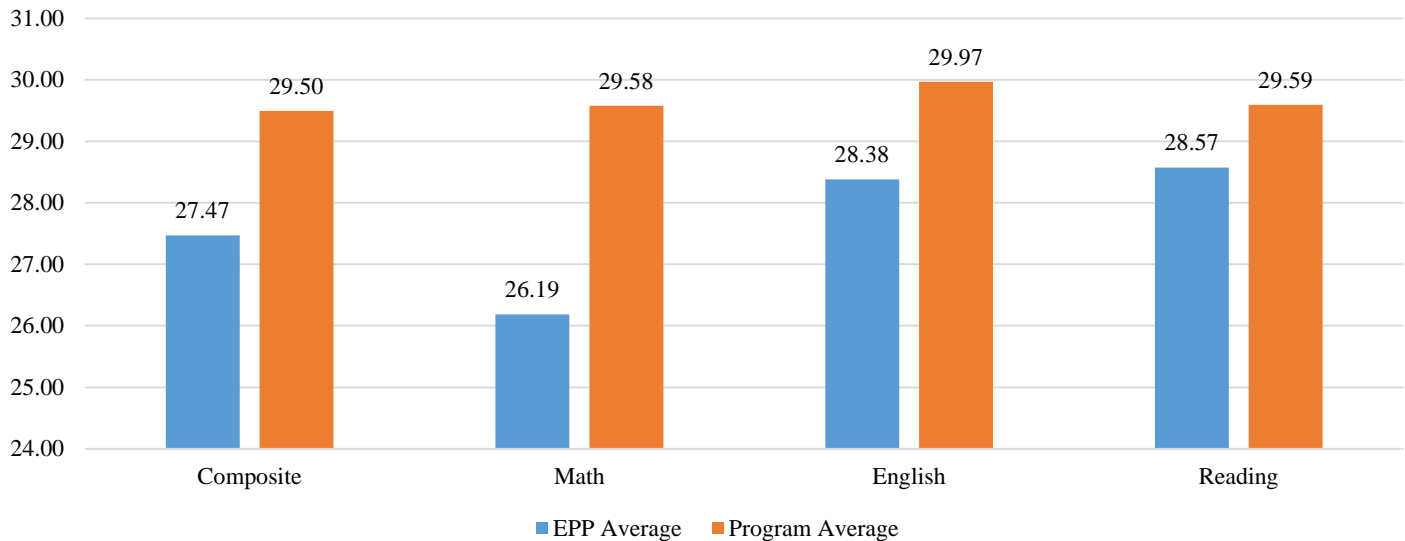


Figure 10. Pre-major ACT Results

Table 7.

Pre-major ACT Results

ACT Score	EPP Average	Program Average	EPP St Dev	Program St Dev	Program Min	Program Max	N	Percent of Total
Composite	27.47	29.50	3.66	3.21	21.00	35.00	141	100.00%
Math	26.19	29.58	3.78	3.11	21.00	35.00	141	100.00%
English	28.38	29.97	4.74	4.24	19.00	36.00	141	100.00%
Reading	28.57	29.59	4.66	4.42	17.00	36.00	141	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.

# BYU Educator Preparation Program Annual Report

## Mathematics Education

### Transition 1: Admissions

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

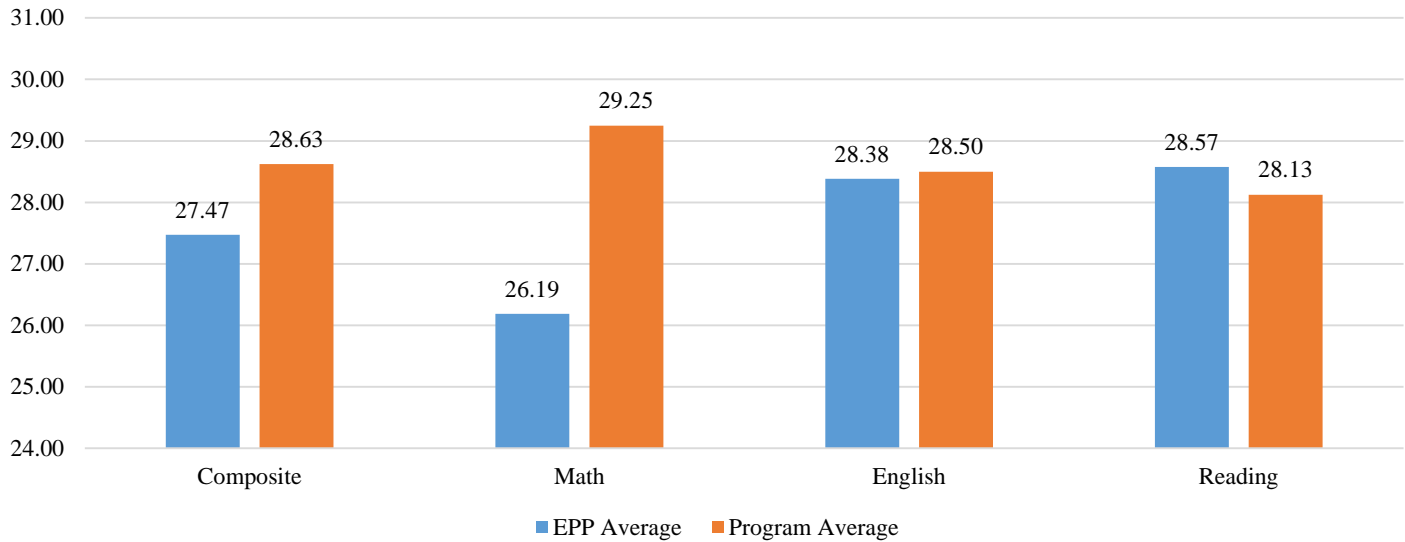


Figure 11. Major ACT Results

Table 8.

Major ACT Results

ACT Score	EPP Average	Program Average	EPP St Dev	Program St Dev	Program Min	Program Max	N	Percent of Total
Composite	27.47	28.63	3.66	4.63	21.00	36.00	8	100.00%
Math	26.19	29.25	3.78	4.37	23.00	36.00	8	100.00%
English	28.38	28.50	4.74	5.63	21.00	36.00	8	100.00%
Reading	28.57	28.13	4.66	6.01	19.00	35.00	8	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.



# BYU Educator Preparation Program Annual Report

## Mathematics Education

### 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.

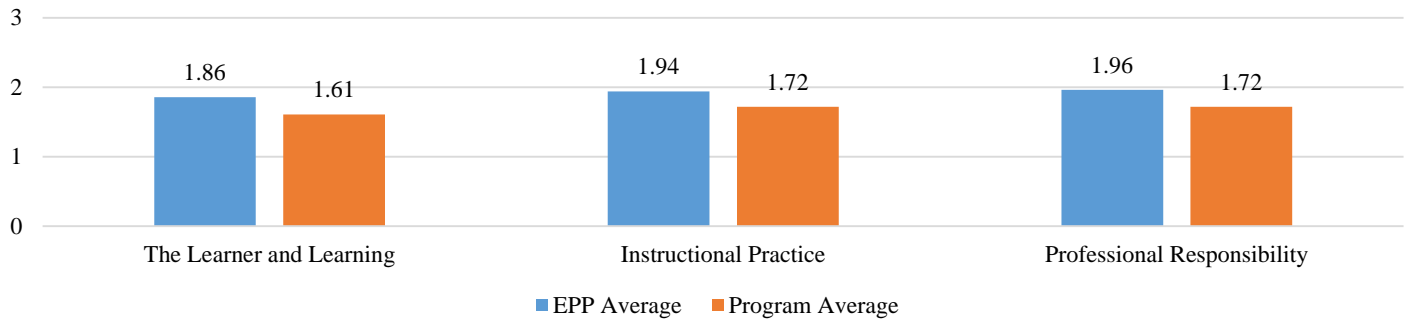


Figure 12. T1 UTESS by UETS Domains

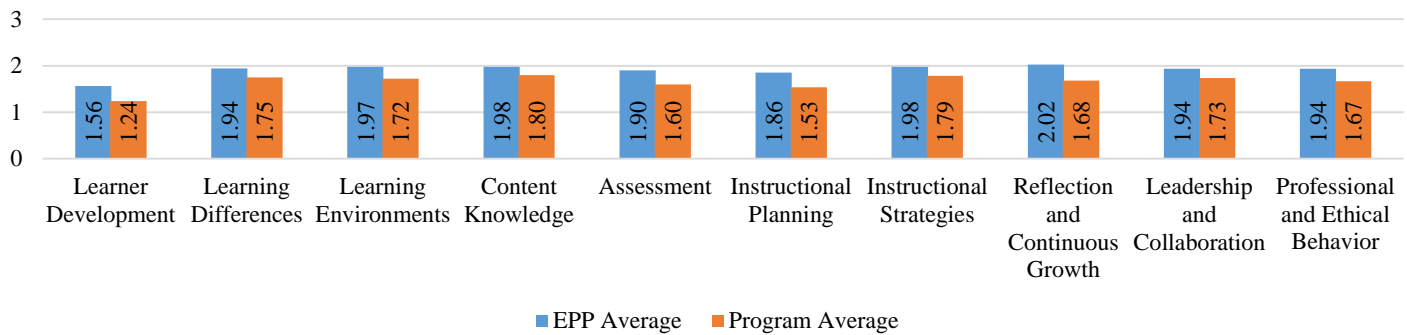
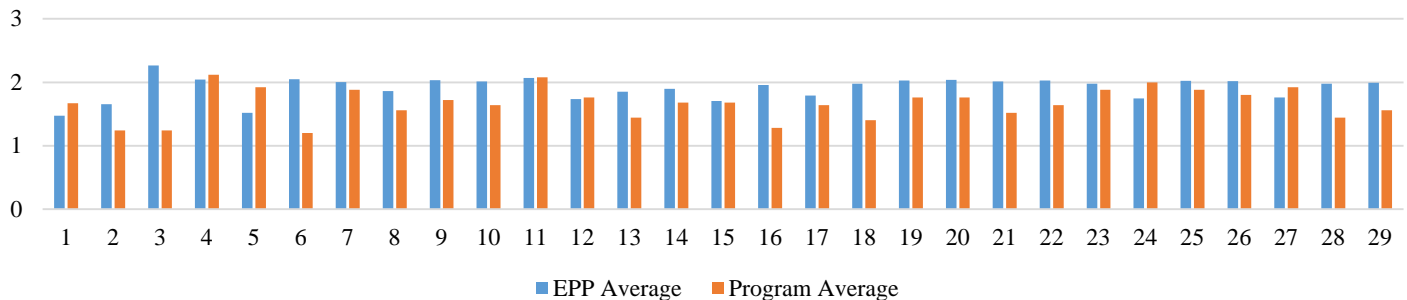


Figure 13. T1 UTESS by UET Standards



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

Figure 14. T1 UTESS by Items

# BYU Educator Preparation Program Annual Report

Mathematics Education

Transition 1: Admissions

## TSA

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

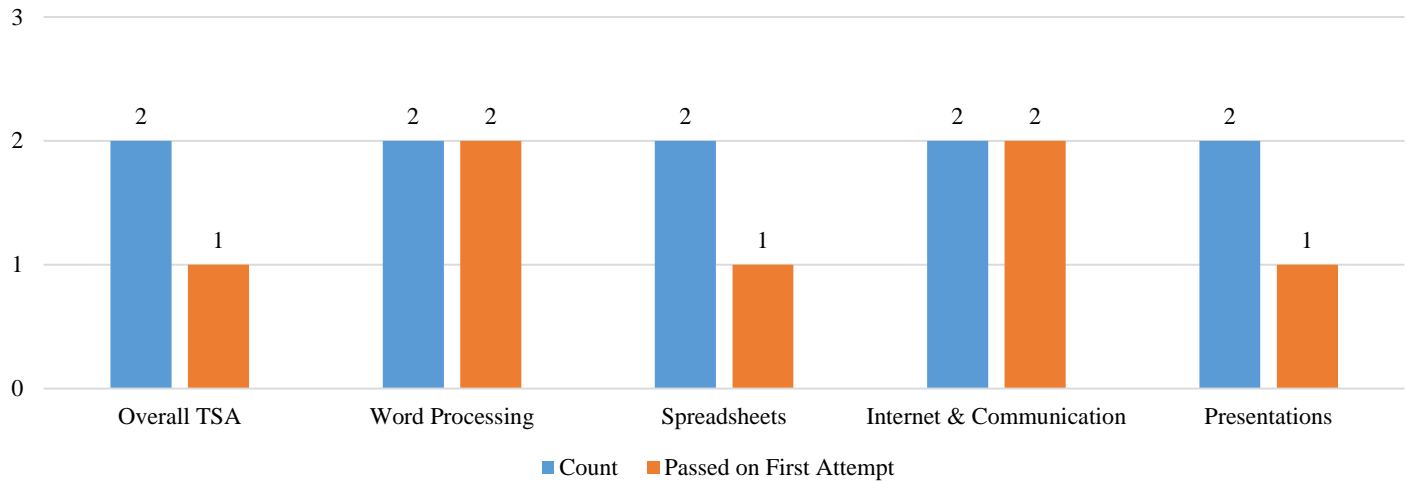


Figure 15. T1 TSA Results of Candidates Passing on the First Attempt.

Table 9.

T1 TSA Results of Candidates Passing on the First Attempt

N = 143	Count	Percent of Total	Passed on First Attempt	Percent of Passing on First Attempt	EPP Average to pass on first attempt
Overall TSA	2	1.40%	1	50.00%	86.28%
Word Processing	2	1.40%	2	100.00%	95.53%
Spreadsheets	2	1.40%	1	50.00%	92.95%
Internet & Communication	2	1.40%	2	100.00%	98.29%
Presentations	2	1.40%	1	50.00%	97.41%

# BYU Educator Preparation Program Annual Report

## Mathematics Education

### 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

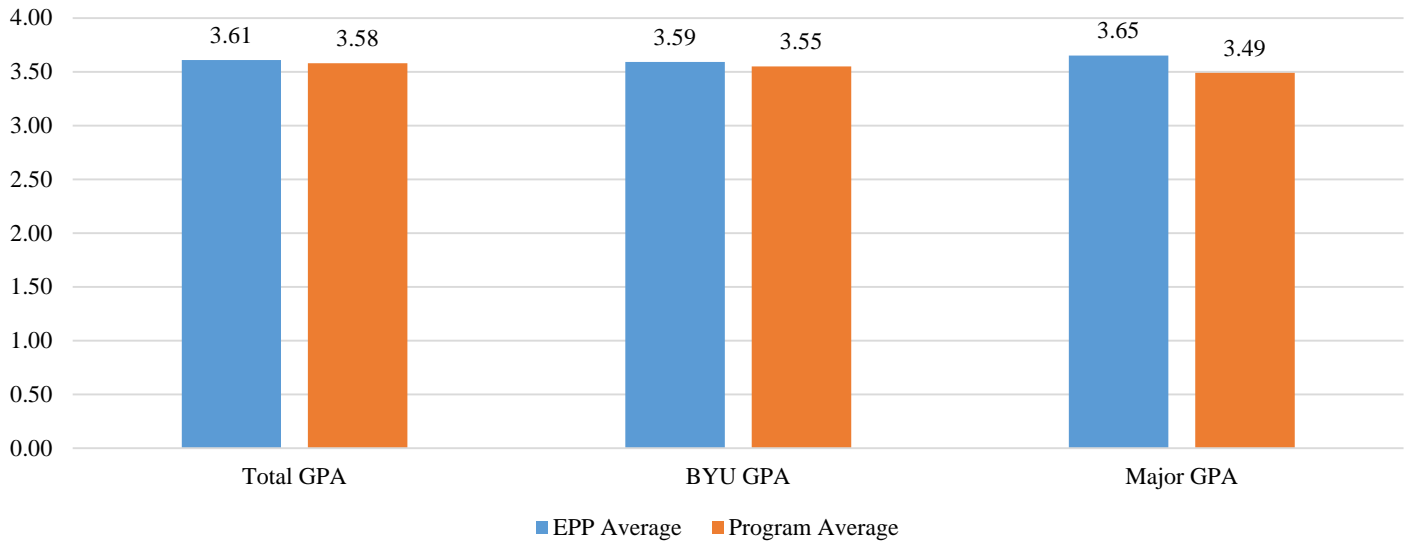


Figure 16. T2 Total, BYU, and Major GPA

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	4.00	4.00	4.00	4.00	4.00
Min	1.77	2.83	1.36	2.67	1.00	2.81
Average	3.61	3.58	3.59	3.55	3.65	3.49
St Dev	0.30	0.34	0.33	0.36	0.31	0.32
Count	1099	45	1099	45	1094	45
% 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%

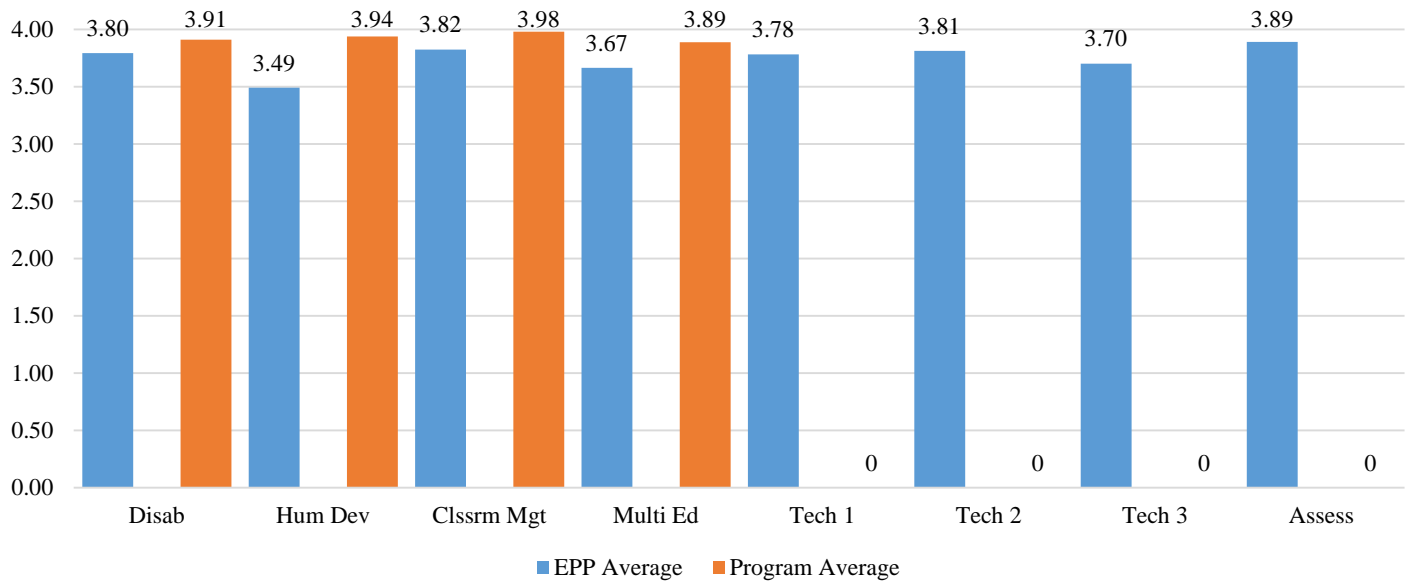
# BYU Educator Preparation Program Annual Report

Mathematics Education

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
<b>EPP Average</b>	3.80	3.49	3.82	3.67	3.78	3.81	3.70	3.89
<b>Program Average</b>	3.91	3.94	3.98	3.89	-	-	-	-
<b>Course Count</b>	17	20	18	17	-	-	-	-
<b>St Dev</b>	0.32	0.23	0.07	0.28	-	-	-	-

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

# BYU Educator Preparation Program Annual Report

## Mathematics Education

### 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.

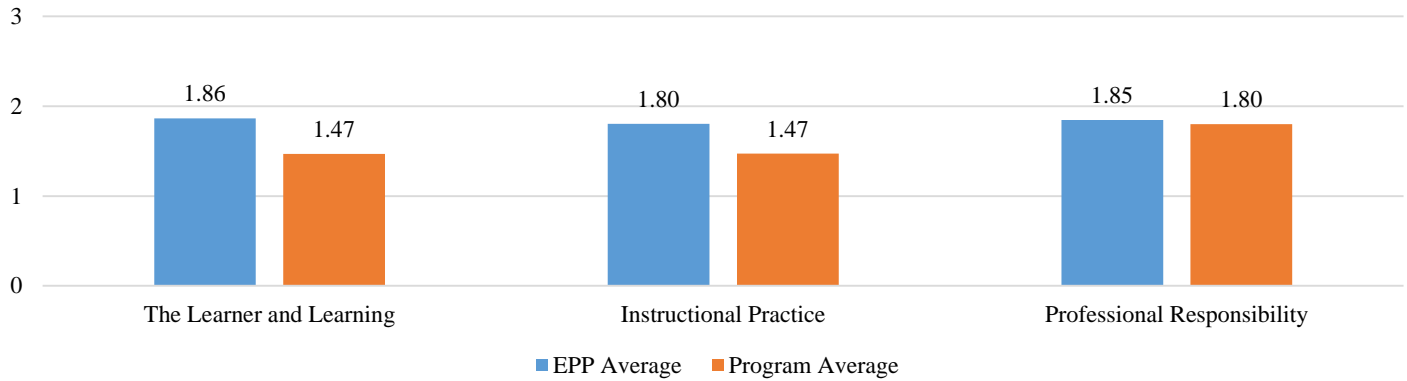


Figure 18. T2 PAES US by UETS Domains

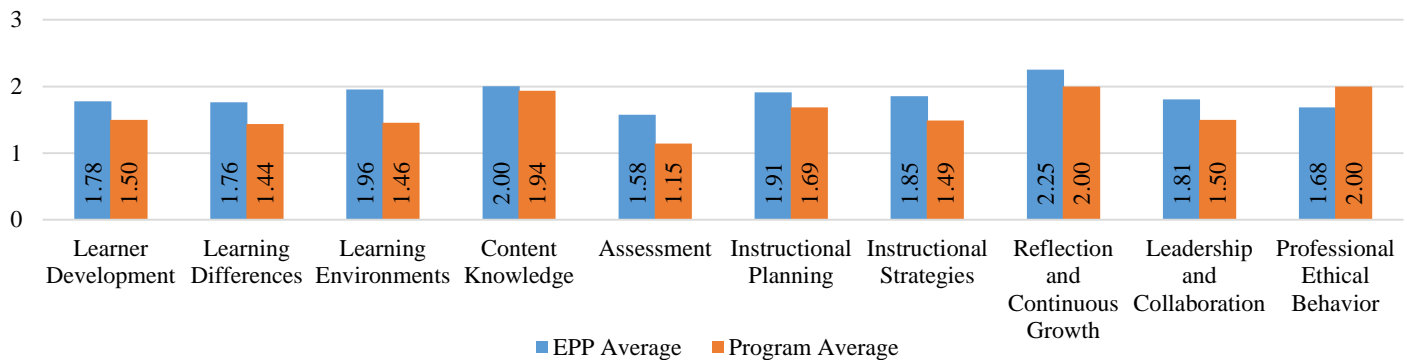


Figure 19. T2 PAES US by UET Standards

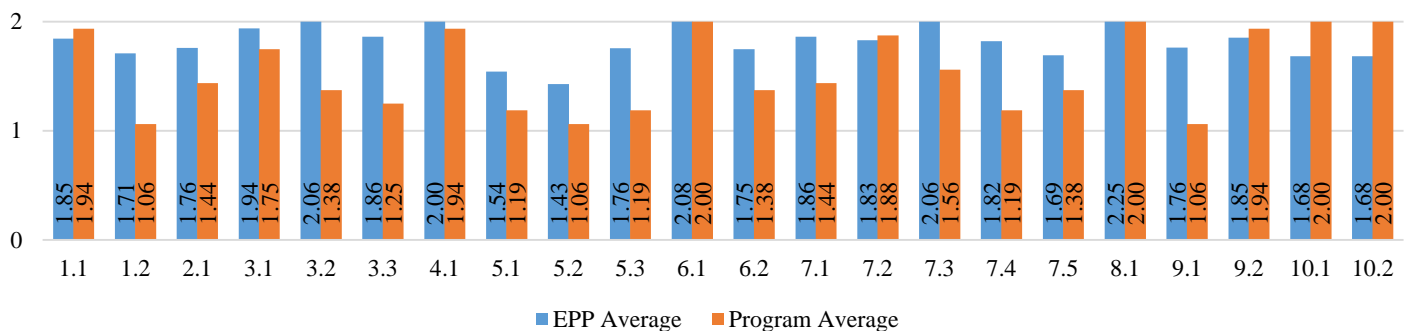


Figure 20. T2 PAES US by Items

# BYU Educator Preparation Program Annual Report

## Mathematics Education

### 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

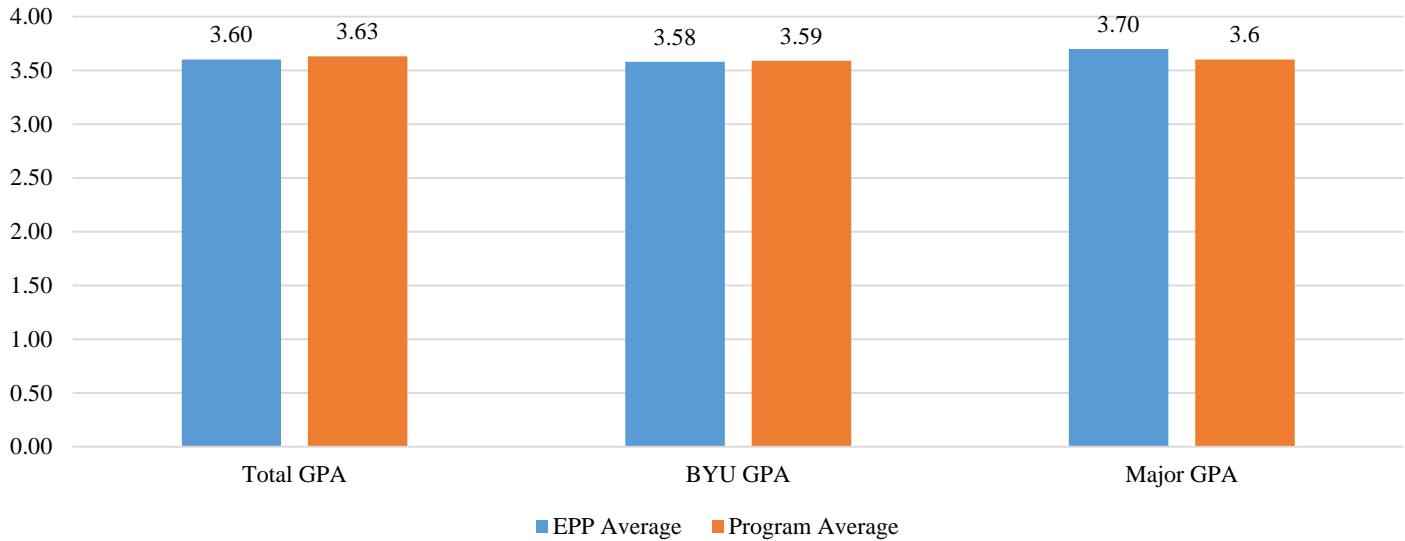


Figure 21. T3 Total, BYU, and Major GPA

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
<b>Max</b>	4.00	3.99	4.00	3.98	4.00	3.99
<b>Min</b>	2.30	2.55	2.12	2.55	2.70	3.14
<b>Average</b>	3.60	3.63	3.58	3.59	3.70	3.6
<b>St Dev</b>	0.29	0.32	0.31	0.35	0.26	0.28
<b>Count</b>	492	25	492	25	489	25
<b>% of Total</b>	100.00%	100.00%	100.00%	100.00%	99.39%	100.00%
<b>Missing</b>	0	0	0	0	3	0
<b>% of Total</b>	0.00%	0.00%	0.00%	0.00%	0.61%	0.00%

# BYU Educator Preparation Program Annual Report

## Mathematics Education

### Transition 3: Clinical

#### PAES US

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

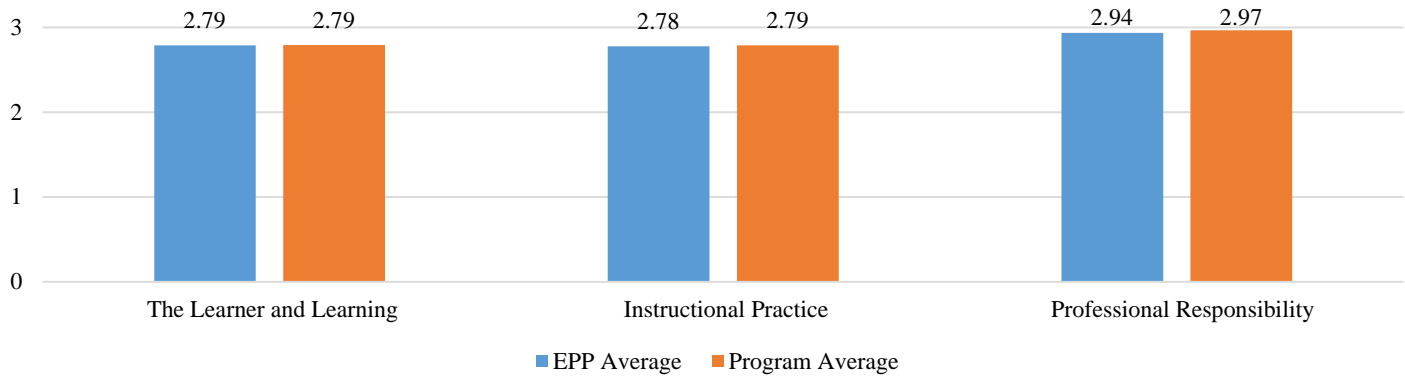


Figure 22. T3 PAES US by UETS Domains

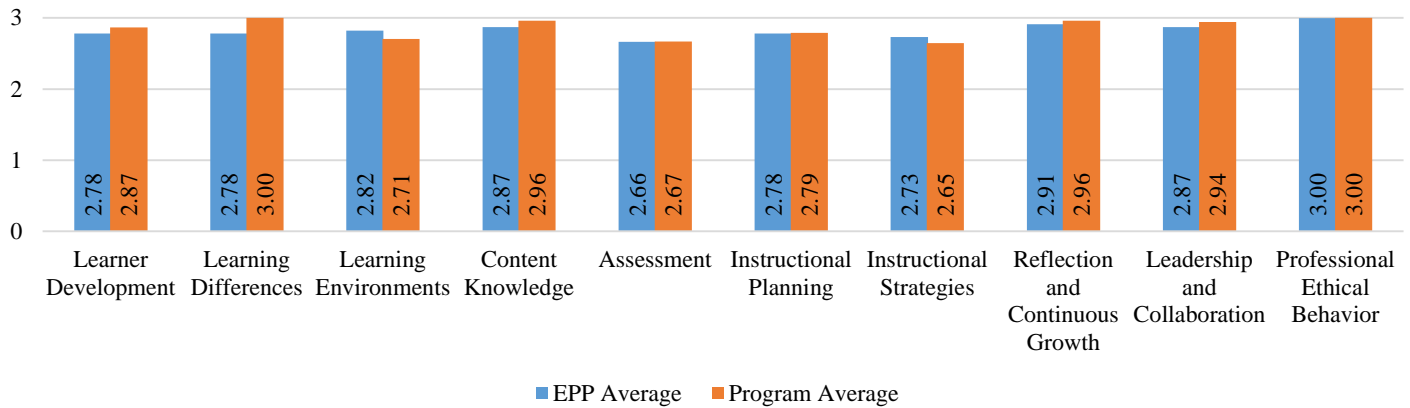


Figure 23. T3 PAES US by UET Standards

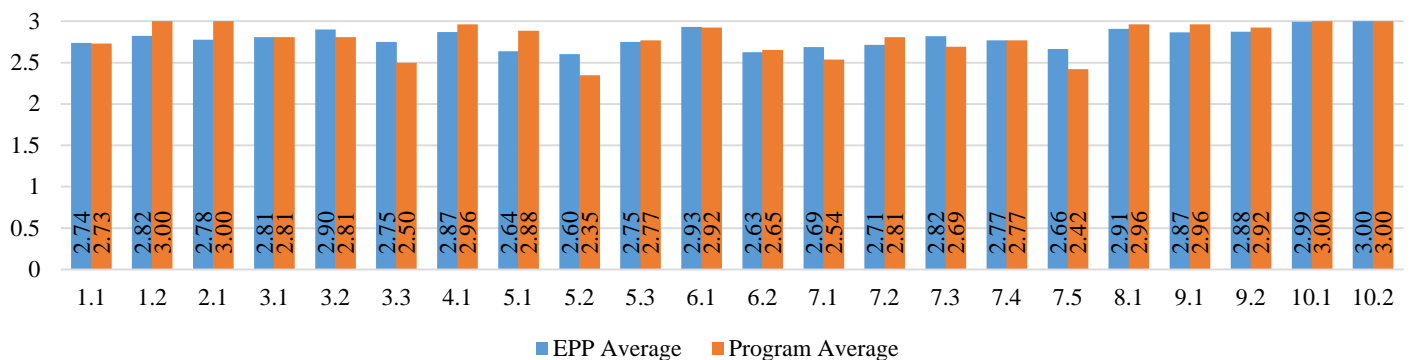


Figure 24. T3 PAES US by Items

# BYU Educator Preparation Program Annual Report

## Mathematics Education

### Transition 3: Clinical

#### PAES MT

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

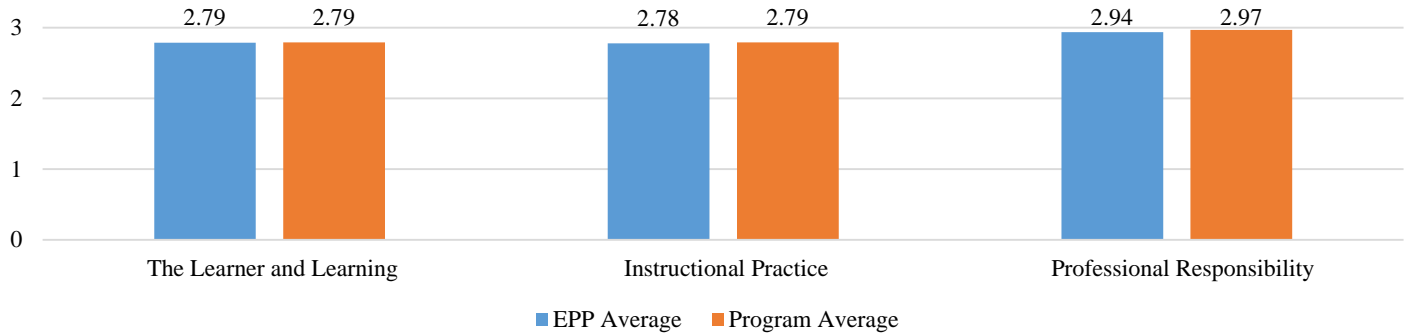


Figure 25. T3 PAES MT by UETS Domains

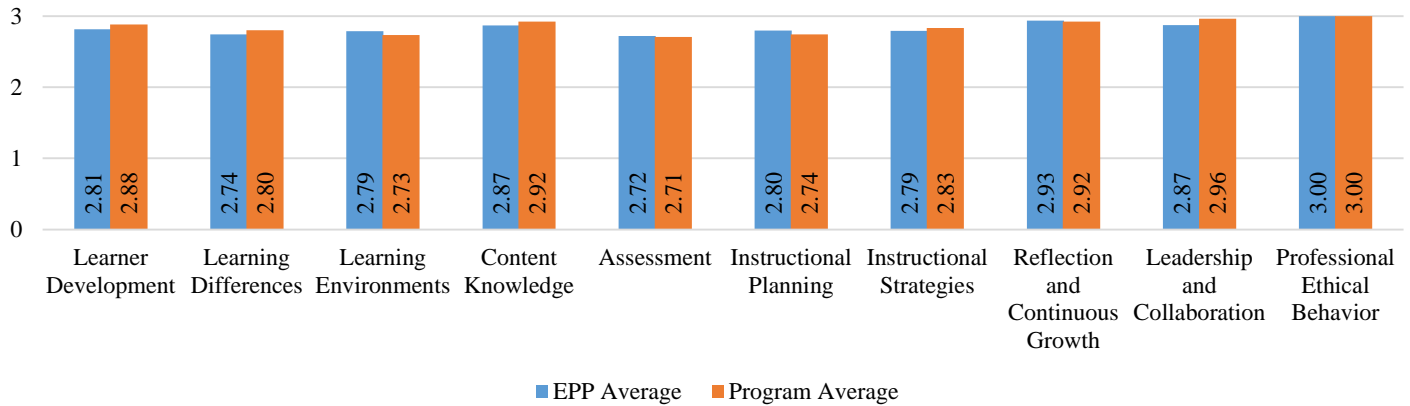


Figure 26. T3 PAES MT by UET Standards

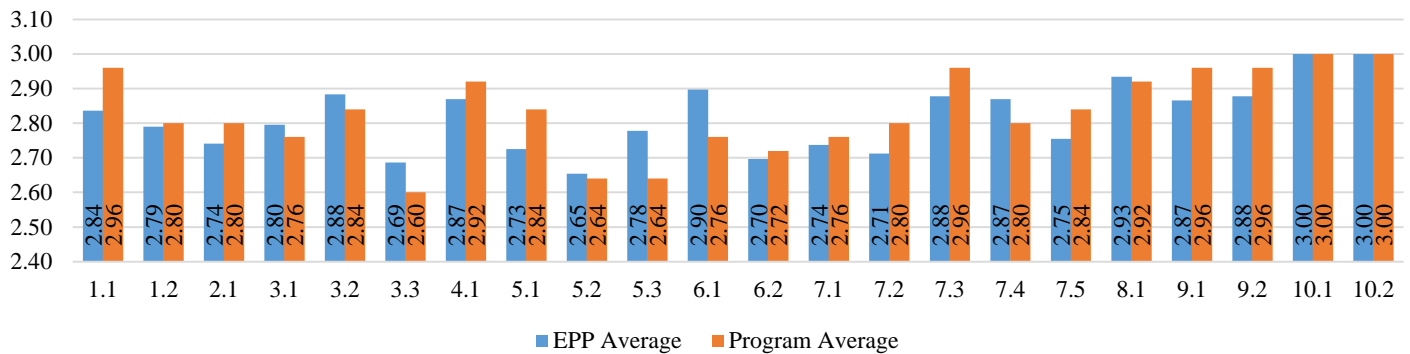


Figure 27. T3 PAES MT by Items



# BYU Educator Preparation Program Annual Report

## Mathematics Education

### 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.

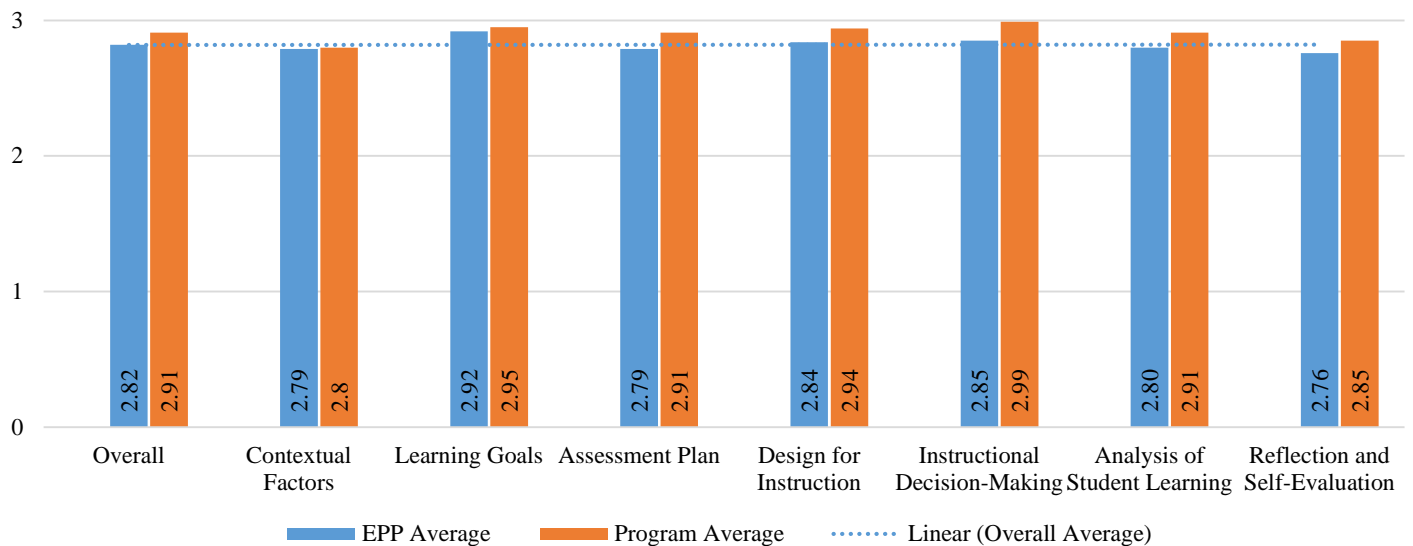


Figure 28. T3 RTWS

Table 13.

T3 RTWS

Section	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Overall</b>	<b>2.82</b>	<b>2.91</b>	<b>0.15</b>	<b>0.01</b>	<b>25</b>
<b>Contextual Factors</b>	2.79	2.80	0.05	0.13	25
<b>Learning Goals</b>	2.92	2.95	0.20	0.16	25
<b>Assessment Plan</b>	2.79	2.91	0.27	0.11	25
<b>Design for Instruction</b>	2.84	2.94	0.21	0.19	25
<b>Instructional Decision-Making</b>	2.85	2.99	0.31	0.07	25
<b>Analysis of Student Learning</b>	2.80	2.91	0.28	0.21	25
<b>Reflection and Self-Evaluation</b>	2.76	2.85	0.31	0.08	25

# BYU Educator Preparation Program Annual Report

## Mathematics Education

### 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.

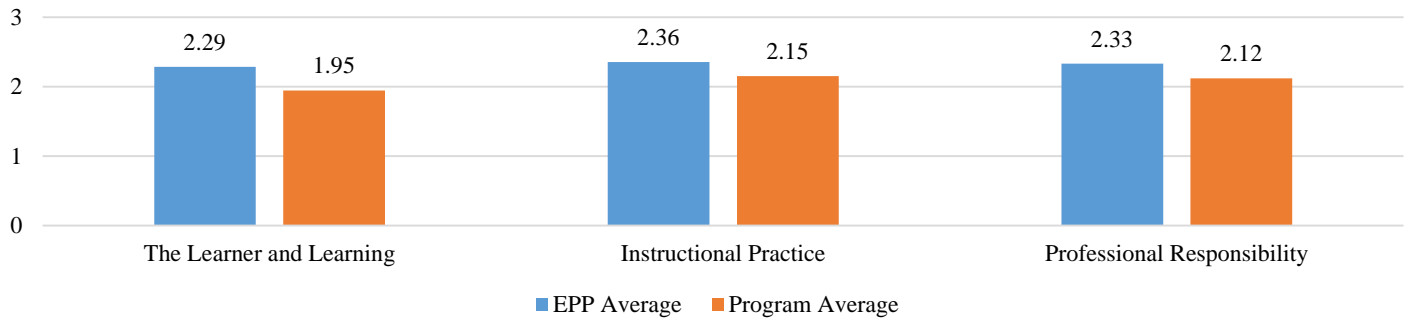


Figure 29. T3 UTESS by UETS Domains

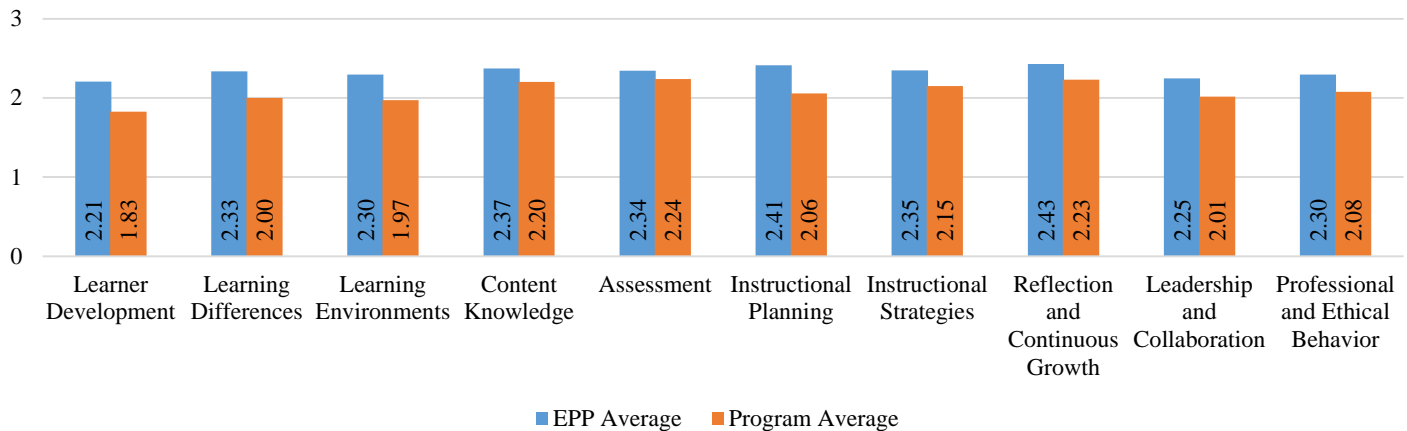


Figure 30. T3 UTESS by UET Standards

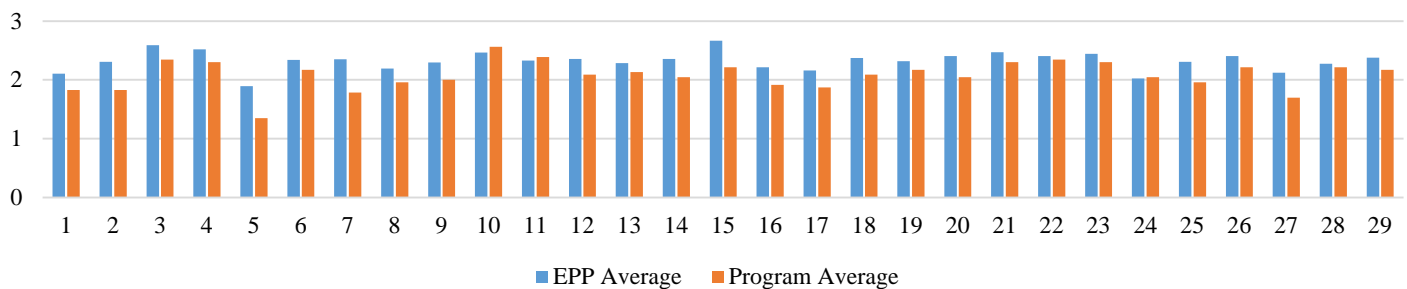


Figure 31. T3 UTESS by Items

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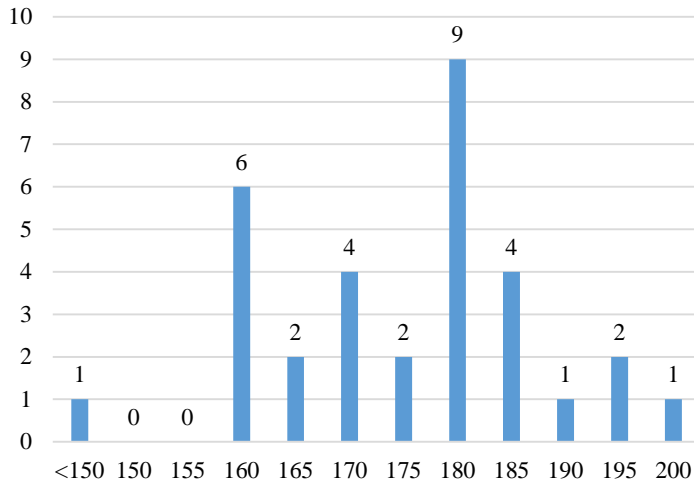
## Mathematics Education

### 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 5161: Mathematics—Content Knowledge



Note: Test 5161 is scored out of 200 maximum points and a minimum passing score of 157

Figure 32. Praxis Test 5161 Results

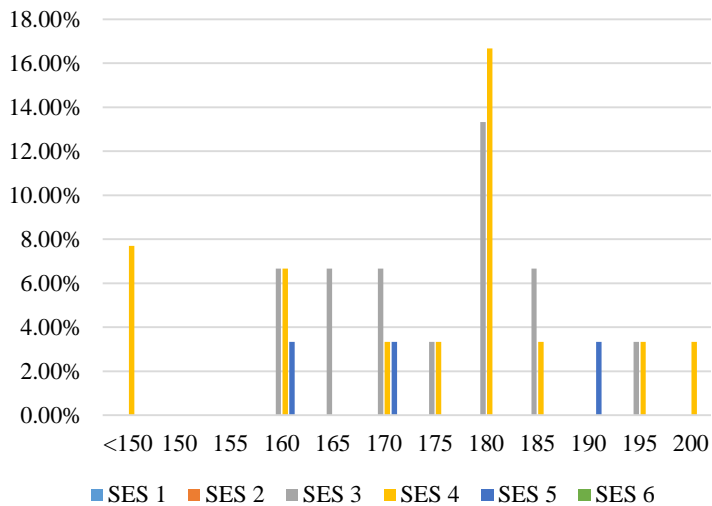


Figure 33. Test 5161 Results by SES

Table 14.

Praxis Test 5161 Results

Result	Frequency
<150	1
150-154	0
155-159	0
160-164	6
165-169	2
170-174	4
175-179	2
180-184	9
185-189	4
190-194	1
195-199	2
200	1
<b>Total</b>	<b>32</b>

Table 15.

SES Categories

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

# BYU Educator Preparation Program Annual Report

Mathematics Education

## Appendix A

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### 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 5.97 % 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; however, these inconsistencies do not exist in over 5.00% of the data. Therefore, the statistics shown below are within a 95.00% confidence interval, as estimated by the EPP office and staff.

# BYU Educator Preparation Program Annual Report

## Mathematics Education

### Appendix A

#### Administrative Overview

Table A.1.

*Program Flow*

Transition	Pre-Major	T1	T2	T3	Withdrawal PreM	Withdrawal Maj	Grand Total
<b>Count</b>	131	7	40	23	9	2	<b>212</b>
<b>Withdrawal %</b>	-	-	-	-	7.00%	3.00%	<b>5.19%</b>
<b>% Total</b>	<b>61.79%</b>	<b>3.30%</b>	<b>18.87%</b>	<b>10.85%</b>	<b>4.25%</b>	<b>0.94%</b>	<b>100.00%</b>

Table A.2.

*Graduated and Licensed*

	Graduated	Licensed
<b>Count</b>	23	21
<b>% of T3</b>	92.00%	84.00%
<b>Total T3</b>	<b>25</b>	<b>25</b>

Table A.3.

*Clinical Experiences for T3 Candidates*

	Student Teaching	Internship	Missing	Total
<b>Count</b>	25	0	0	<b>25</b>
<b>Percent of Total</b>	100.00%	0.00%	0.00%	<b>100.00%</b>

#### Transition 1

#### UTESS

Table A.4.

*T1 UTESS by Domain*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	1.86	1.61	0.67	0.70	25
<b>Instructional Practice</b>	1.94	1.72	0.68	0.74	25
<b>Professional Responsibility</b>	1.96	1.72	0.70	0.75	25

# BYU Educator Preparation Program Annual Report

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### Appendix A

Table A.5.

*T1 UTESS by Standard*

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	1.56	1.24	0.83	0.91	25
<b>Learning Differences</b>	1.94	1.75	0.73	0.66	25
<b>Learning Environments</b>	1.97	1.72	0.75	0.86	25
<b>Content Knowledge</b>	1.98	1.80	0.71	0.75	25
<b>Assessment</b>	1.90	1.60	0.78	0.88	25
<b>Instructional Planning</b>	1.86	1.53	0.78	0.92	25
<b>Instructional Strategies</b>	1.98	1.79	0.65	0.69	25
<b>Reflection and Continuous Growth</b>	2.02	1.68	0.73	0.76	25
<b>Leadership and Collaboration</b>	1.94	1.73	0.74	0.83	25
<b>Professional and Ethical Behavior</b>	1.94	1.67	0.74	0.81	25

Table A.6.

*T1 UTESS by Items*

Item	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>1</b>	1.47	1.67	0.88	0.88	25
<b>2</b>	1.66	1.24	0.89	1.01	25
<b>3</b>	2.27	1.24	0.82	0.88	25
<b>4</b>	2.04	2.12	0.88	0.95	25
<b>5</b>	1.52	1.92	0.92	0.82	25
<b>6</b>	2.05	1.20	0.82	1.09	25
<b>7</b>	2.00	1.88	0.86	0.96	25
<b>8</b>	1.86	1.56	0.83	0.89	25
<b>9</b>	2.03	1.72	0.81	0.91	25
<b>10</b>	2.01	1.64	0.79	0.76	25
<b>11</b>	2.07	2.08	0.82	0.93	25
<b>12</b>	1.74	1.76	0.90	0.96	25
<b>13</b>	1.85	1.44	0.86	1.03	25
<b>14</b>	1.90	1.68	0.87	1.03	25
<b>15</b>	1.71	1.68	0.98	1.14	25
<b>16</b>	1.96	1.28	0.83	0.86	25
<b>17</b>	1.79	1.64	0.85	0.82	25
<b>18</b>	1.98	1.40	0.79	0.66	25

# BYU Educator Preparation Program Annual Report

## Mathematics Education

### Appendix A

<b>19</b>	2.03	1.76	0.78	0.93	25
<b>20</b>	2.04	1.76	0.84	0.92	25
<b>21</b>	2.01	1.52	0.89	0.95	25
<b>22</b>	2.03	1.64	0.79	0.78	25
<b>23</b>	1.98	1.88	0.80	0.76	25
<b>24</b>	1.75	2.00	0.87	0.97	25
<b>25</b>	2.02	1.88	0.83	0.91	25
<b>26</b>	2.02	1.80	0.86	0.86	25
<b>27</b>	1.76	1.92	0.86	0.96	25
<b>28</b>	1.98	1.44	0.85	0.87	25
<b>29</b>	1.99	1.56	0.83	1.01	25
<b>Overall</b>	<b>1.91</b>	<b>1.76</b>	<b>0.67</b>	<b>0.72</b>	<b>25</b>

## Transition 2

## PAES US

Table 7.

*T2 PAES US by UETS Domains*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	1.86	1.47	0.50	0.27	16
<b>Instructional Practice</b>	1.80	1.47	0.49	0.22	16
<b>Professional Responsibility</b>	1.85	1.80	0.41	0.07	16

Table 8.

*T2 PAES US by UET Standards*

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	1.78	1.50	0.49	0.18	16
<b>Learning Differences</b>	1.76	1.44	0.59	0.51	16
<b>Learning Environments</b>	1.96	1.46	0.59	0.36	16
<b>Content Knowledge</b>	2.00	1.94	0.65	0.25	16
<b>Assessment</b>	1.58	1.15	0.58	0.27	16
<b>Instructional Planning</b>	1.91	1.69	0.58	0.25	16
<b>Instructional Strategies</b>	1.85	1.49	0.49	0.31	16

# BYU Educator Preparation Program Annual Report

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<b>Reflection and Continuous Growth</b>	2.25	2.00	0.68	0.00	16
<b>Leadership and Collaboration</b>	1.81	1.50	0.55	0.18	16
<b>Professional Ethical Behavior</b>	1.68	2.00	0.47	0.00	16

Table A.9.

*T2 PAES US by Items*

Item	EPP Average	Program Average	EPP St Dev	Program St Dev	N
1.1	1.85	1.94	0.54	0.25	16
1.2	1.71	1.06	0.64	0.25	16
2.1	1.76	1.44	0.59	0.51	16
3.1	1.94	1.75	0.60	0.45	16
3.2	2.06	1.38	0.73	0.50	16
3.3	1.86	1.25	0.66	0.45	16
4.1	2.00	1.94	0.65	0.25	16
5.1	1.54	1.19	0.63	0.40	16
5.2	1.43	1.06	0.71	0.25	16
5.3	1.76	1.19	0.68	0.40	16
6.1	2.08	2.00	0.65	0.00	16
6.2	1.75	1.38	0.74	0.50	16
7.1	1.86	1.44	0.53	0.51	16
7.2	1.83	1.88	0.67	0.34	16
7.3	2.06	1.56	0.66	0.51	16
7.4	1.82	1.19	0.67	0.40	16
7.5	1.69	1.38	0.61	0.50	16
8.1	2.25	2.00	0.68	0.00	16
9.1	1.76	1.06	0.68	0.25	16
9.2	1.85	1.94	0.56	0.25	16
10.1	1.68	2.00	0.47	0.00	16
10.2	1.68	2.00	0.47	0.00	16



# BYU Educator Preparation Program Annual Report

## Mathematics Education

### 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
<b>The Learner and Learning</b>	2.79	2.79	0.22	0.25	25
<b>Instructional Practice</b>	2.78	2.79	0.20	0.16	25
<b>Professional Responsibility</b>	2.94	2.97	0.13	0.09	25

Table 11.

*T3 PAES US by UET Standards*

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	2.78	2.87	0.30	0.23	26
<b>Learning Differences</b>	2.78	3.00	0.42	0.00	26
<b>Learning Environments</b>	2.82	2.71	0.27	0.33	26
<b>Content Knowledge</b>	2.87	2.96	0.34	0.20	26
<b>Assessment</b>	2.66	2.67	0.35	0.27	26
<b>Instructional Planning</b>	2.78	2.79	0.29	0.32	26
<b>Instructional Strategies</b>	2.73	2.65	0.27	0.17	26
<b>Reflection and Continuous Growth</b>	2.91	2.96	0.29	0.20	26
<b>Leadership and Collaboration</b>	2.87	2.94	0.28	0.22	26
<b>Professional Ethical Behavior</b>	2.99	3.00	0.07	0.00	26

Table A.12.

*T3 PAES US by Items*

Item	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>1.1</b>	2.74	2.73	0.44	0.45	26
<b>1.2</b>	2.82	3.00	0.38	0.00	26
<b>2.1</b>	2.78	3.00	0.42	0.00	26
<b>3.1</b>	2.81	2.81	0.39	0.40	26

# BYU Educator Preparation Program Annual Report

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3.2	2.90	2.81	0.31	0.40	26
3.3	2.75	2.50	0.44	0.51	26
4.1	2.87	2.96	0.34	0.20	26
5.1	2.64	2.88	0.48	0.33	26
5.2	2.60	2.35	0.50	0.49	26
5.3	2.75	2.77	0.44	0.43	26
6.1	2.93	2.92	0.26	0.27	26
6.2	2.63	2.65	0.50	0.49	26
7.1	2.69	2.54	0.47	0.51	26
7.2	2.71	2.81	0.47	0.40	26
7.3	2.82	2.69	0.39	0.47	26
7.4	2.77	2.77	0.45	0.43	26
7.5	2.66	2.42	0.49	0.50	26
8.1	2.91	2.96	0.29	0.20	26
9.1	2.87	2.96	0.34	0.20	26
9.2	2.88	2.92	0.33	0.27	26
10.1	2.99	3.00	0.13	0.00	26
10.2	3.00	3.00	0.00	0.00	26

## PAES MT

Table 13.

*T3 PAES MT by UETS Domains*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	2.79	2.79	0.22	0.25	25
<b>Instructional Practice</b>	2.78	2.79	0.20	0.16	25
<b>Professional Responsibility</b>	2.94	2.97	0.13	0.09	25

Table 14.

*T3 PAES MT by UET Standards*

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	2.81	2.88	0.29	0.22	25
<b>Learning Differences</b>	2.74	2.80	0.44	0.50	25
<b>Learning Environments</b>	2.79	2.73	0.29	0.35	25
<b>Content Knowledge</b>	2.87	2.92	0.35	0.28	25

# BYU Educator Preparation Program Annual Report

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Assessment	2.72	2.71	0.32	0.28	25
<b>Instructional Planning</b>	2.80	2.74	0.29	0.29	25
<b>Instructional Strategies</b>	2.79	2.83	0.23	0.22	25
<b>Reflection and Continuous Growth</b>	2.93	2.92	0.25	0.28	25
<b>Leadership and Collaboration</b>	2.87	2.96	0.28	0.14	25
<b>Professional Ethical Behavior</b>	3.00	3.00	0.00	0.00	25

Table A.15.

*T3 PAES MT by Items*

Item	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>1.1</b>	2.84	2.96	0.38	0.00	25
<b>1.2</b>	2.79	2.80	0.42	0.41	25
<b>2.1</b>	2.74	2.80	0.44	0.50	25
<b>3.1</b>	2.80	2.76	0.40	0.44	25
<b>3.2</b>	2.88	2.84	0.33	0.37	25
<b>3.3</b>	2.69	2.60	0.47	0.50	25
<b>4.1</b>	2.87	2.92	0.35	0.28	25
<b>5.1</b>	2.73	2.84	0.45	0.37	25
<b>5.2</b>	2.65	2.64	0.48	0.49	25
<b>5.3</b>	2.78	2.64	0.43	0.49	25
<b>6.1</b>	2.90	2.76	0.32	0.44	25
<b>6.2</b>	2.70	2.72	0.47	0.46	25
<b>7.1</b>	2.74	2.76	0.44	0.44	25
<b>7.2</b>	2.71	2.80	0.47	0.41	25
<b>7.3</b>	2.88	2.96	0.33	0.20	25
<b>7.4</b>	2.87	2.80	0.34	0.41	25
<b>7.5</b>	2.75	2.84	0.45	0.37	25
<b>8.1</b>	2.93	2.92	0.25	0.28	25
<b>9.1</b>	2.87	2.96	0.36	0.20	25
<b>9.2</b>	2.88	2.96	0.34	0.20	25
<b>10.1</b>	3.00	3.00	0.00	0.00	25
<b>10.2</b>	3.00	3.00	0.00	0.00	25

# BYU Educator Preparation Program Annual Report

## Mathematics Education

### Appendix A

## UTESS

Table A.16.

*T3 UTESS by Domain*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	2.29	1.95	0.40	0.42	23
<b>Instructional Practice</b>	2.36	2.15	0.36	0.39	23
<b>Professional Responsibility</b>	2.33	2.12	0.37	0.41	23

Table A.17.

*T3 UTESS by Standard*

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	2.21	1.83	0.83	0.58	23
<b>Learning Differences</b>	2.33	2.00	0.73	0.47	23
<b>Learning Environments</b>	2.30	1.97	0.75	0.41	23
<b>Content Knowledge</b>	2.37	2.20	0.71	0.49	23
<b>Assessment</b>	2.34	2.24	0.78	0.47	23
<b>Instructional Planning</b>	2.41	2.06	0.78	0.49	23
<b>Instructional Strategies</b>	2.35	2.15	0.65	0.38	23
<b>Reflection and Continuous Growth</b>	2.43	2.23	0.73	0.39	23
<b>Leadership and Collaboration</b>	2.25	2.01	0.74	0.52	23
<b>Professional and Ethical Behavior</b>	2.30	2.08	0.74	0.45	23

Table A.18.

*T3 UTESS by Items*

Item	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>1</b>	2.11	1.83	0.65	0.72	23
<b>2</b>	2.31	1.83	0.65	0.72	23
<b>3</b>	2.59	2.35	0.57	0.65	23
<b>4</b>	2.52	2.30	0.59	0.63	23
<b>5</b>	1.90	1.35	0.76	0.83	23
<b>6</b>	2.34	2.17	0.56	0.65	23
<b>7</b>	2.35	1.78	0.59	0.42	23

# BYU Educator Preparation Program Annual Report

## Mathematics Education

### Appendix A

8	2.20	1.96	0.59	0.64	23
9	2.30	2.00	0.59	0.60	23
10	2.46	2.57	0.53	0.59	23
11	2.33	2.39	0.56	0.58	23
12	2.36	2.09	0.60	0.67	23
13	2.29	2.13	0.59	0.63	23
14	2.35	2.04	0.59	0.71	23
15	2.67	2.22	0.53	0.60	23
16	2.22	1.91	0.57	0.51	23
17	2.16	1.87	0.59	0.69	23
18	2.37	2.09	0.53	0.60	23
19	2.32	2.17	0.58	0.72	23
20	2.41	2.04	0.56	0.56	23
21	2.47	2.30	0.57	0.56	23
22	2.41	2.35	0.56	0.57	23
23	2.44	2.30	0.54	0.56	23
24	2.03	2.04	0.66	0.64	23
25	2.31	1.96	0.56	0.64	23
26	2.41	2.22	0.56	0.60	23
27	2.12	1.70	0.61	0.70	23
28	2.27	2.22	0.60	0.52	23
29	2.38	2.17	0.55	0.65	23
Overall	2.32	2.08	0.35	0.38	23

## Praxis

### Praxis Test 5161: Mathematics—Content Knowledge

Table A.19.

*Praxis Test 5161: Mathematics—Content Knowledge Overall Results*

	Max	Average	Min	St Dev
Score	200	129.71	160	11.34
N Size	27	27	27	27
N Missing	0	0	0	0
Percentage	100.00%	100.00%	100.00%	100.00%

Note: Test 5161 is scored out of 200 maximum points and a minimum passing score of 157

# BYU Educator Preparation Program Annual Report

## Mathematics Education

### Appendix A

Table A.20.

*Praxis Test 5161: Mathematics—Content Knowledge Section Results*

	Points Available	Max	Average	Min	St Dev	N Size	Missing	Percentage
<b>Number and Quantity, Algebra, Functions, and Calculus</b>	34.00	33	28.30	22	2.92	27	0	100.00%
<b>Geometry, Probability and Statistics, and Discrete Mathematics</b>	15.93	16	13.07	8	1.94	27	0	100.00%

Table A.21.

*Praxis Test 5161: Mathematics—Content Knowledge Attempts*

	First Attempt	Second Attempt	Third Attempt	Total
<b>N Size</b>	27	5	2	<b>27</b>
<b>Count</b>	27	4	1	<b>27</b>
<b>Missing</b>	0	1	1	<b>1</b>
<b>Passed</b>	22	3	1	<b>26</b>
<b>Failed</b>	5	1	0	<b>1</b>
<b>% Who Passed The Attempt</b>	81.48%	75.00%	100.00%	<b>-</b>
<b>% Who Passed the Test</b>	81.48%	11.11%	3.70%	<b>96.30%</b>

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 5161: Mathematics—Content Knowledge Results sorted by Socioeconomic Status*

Category	<150	150-154	155-159	160-164	165-169	170-174	175-179	180-184	185-189	190-194	195-199	200	Total
<b>SES 1</b>	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
<b>SES 2</b>	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
<b>SES 3</b>	0	0	0	2	2	2	1	4	2	0	1	0	<b>14</b>
<b>SES 4</b>	1	0	0	2	0	1	1	5	1	0	1	1	<b>13</b>
<b>SES 5</b>	0	0	0	1	0	1	0	0	0	1	0	0	<b>3</b>
<b>SES 6</b>	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>30</b>

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



**BYU Educator Preparation Program  
2017 – 2018 Annual Report**

Report for Physics Teaching (BS)

Prepared by the EPP Support Team  
August 2018

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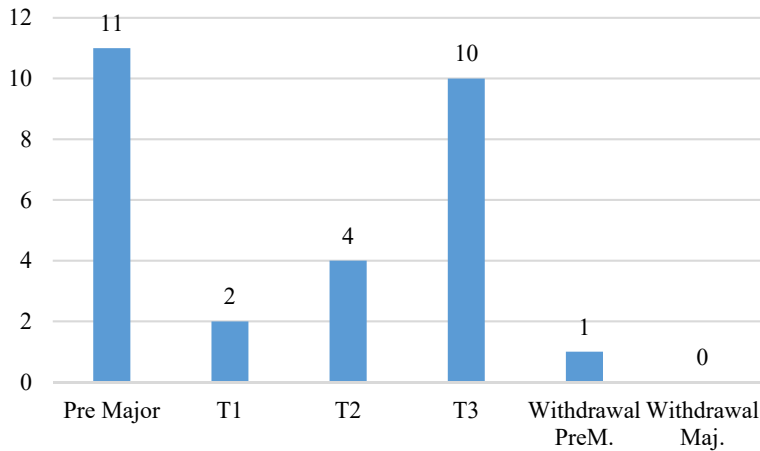


# BYU Educator Preparation Program Annual Report

## Physics Teaching

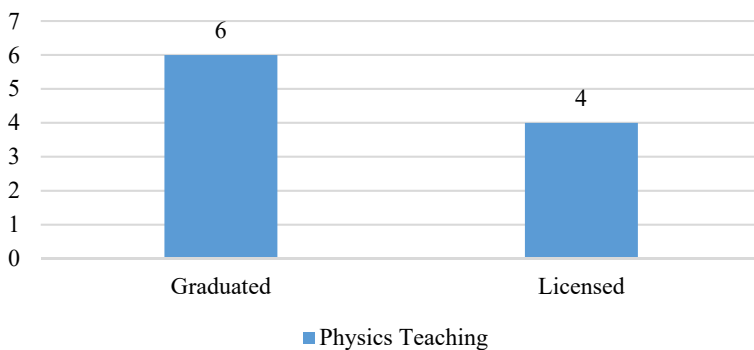
### Administrative Overview

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



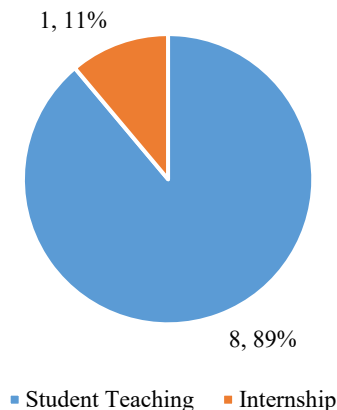
In 2017-2018, the Physics Teaching program had 11 candidates enrolled in its pre-major, two candidates in Transition 1, four candidates in Transition 2, and ten candidates in Transition 3.

Figure 1. Program Flow



Six students graduated from Physics Teaching. While many candidates pursue licensure, two 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 89% of the candidates choosing student teaching.

Figure 3. Clinical Experiences for T3 Candidates

# BYU Educator Preparation Program Annual Report

## Physics Teaching

### Biographic Overview

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

#### Gender

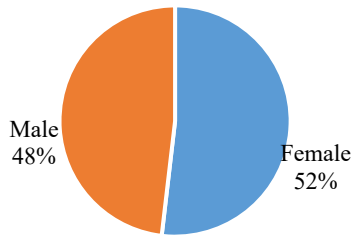


Figure 4. Gender

Table 1.

Gender

Gender	Count	Percent of Total
Female	14	51.85%
Male	13	48.15%
Total	27	100.00%
Missing	0	0.00%
Grand Total	27	100.00%

#### Socioeconomic Status

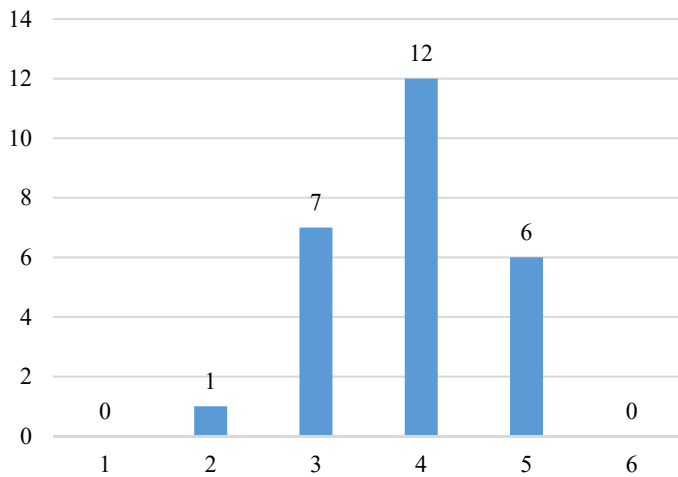


Figure 5. Socioeconomic Status

Table 2.

Socioeconomic Status

SES Category	Count	Percent of Total
SES 1	0	0.00%
SES 2	1	3.70%
SES 3	7	25.93%
SES 4	12	44.44%
SES 5	6	22.22%
SES 6	0	0.00%
Total	26	96.30%
Missing	1	3.70%
Grand Total	27	100.00%

Note: See Appendix A for SES explanation

#### Marital Status

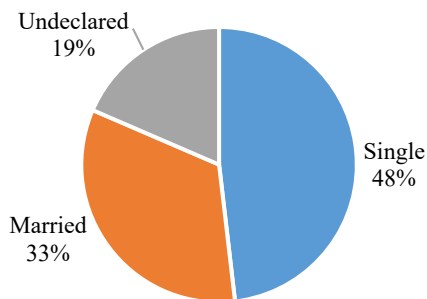


Figure 6. Marital Status

Table 3.

Marital Status

Marital Status	Count	Percent of Total
Single	13	48.15%
Married	9	33.33%
Undeclared	5	18.52%
Total	27	100.00%
Missing	0	0.00%
Grand Total	27	100.00%

# BYU Educator Preparation Program Annual Report

## Physics Teaching

### Biographic Overview

#### Age

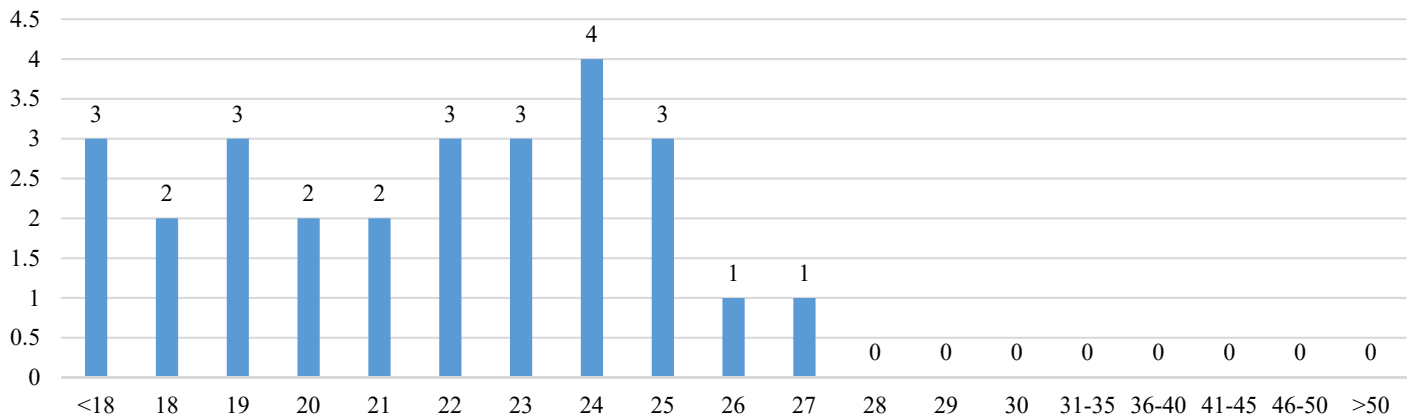


Figure 7. Age

Table 4.

#### Age

Age	Count	Percent of Total
<18	3	11.11%
18	2	7.41%
19	3	11.11%
20	2	7.41%
21	2	7.41%
22	3	11.11%
23	3	11.11%
24	4	14.81%
25	3	11.11%
26	1	3.70%
27	1	3.70%
28	0	0.00%
29	0	0.00%
30	0	0.00%
31-35	0	0.00%
36-40	0	0.00%
41-45	0	0.00%
46-50	0	0.00%
>50	0	0.00%
<b>Total</b>	<b>27</b>	<b>100.00%</b>
<b>Missing</b>	<b>0</b>	<b>0.00%</b>
<b>Grand Total</b>	<b>27</b>	<b>100.00%</b>

# BYU Educator Preparation Program Annual Report

## Physics Teaching

### Biographic Overview

#### Ethnicity

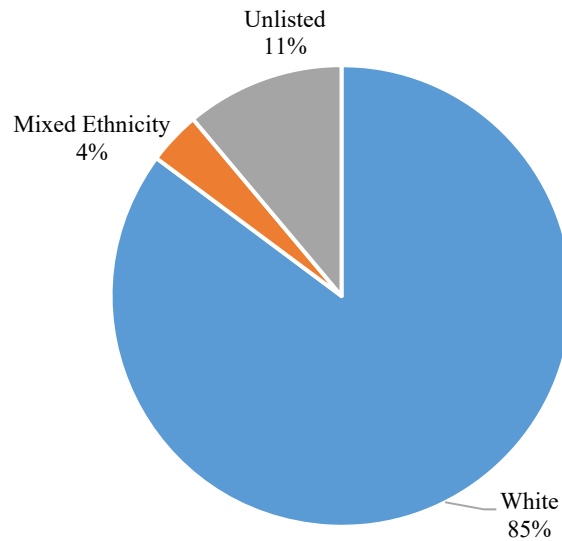


Figure 8. Ethnicity

Table 5.  
Ethnicity

Ethnicity	Count	Percent of Total
White	23	85.19%
Mixed Ethnicity	1	3.70%
Unlisted	3	11.11%
Total	27	100.00%
Missing	0	0.00%
Grand Total	27	100.00%

# BYU Educator Preparation Program Annual Report

## Physics 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

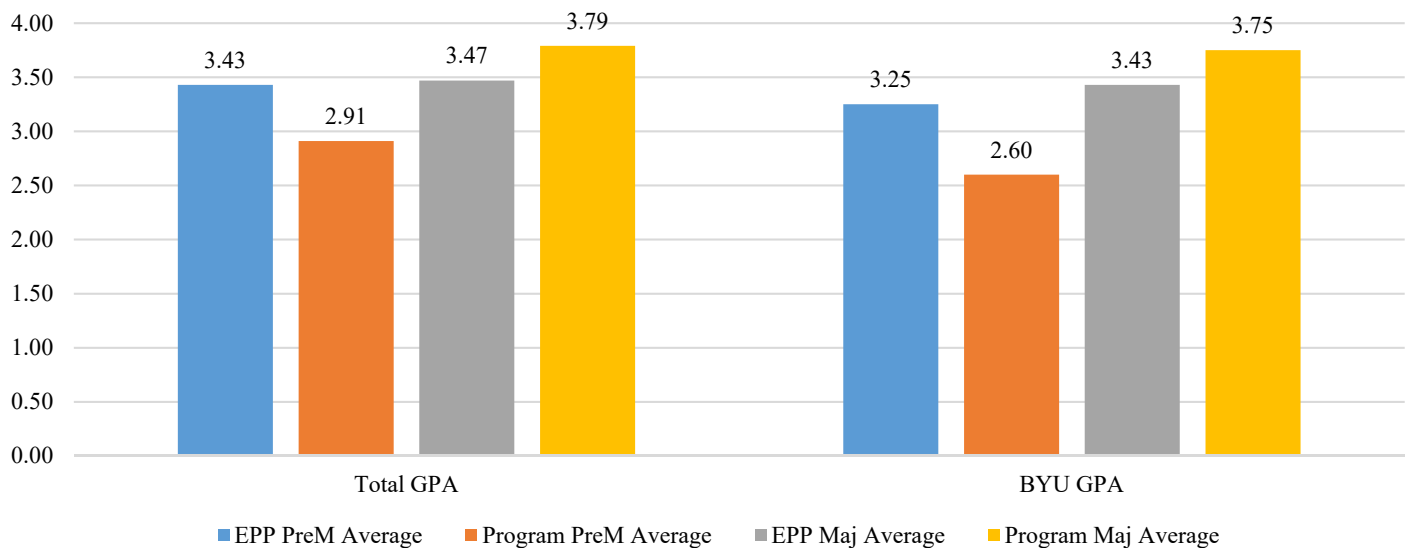


Figure 9. Total and BYU GPA at Admissions

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)
<b>Max</b>	4.00	4.00	4.00	3.85	4.00	3.78	4.00	3.81
<b>Min</b>	0.18	2.19	0.53	3.73	0.18	1.97	0.53	3.69
<b>Average</b>	3.43	2.91	3.47	3.79	3.25	2.60	3.43	3.75
<b>St Dev</b>	0.57	0.77	0.48	0.09	0.65	0.81	0.51	0.09
<b>Count</b>	1258	6	491	2	858	4.00	466	2
<b>% of Total</b>	77.94%	54.55%	96.46%	100%	53.16%	36.36%	91.55%	100%
<b>Missing</b>	356	5	18	0	756	7	43	0
<b>% of Total</b>	22.06%	45.45%	3.54%	0.00%	46.84%	63.64%	8.45%	0.00%

Note: Maj = Major, PreM = Pre-major

# BYU Educator Preparation Program Annual Report

## Physics Teaching

### Transition 1: Admissions

#### ACT

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

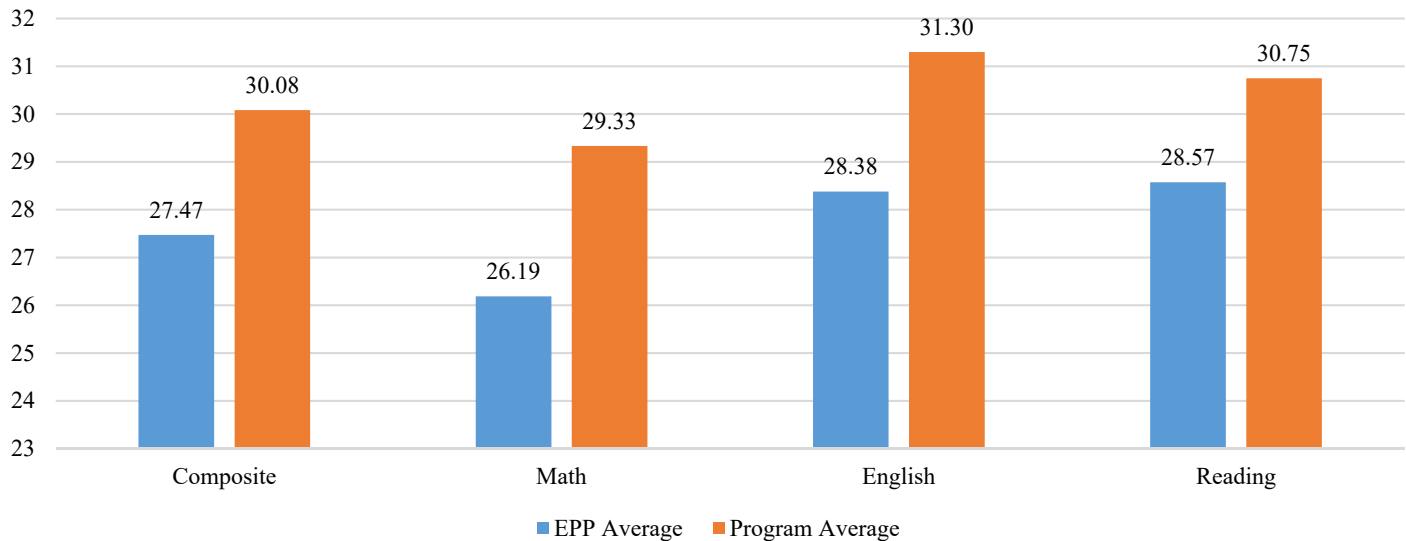


Figure 10. Pre-major ACT Results

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	30.08	3.66	2.84	24.00	34.00	12	100.00%
Math	26.19	29.33	3.78	3.73	22.00	35.00	12	100.00%
English	28.38	31.30	4.74	3.65	24.00	35.00	10	83.00%
Reading	28.57	30.75	4.66	2.90	26.00	34.00	12	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.

# BYU Educator Preparation Program Annual Report

## Physics Teaching

### Transition 1: Admissions

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

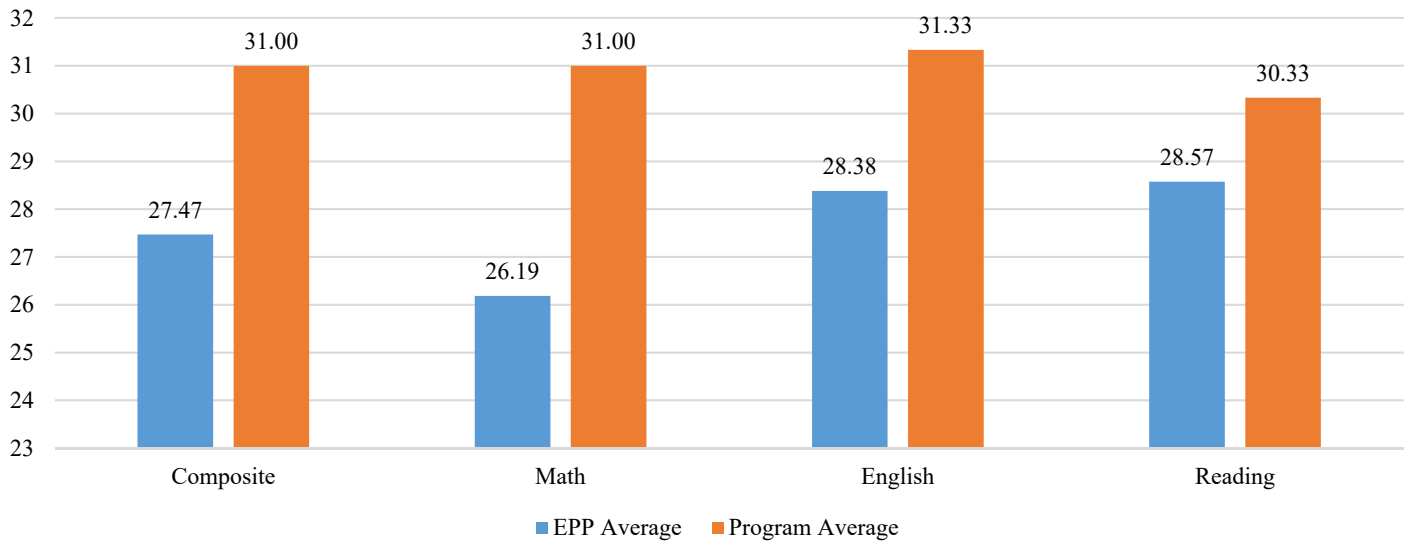


Figure 11. Major ACT Results

Table 8.

Major ACT Results

ACT Score	EPP Average	Program Average	EPP St Dev	Program St Dev	Program Min	Program Max	Count	% of Total
Composite	27.47	30.00	3.66	4.24	27	33	2	100.00%
Math	26.19	30.00	3.78	1.41	29	31	2	100.00%
English	28.38	31.50	4.74	4.95	28	35	2	100.00%
Reading	28.57	29.50	4.66	3.54	27	32	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.

# BYU Educator Preparation Program Annual Report

## Physics 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.

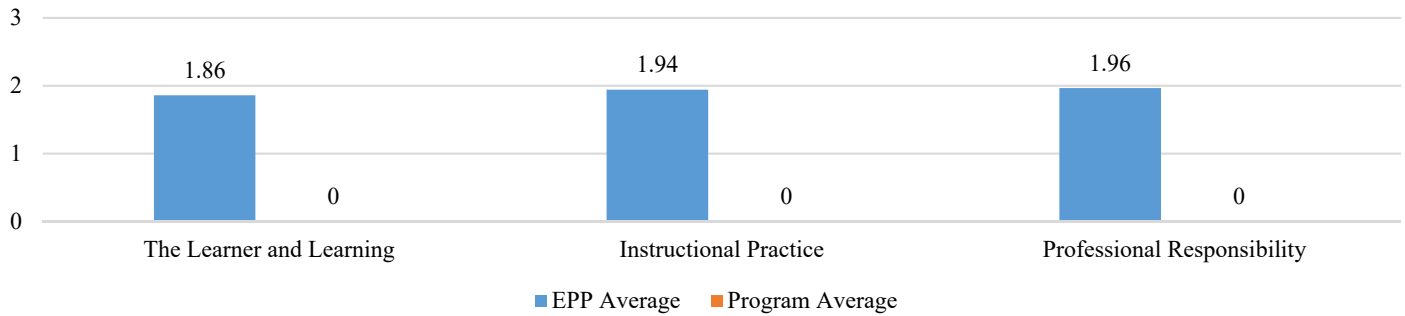


Figure #. T1 UTESS by UETS Domains

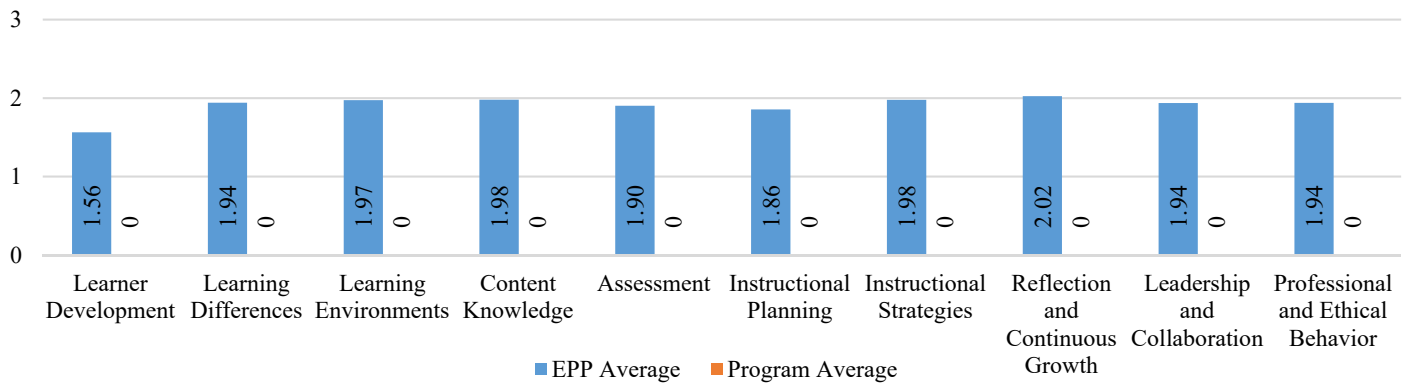
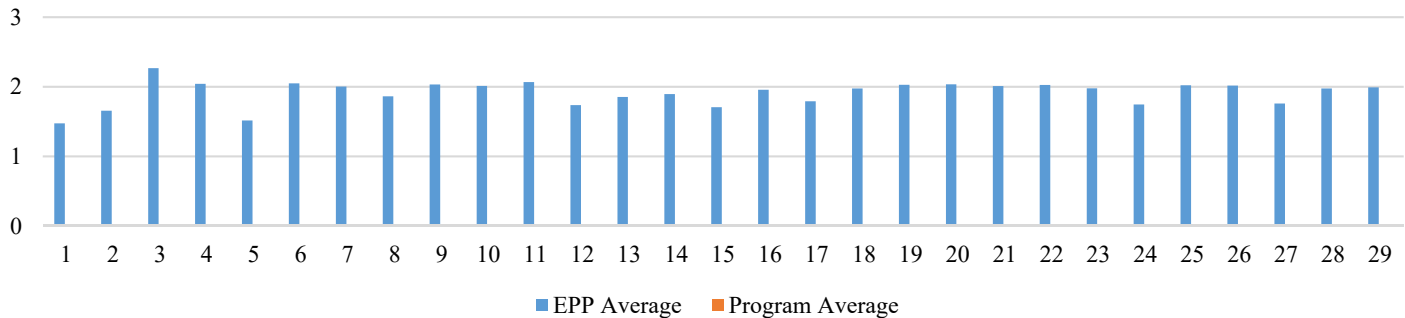


Figure #. T1 UTESS by UET Standards



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

Figure #. T1 UTESS by Items



# BYU Educator Preparation Program Annual Report

## Physics Teaching

### Transition 1: Admissions

#### TSA

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

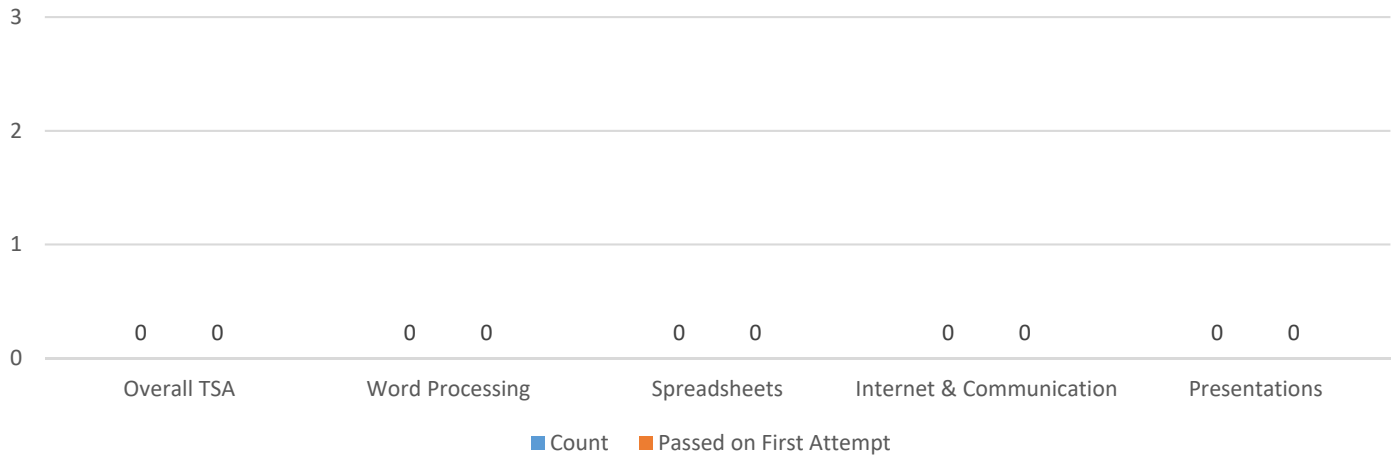


Figure #. T1 TSA Results of Candidates Passing on the First Attempt

N = 2	Count	% of Total	Passed on First Attempt	% of Passing on First Attempt	EPP Average to Pass on First Attempt
Overall TSA	0	0.00%	0	-	86.28%
Word Processing	0	0.00%	0	-	95.53%
Spreadsheets	0	0.00%	0	-	92.95%
Internet & Communication	0	0.00%	0	-	98.29%
Presentations	0	0.00%	0	-	97.41%

# BYU Educator Preparation Program Annual Report

## Physics 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

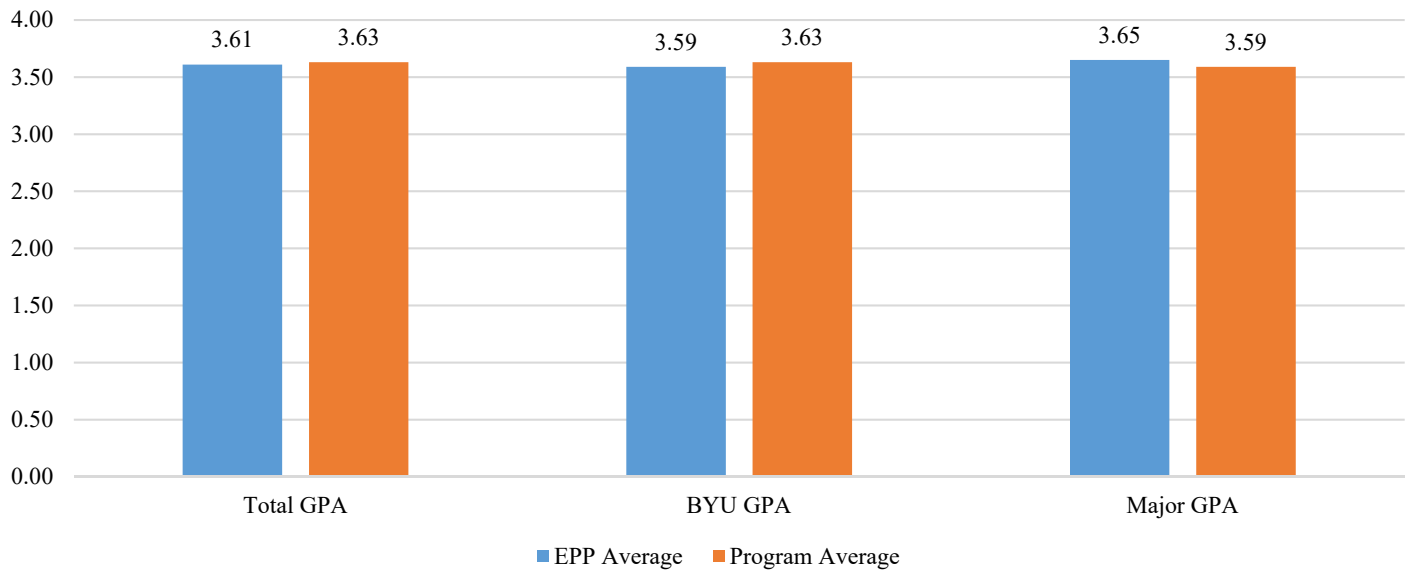


Figure 12. T2 Total, BYU, and Major GPA

Table 9.

T2 Total, BYU, and Major GPA

	EPP Total GPA	Program Total GPA	EPP BYU GPA	Program BYU GPA	EPP Major GPA	Program Major GPA
<b>Max</b>	4.00	3.92	4.00	3.92	4.00	3.93
<b>Min</b>	1.77	3.33	1.36	3.33	1.00	3.32
<b>Average</b>	3.61	3.63	3.59	3.63	3.65	3.59
<b>St Dev</b>	0.30	0.27	0.33	0.27	0.31	0.27
<b>Count</b>	1099	4	1099	4.00	1094	4
<b>% of Total</b>	100.00%	100.00%	100.00%	100.00%	99.55%	100.00%
<b>Missing</b>	0	0.00	0	0.00	5	0.00
<b>% of Total</b>	0.00%	0.00%	0.00%	0.00%	0.45%	0.00%

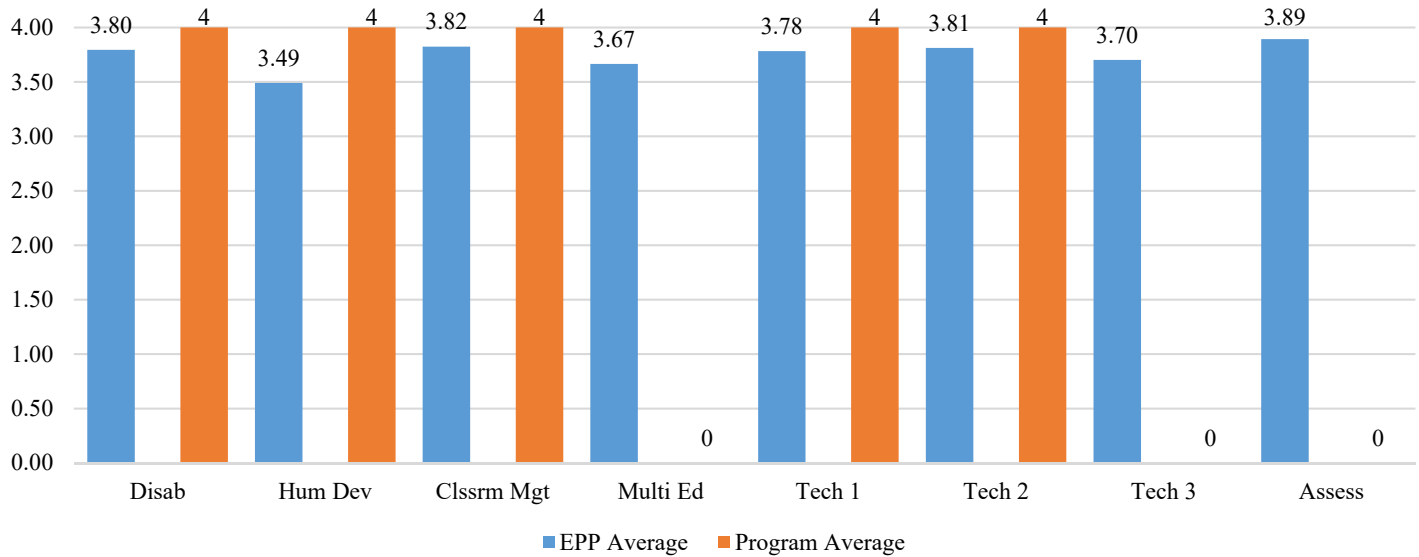
# BYU Educator Preparation Program Annual Report

## Physics 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 13. EPP Core GPA.

Table 10.

EPP Core GPA

	Disab	Hum Dev	Clssrm Mgt	Multi Ed	Tech 1	Tech 2	Tech 3	Assess
<b>EPP Average</b>	3.80	3.49	3.82	3.67	3.78	3.81	3.70	3.89
<b>ProgramAverage</b>	4.00	4.00	4.00	-	4.00	4.00	-	-
<b>Course Count</b>	5	3	2	-	1	1	-	-
<b>STDEV</b>	0.00	0.00	0.00	-	0.00	0.00	-	-

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

# BYU Educator Preparation Program Annual Report

## Physics 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.

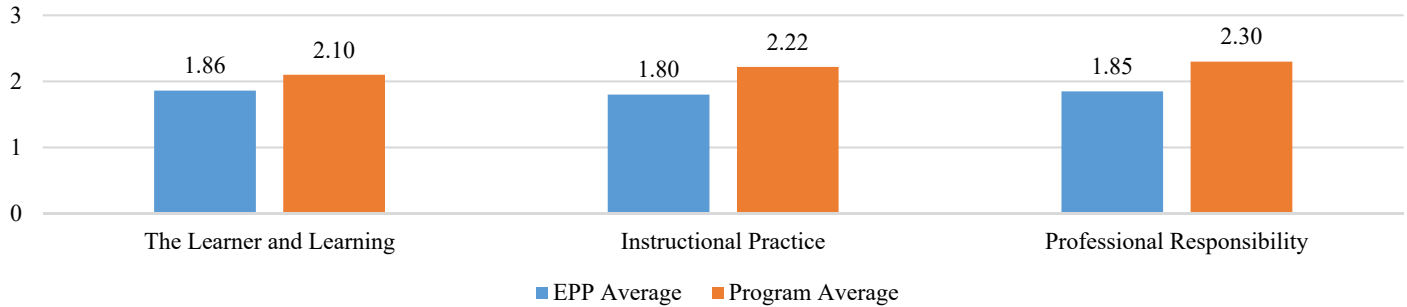


Figure 14. T2 PAES US by UETS Domains

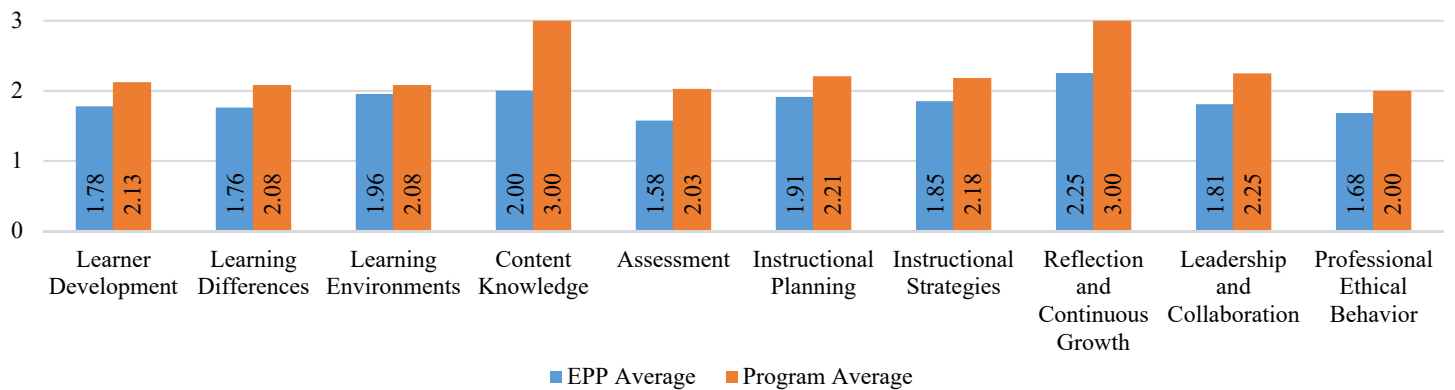


Figure 15. T2 PAES US by UET Standards

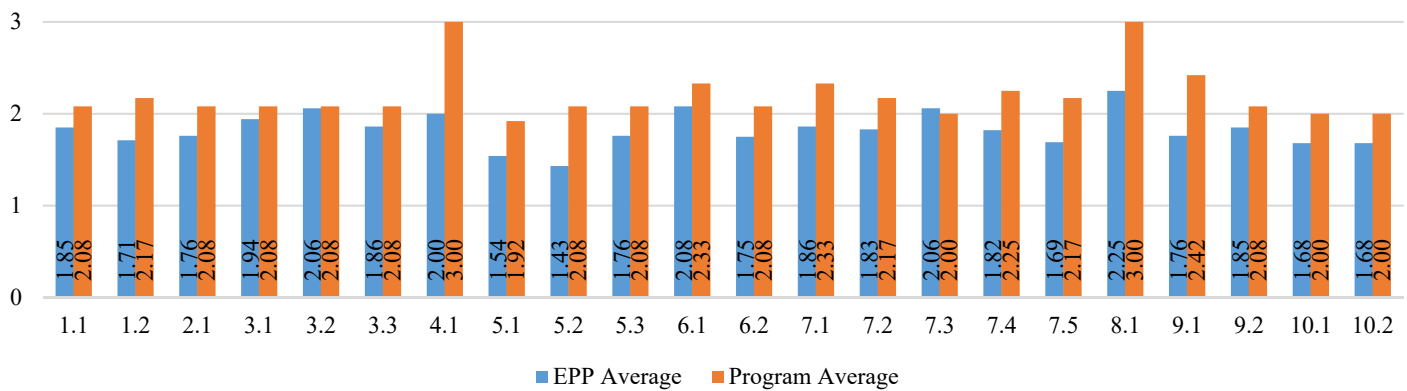


Figure 16. T2 PAES US by Items

# BYU Educator Preparation Program Annual Report

## Physics 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

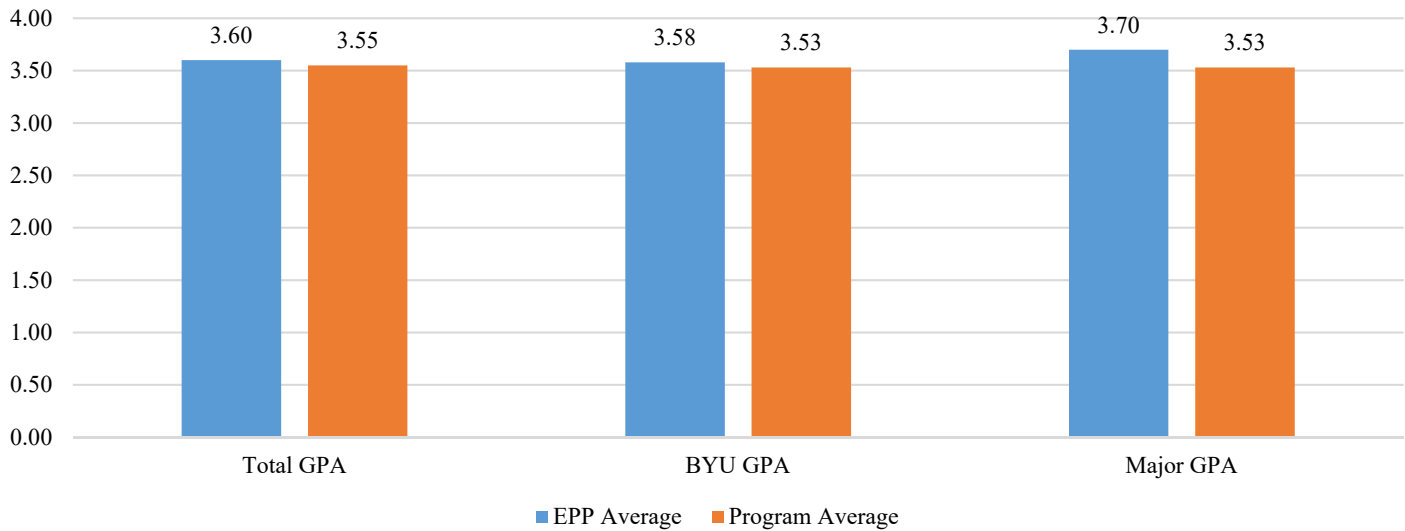


Figure 17. T3 Total, BYU, and Major GPA

Table 11.

T3 Total, BYU, and Major GPA

	EPP Total GPA	Program Total GPA	EPP BYU GPA	Program BYU GPA	EPP Major GPA	Program Major GPA
<b>Max</b>	4.00	3.93	4.00	3.93	4.00	3.93
<b>Min</b>	2.30	3.14	2.12	3.15	2.70	2.99
<b>Average</b>	3.60	3.55	3.58	3.53	3.70	3.53
<b>St Dev</b>	0.29	0.29	0.31	0.28	0.26	0.31
<b>Count</b>	492	10	492	10	489	10
<b>% of Total</b>	100.00%	100%	100.00%	100%	99.39%	100%
<b>Missing</b>	0	0.00	0	0.00	3	0.00
<b>% of Total</b>	0.00%	0%	0.00%	0%	0.61%	0%

# BYU Educator Preparation Program Annual Report

## Physics Teaching

### Transition 3: Clinical

#### PAES US

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

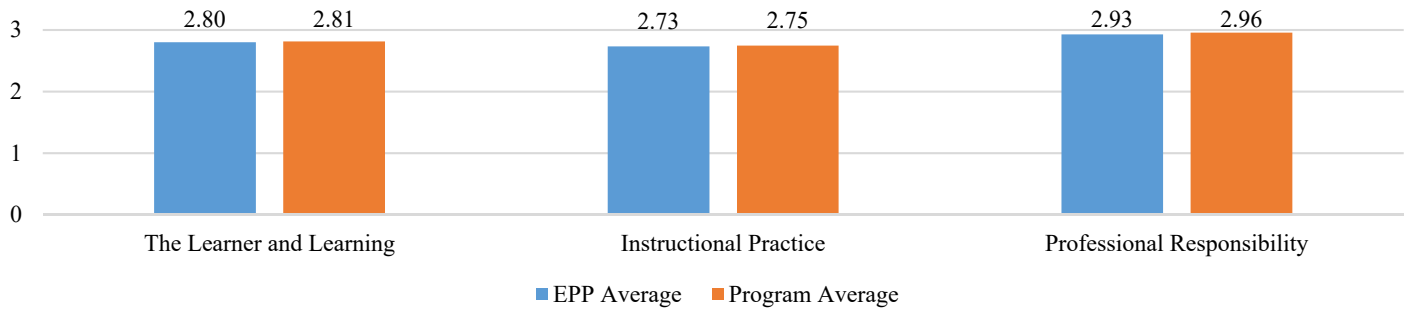


Figure 18. T3 PAES US by UETS Domains

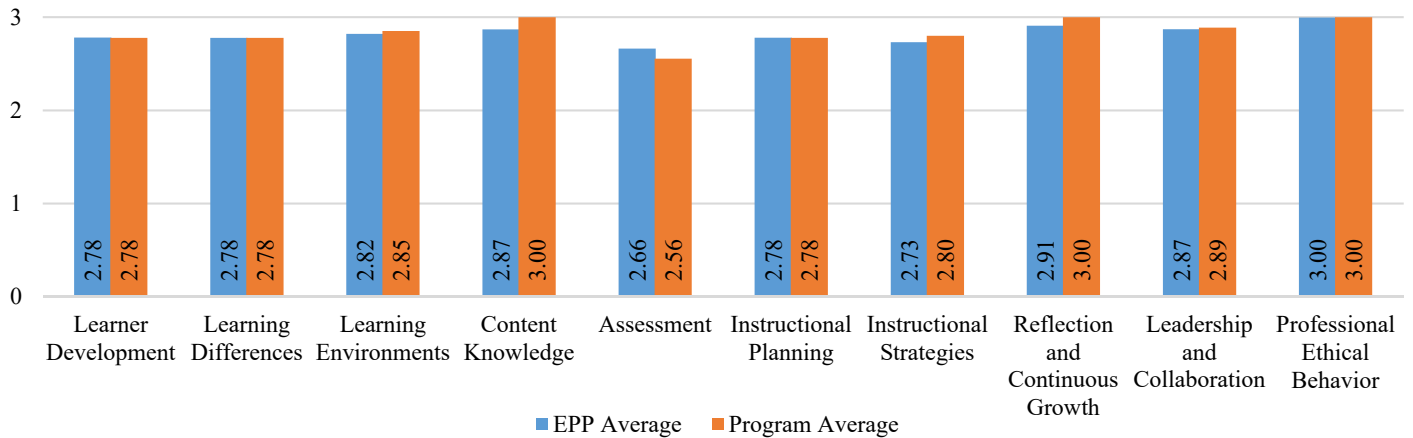


Figure 19. T3 PAES US by UET Standards

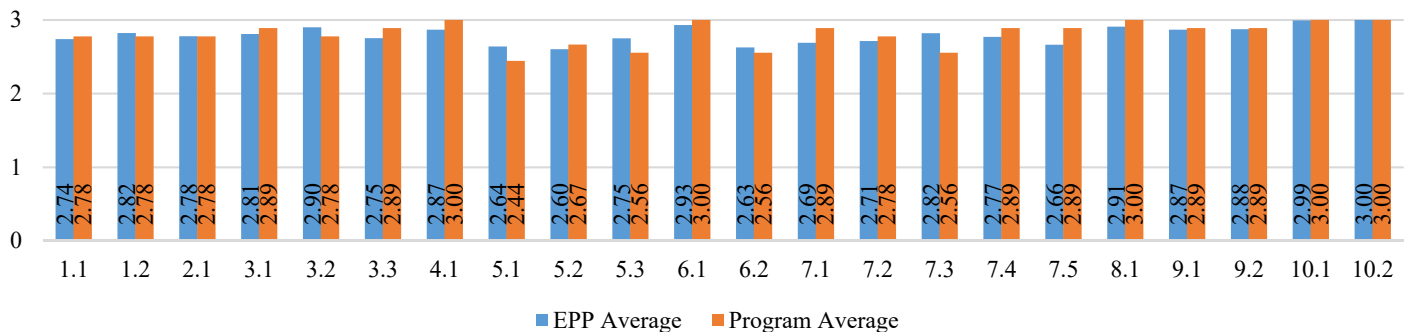


Figure 20. T3 PAES US by Items

# BYU Educator Preparation Program Annual Report

## Physics Teaching

### Transition 3: Clinical

#### PAES MT

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

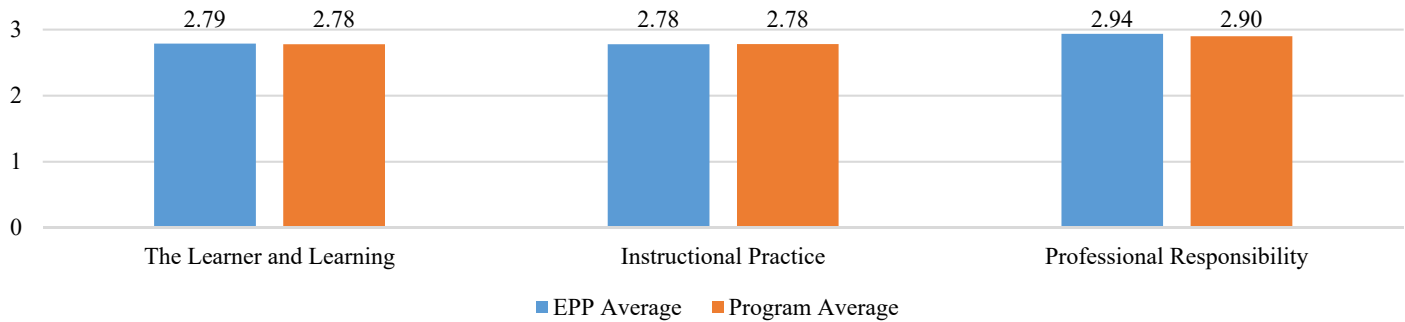


Figure 21. T3 PAES MT by UETS Domains

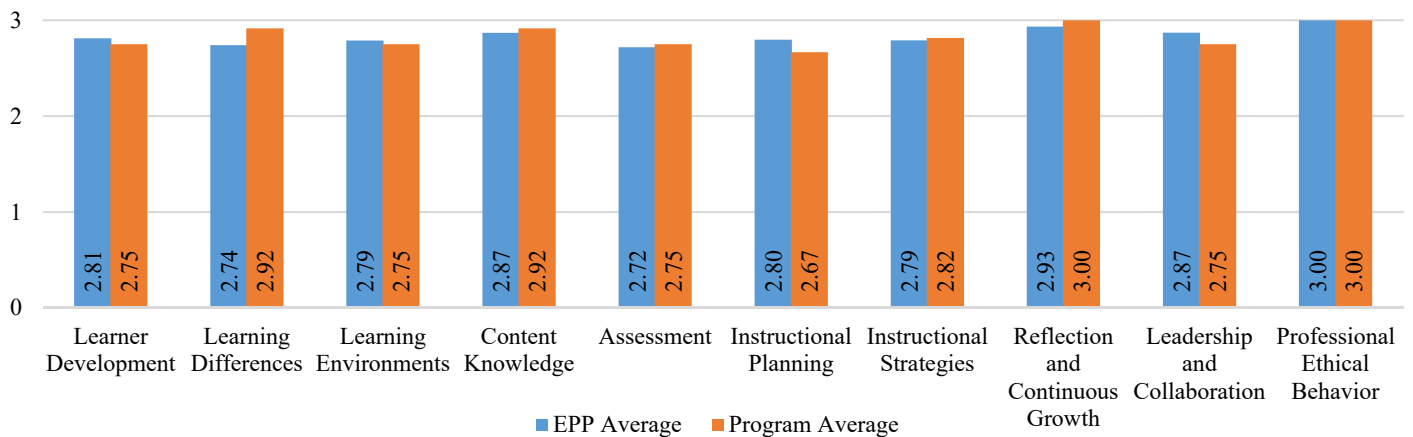


Figure 22. T3 PAES MT by UET Standards

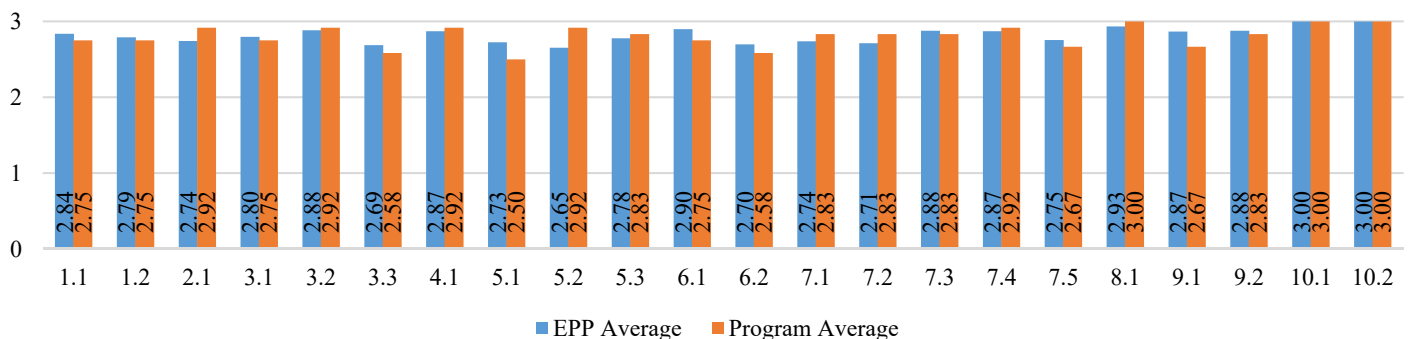


Figure 23. T3 PAES MT by Items

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## Physics 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.

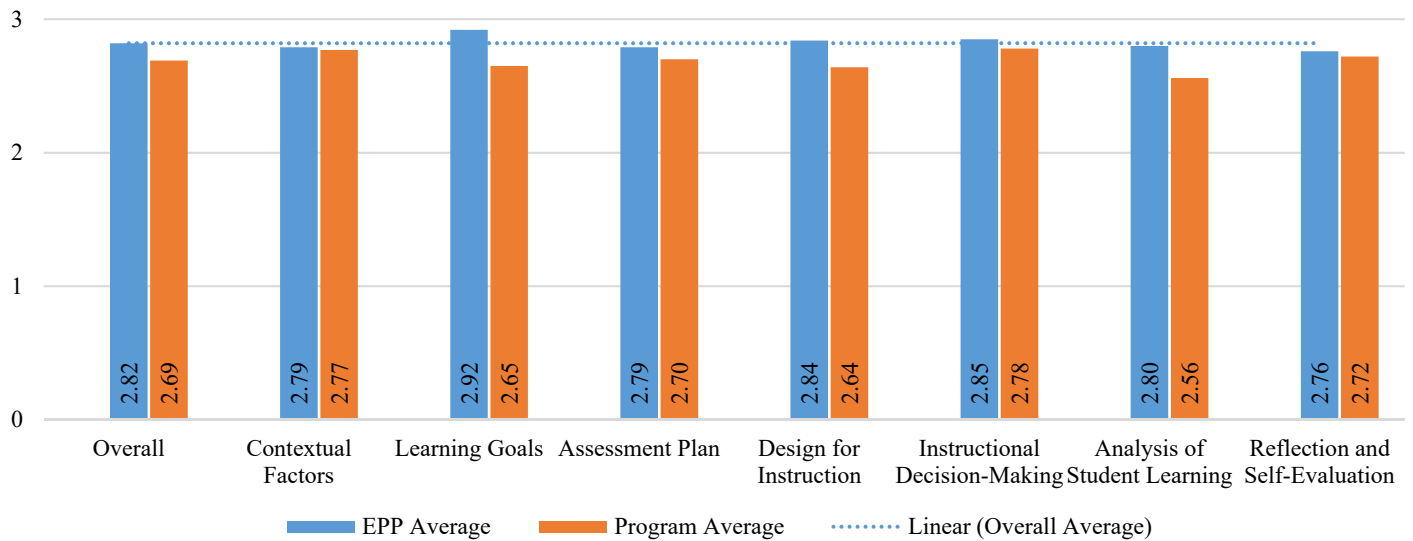


Figure 24. T3 RTWS

Table 12.

T3 RTWS

Section	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Overall</b>	2.82	2.69	0.15	0.29	12
<b>Contextual Factors</b>	2.79	2.77	0.05	0.00	12
<b>Learning Goals</b>	2.92	2.65	0.20	0.42	12
<b>Assessment Plan</b>	2.79	2.70	0.27	0.42	12
<b>Design for Instruction</b>	2.84	2.64	0.21	0.41	12
<b>Instructional Decision-Making</b>	2.85	2.78	0.31	0.41	12
<b>Analysis of Student Learning</b>	2.80	2.56	0.28	0.30	12
<b>Reflection and Self-Evaluation</b>	2.76	2.72	0.31	0.32	12



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## Physics 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.

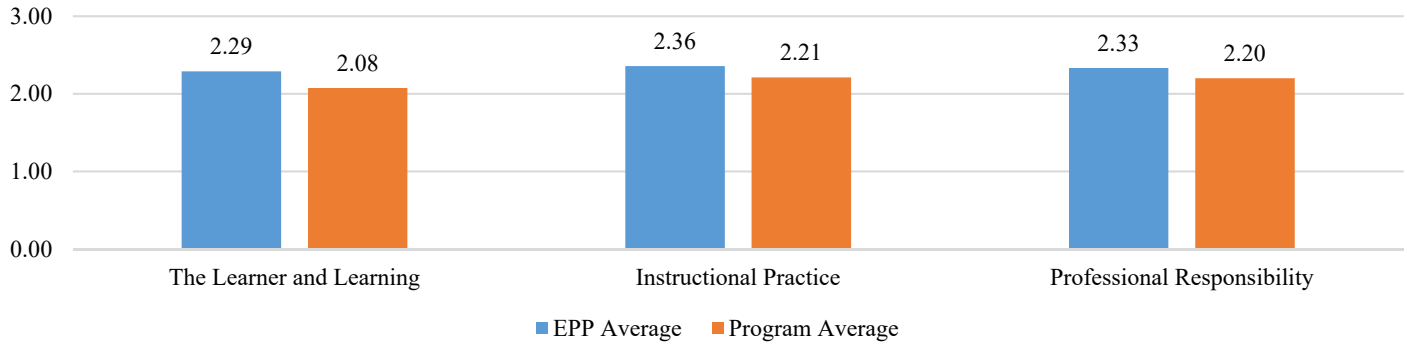


Figure 25. T3 UTESS by UETS Domains

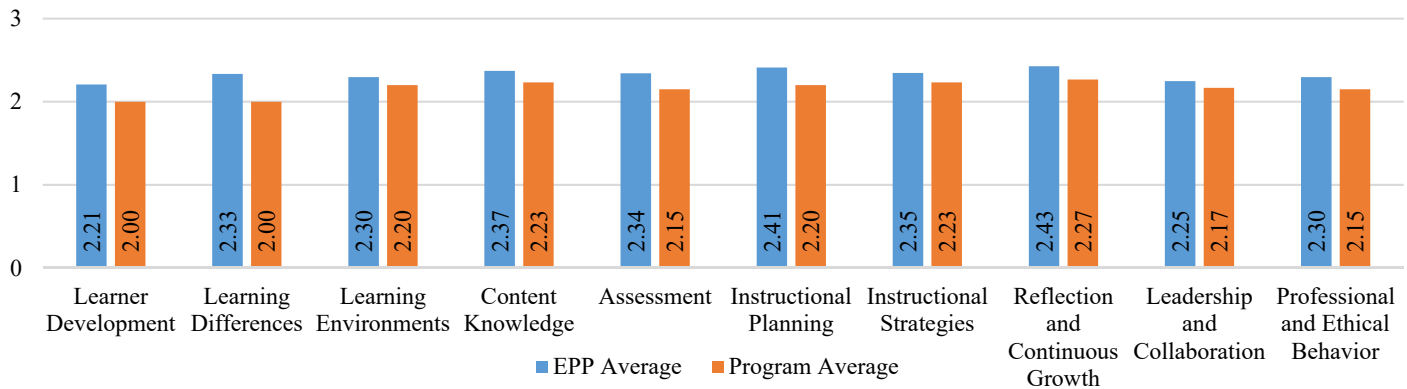


Figure 26. T3 UTESS by UET Standards

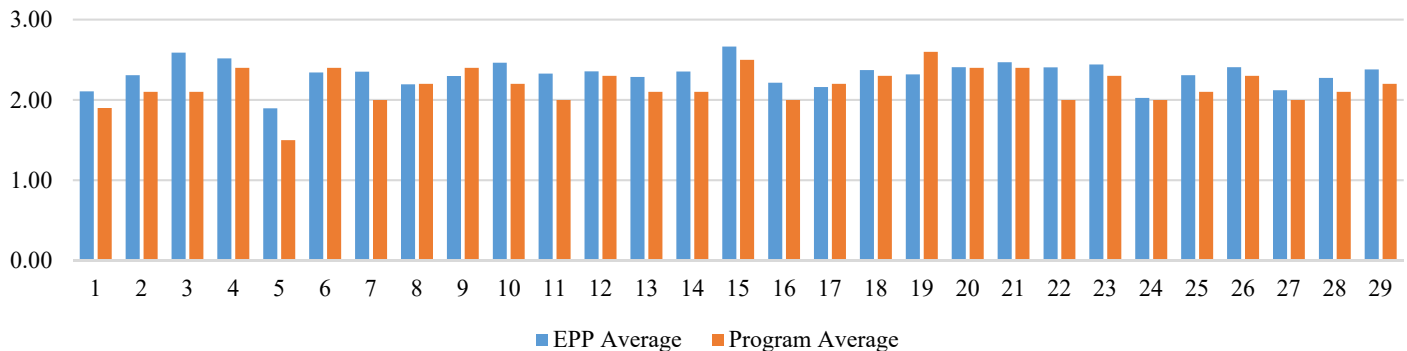


Figure 27. T3 UTESS by Items

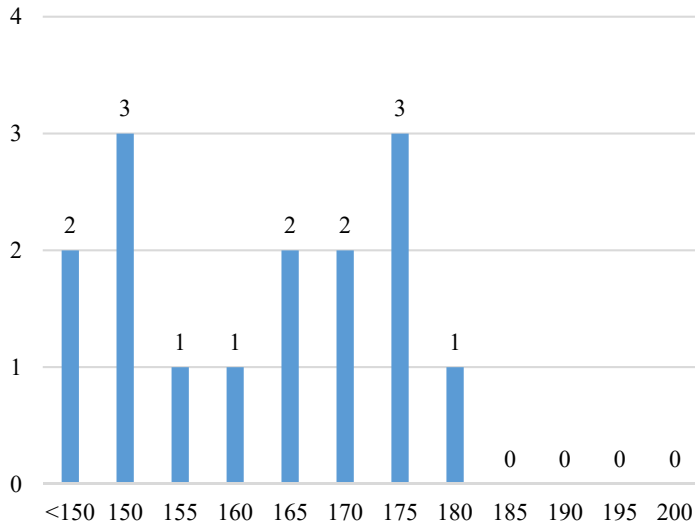
# BYU Educator Preparation Program Annual Report

## Physics 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 5265: Physics—Content Knowledge



Note: Test 5265 is scored out of 200 maximum points and a minimum passing score of 136

Figure 28. Praxis Test 5265 Results

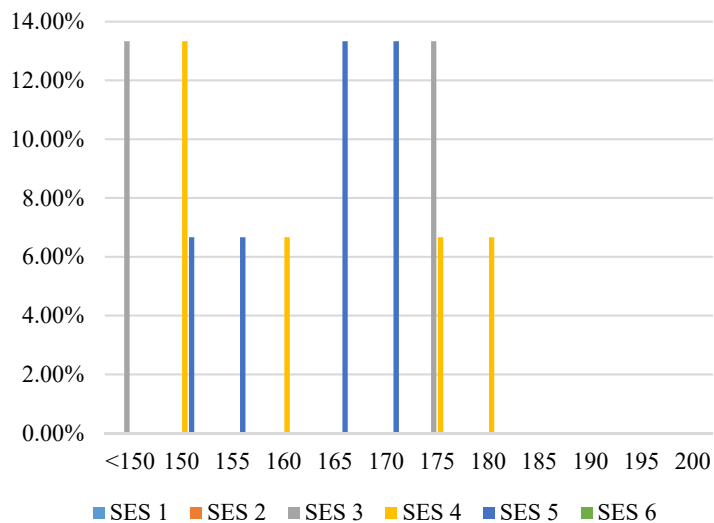


Figure 29. Praxis Test 5265 Results by SES

Table 13.  
Praxis Test 5265 Results

Result	Frequency
<150	2
150-154	3
155-159	1
160-164	1
165-169	2
170-174	2
175-179	3
180-184	1
185-189	0
190-194	0
195-199	0
200	0
<b>Total</b>	<b>15</b>

Table 14.  
SES Categories

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

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Appendix A

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## 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 3.70% 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; however, these inconsistencies do not exist in over 5.00% of the data. Therefore, the statistics shown below are within a 95.00% confidence interval, as estimated by the EPP office and staff.

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## Physics Teaching

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#### Administrative Overview

Table A.1.

*Program Flow*

Transition	Pre-Major	T1	T2	T3	Withdrawal PreM	Withdrawal Maj	Grand Total
<b>Count</b>	11	2	4	10	1	0	<b>28</b>
<b>Withdrawal %</b>	-	-	-	-	9.09%	0.00%	<b>0.36%</b>
<b>% Total</b>	39.29%	7.14%	14.29%	35.71%	3.57%	0.00%	<b>100.00%</b>

Table A.2.

*Graduated and Licensed*

	Graduated	Licensed
<b>Count</b>	6	4
<b>% of T3</b>	60.00%	40.00%
<b>Total T3</b>	<b>10</b>	<b>10</b>

Table A.3.

*Clinical Experiences for T3 Candidates*

	Student Teaching	Internship	Missing	Total
<b>Count</b>	8	1	2	<b>11</b>
<b>Percent of Total</b>	73%	9%	18%	<b>100%</b>

#### Transition 1

#### UTESS

Table A.4.

*T1 UTESS by UETS Domains*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	1.86	0	0.67		
<b>Instructional Practice</b>	1.94	0	0.68		
<b>Professional Responsibility</b>	1.96	0	0.7		

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Table A.5.

*T1 UTESS by UET Standards*

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	1.56	0	0.83	-	0
<b>Learning Differences</b>	1.94	0	0.73	-	0
<b>Learning Environments</b>	1.97	0	0.75	-	0
<b>Content Knowledge</b>	1.98	0	0.71	-	0
<b>Assessment</b>	1.90	0	0.78	-	0
<b>Instructional Planning</b>	1.86	0	0.78	-	0
<b>Instructional Strategies</b>	1.98	0	0.65	-	0
<b>Reflection and Continuous Growth</b>	2.02	0	0.73	-	0
<b>Leadership and Collaboration</b>	1.94	0	0.74	-	0
<b>Professional and Ethical Behavior</b>	1.94	0	0.74	-	0

Table A.6.

*T1 UTESS by Items*

Item	EPP Average	Program Average	EPP St Dev	Program St Dev	N
1	1.47	0	0.88	-	0
2	1.66	0	0.89	-	0
3	2.27	0	0.82	-	0
4	2.04	0	0.88	-	0
5	1.52	0	0.92	-	0
6	2.05	0	0.82	-	0
7	2.00	0	0.86	-	0
8	1.86	0	0.83	-	0
9	2.03	0	0.81	-	0
10	2.01	0	0.79	-	0
11	2.07	0	0.82	-	0
12	1.74	0	0.90	-	0
13	1.85	0	0.86	-	0
14	1.90	0	0.87	-	0
15	1.71	0	0.98	-	0
16	1.96	0	0.83	-	0
17	1.79	0	0.85	-	0
18	1.98	0	0.79	-	0
19	2.03	0	0.78	-	0
20	2.04	0	0.84	-	0
21	2.01	0	0.89	-	0

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22	2.03	0	0.79	-	0
23	1.98	0	0.80	-	0
24	1.75	0	0.87	-	0
25	2.02	0	0.83	-	0
26	2.02	0	0.86	-	0
27	1.76	0	0.86	-	0
28	1.98	0	0.85	-	0
29	1.99	0	0.83	-	0
<b>Overall</b>	<b>1.91</b>	<b>0</b>	<b>0.67</b>	<b>-</b>	<b>0</b>

## Transition 2

## PAES

Table 7.

*T2 PAES US by UETS Domains*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	1.86	2.10	0.50	0.32	12
<b>Instructional Practice</b>	1.80	2.22	0.49	0.25	12
<b>Professional Responsibility</b>	1.85	2.30	0.41	0.13	12

Table 8.

*T2 PAES US by UET Standards*

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	1.78	2.13	0.49	0.43	12
<b>Learning Differences</b>	1.76	2.08	0.59	0.51	12
<b>Learning Environments</b>	1.96	2.08	0.59	0.21	12
<b>Content Knowledge</b>	2.00	3.00	0.65	0.00	12
<b>Assessment</b>	1.58	2.03	0.58	0.30	12
<b>Instructional Planning</b>	1.91	2.21	0.58	0.40	12
<b>Instructional Strategies</b>	1.85	2.18	0.49	0.30	12
<b>Reflection and Continuous Growth</b>	2.25	3.00	0.68	0.00	12
<b>Leadership and Collaboration</b>	1.81	2.25	0.55	0.34	12
<b>Professional Ethical Behavior</b>	1.68	2.00	0.47	0.00	12

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Table 9.

*T2 PAES US by Items*

Item	EPP Average	Program Average	EPP St Dev	Program St Dev	N
1.1	1.85	2.08	0.54	0.51	12
1.2	1.71	2.17	0.64	0.39	12
2.1	1.76	2.08	0.59	0.51	12
3.1	1.94	2.08	0.60	0.29	12
3.2	2.06	2.08	0.73	0.29	12
3.3	1.86	2.08	0.66	0.29	12
4.1	2.00	3.00	0.65	0.00	12
5.1	1.54	1.92	0.63	0.29	12
5.2	1.43	2.08	0.71	0.29	12
5.3	1.76	2.08	0.68	0.51	12
6.1	2.08	2.33	0.65	0.78	12
6.2	1.75	2.08	0.74	0.29	12
7.1	1.86	2.33	0.53	0.49	12
7.2	1.83	2.17	0.67	0.39	12
7.3	2.06	2.00	0.66	0.00	12
7.4	1.82	2.25	0.67	0.45	12
7.5	1.69	2.17	0.61	0.39	12
8.1	2.25	3.00	0.68	0.00	12
9.1	1.76	2.42	0.68	0.51	12
9.2	1.85	2.08	0.56	0.29	12
10.1	1.68	2.00	0.47	0.00	12
10.2	1.68	2.00	0.47	0.00	12

Note: The population for T2 PAES includes students who were in T2 during Fall 2017 but T3 in Winter 2018, which explains the population variation.

## Transition 3

### PAES

Table 10.

*T3 PAES US by UETS Domains*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	2.80	2.81	0.22	0.26	9

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<b>Instructional Practice</b>	2.73	2.75	0.22	0.17	9
<b>Professional Responsibility</b>	2.93	2.96	0.14	0.13	9

Table 11.

*T3 PAES US by UET Standards*

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	2.78	2.78	0.30	0.36	9
<b>Learning Differences</b>	2.78	2.78	0.42	0.44	9
<b>Learning Environments</b>	2.82	2.85	0.27	0.24	9
<b>Content Knowledge</b>	2.87	3.00	0.34	0.00	9
<b>Assessment</b>	2.66	2.56	0.35	0.24	9
<b>Instructional Planning</b>	2.78	2.78	0.29	0.26	9
<b>Instructional Strategies</b>	2.73	2.80	0.27	0.20	9
<b>Reflection and Continuous Growth</b>	2.91	3.00	0.29	0.00	9
<b>Leadership and Collaboration</b>	2.87	2.89	0.28	0.33	9
<b>Professional Ethical Behavior</b>	3.00	3.00	0.00	0.00	9

Table 12.

*T3 PAES US by Items*

Item	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>1.1</b>	2.74	2.78	0.44	0.44	9
<b>1.2</b>	2.82	2.78	0.38	0.44	9
<b>2.1</b>	2.78	2.78	0.42	0.44	9
<b>3.1</b>	2.81	2.89	0.39	0.33	9
<b>3.2</b>	2.90	2.78	0.31	0.44	9
<b>3.3</b>	2.75	2.89	0.44	0.33	9
<b>4.1</b>	2.87	3.00	0.34	0.00	9
<b>5.1</b>	2.64	2.44	0.48	0.53	9
<b>5.2</b>	2.60	2.67	0.50	0.50	9
<b>5.3</b>	2.75	2.56	0.44	0.53	9
<b>6.1</b>	2.93	3.00	0.26	0.00	9
<b>6.2</b>	2.63	2.56	0.50	0.53	9
<b>7.1</b>	2.69	2.89	0.47	0.33	9
<b>7.2</b>	2.71	2.78	0.47	0.44	9
<b>7.3</b>	2.82	2.56	0.39	0.53	9



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<b>7.4</b>	2.77	2.89	0.45	0.33	9
<b>7.5</b>	2.66	2.89	0.49	0.33	9
<b>8.1</b>	2.91	3.00	0.29	0.00	9
<b>9.1</b>	2.87	2.89	0.34	0.33	9
<b>9.2</b>	2.88	2.89	0.33	0.33	9
<b>10.1</b>	2.99	3.00	0.07	0.00	9
<b>10.2</b>	3.00	3.00	0.00	0.00	9

Table 13.

*T3 PAES MT by UETS Domains*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	2.79	2.78	0.22	0.25	12
<b>Instructional Practice</b>	2.78	2.78	0.20	0.21	12
<b>Professional Responsibility</b>	2.94	2.90	0.13	0.16	12

Table 14.

*T3 PAES MT by UET Standards*

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	2.81	2.75	0.29	0.40	12
<b>Learning Differences</b>	2.74	2.92	0.44	0.29	12
<b>Learning Environments</b>	2.79	2.75	0.29	0.35	12
<b>Content Knowledge</b>	2.87	2.92	0.35	0.29	12
<b>Assessment</b>	2.72	2.75	0.32	0.25	12
<b>Instructional Planning</b>	2.80	2.67	0.29	0.33	12
<b>Instructional Strategies</b>	2.79	2.82	0.23	0.22	12
<b>Reflection and Continuous Growth</b>	2.93	3.00	0.25	0.00	12
<b>Leadership and Collaboration</b>	2.87	2.75	0.28	0.40	12
<b>Professional Ethical Behavior</b>	3.00	3.00	0.00	0.00	12

Table 15.

*T3 PAES MT by Items*

Item	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>1.1</b>	2.84	2.75	0.38	0.45	12

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1.2	2.79	2.75	0.42	0.45	12
2.1	2.74	2.92	0.44	0.29	12
3.1	2.80	2.75	0.40	0.45	12
3.2	2.88	2.92	0.33	0.29	12
3.3	2.69	2.58	0.47	0.51	12
4.1	2.87	2.92	0.35	0.29	12
5.1	2.73	2.50	0.45	0.52	12
5.2	2.65	2.92	0.48	0.29	12
5.3	2.78	2.83	0.43	0.39	12
6.1	2.90	2.75	0.32	0.45	12
6.2	2.70	2.58	0.47	0.51	12
7.1	2.74	2.83	0.44	0.39	12
7.2	2.71	2.83	0.47	0.39	12
7.3	2.88	2.83	0.33	0.39	12
7.4	2.87	2.92	0.34	0.29	12
7.5	2.75	2.67	0.45	0.49	12
8.1	2.93	3.00	0.25	0.00	12
9.1	2.87	2.67	0.36	0.49	12
9.2	2.88	2.83	0.34	0.39	12
10.1	3.00	3.00	0.00	0.00	12
10.2	3.00	3.00	0.00	0.00	12

## UTESS

Table 16.

*T3 UTESS by UETS Domains*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	2.29	2.08	0.40	0.29	10
<b>Instructional Practice</b>	2.36	2.21	0.36	0.27	10
<b>Professional Responsibility</b>	2.33	2.20	0.37	0.23	10

Table 17.

*T3 UTESS by UET Standards*

UET Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	2.21	2.00	0.83	0.53	10
<b>Learning Differences</b>	2.33	2.00	0.73	0.44	10

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<b>Learning Environments</b>	2.30	2.20	0.75	0.39	10
<b>Content Knowledge</b>	2.37	2.23	0.71	0.45	10
<b>Assessment</b>	2.34	2.15	0.78	0.34	10
<b>Instructional Planning</b>	2.41	2.20	0.78	0.36	10
<b>Instructional Strategies</b>	2.35	2.23	0.65	0.25	10
<b>Reflection and Continuous Growth</b>	2.43	2.27	0.73	0.26	10
<b>Leadership and Collaboration</b>	2.25	2.17	0.74	0.39	10
<b>Professional and Ethical Behavior</b>	2.30	2.15	0.74	0.21	10

Table A.18.

*T3 UTESS by Items*

Item	EPP Average	Program Average	EPP St Dev	Program St Dev	N
1	2.11	1.90	0.65	0.57	10
2	2.31	2.10	0.65	0.57	10
3	2.59	2.10	0.57	0.57	10
4	2.52	2.40	0.59	0.52	10
5	1.90	1.50	0.76	0.71	10
6	2.34	2.40	0.56	0.52	10
7	2.35	2.00	0.59	0.47	10
8	2.20	2.20	0.59	0.42	10
9	2.30	2.40	0.59	0.52	10
10	2.46	2.20	0.53	0.42	10
11	2.33	2.00	0.56	0.47	10
12	2.36	2.30	0.60	0.48	10
13	2.29	2.10	0.59	0.57	10
14	2.35	2.10	0.59	0.57	10
15	2.67	2.50	0.53	0.53	10
16	2.22	2.00	0.57	0.47	10
17	2.16	2.20	0.59	0.42	10
18	2.37	2.30	0.53	0.48	10
19	2.32	2.60	0.58	0.52	10
20	2.41	2.40	0.56	0.52	10
21	2.47	2.40	0.57	0.52	10
22	2.41	2.00	0.56	0.47	10
23	2.44	2.30	0.54	0.48	10
24	2.03	2.00	0.66	0.47	10

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<b>25</b>	2.31	2.10	0.56	0.57	10
<b>26</b>	2.41	2.30	0.56	0.48	10
<b>27</b>	2.12	2.00	0.61	0.00	10
<b>28</b>	2.27	2.10	0.60	0.32	10
<b>29</b>	2.38	2.20	0.55	0.42	10
<b>Overall</b>	<b>2.32</b>	<b>2.18</b>	<b>0.35</b>	<b>0.21</b>	<b>10</b>

## Praxis

### Praxis Test 5265: Physics—Content Knowledge

Table A.19.

*Praxis Test 5265: Physics—Content Knowledge Overall Results*

	Max	Average	Min	St Dev
<b>Score</b>	183	163.20	131	14.57
<b>N Size</b>	15	15	15	15
<b>N Missing</b>	0	0	0	0
<b>Percentage</b>	100.00%	100.00%	100.00%	100.00%

Note: Test 5265 is scored out of 200 maximum points and a minimum passing score of 136.

Table A.20.

*Praxis Test 5265: Physics—Content Knowledge Section Results*

	First Attempt	Second Attempt	Third Attempt	Total
<b>N Size</b>	15	1	1	<b>15</b>
<b>Count</b>	15	1	0	<b>15</b>
<b>Missing</b>	0	0	1	<b>1</b>
<b>Passed</b>	14	0	-	<b>14</b>
<b>Failed</b>	1	1	-	<b>1</b>
<b>% Who Passed The Attempt</b>	93%	0%	-	<b>-</b>
<b>% Who Passed the Test</b>	93%	0%	-	<b>93%</b>

Table A.21.

*Praxis Test 5265: Physics—Content Knowledge Attempts*

	Points Available	Max	Average	Min	St Dev	N Size	Missing	Percentage
<b>Mechanics</b>	32.00	32	25.80	16	3.78	15	0	100%
<b>Electricity and Magnetism</b>	19.00	18	13.33	5	3.79	15	0	100%

# BYU Educator Preparation Program Annual Report

## Physics Teaching

### Appendix A

<b>Optics and Waves</b>	13.00	13	10.33	7	1.84	15	0	100%
<b>Heat; Energy; and Thermodynamics</b>	12.00	12	8.67	5	1.68	15	0	100%
<b>Modern Physics; Atomic and Nuclear Structure</b>	12.00	12	8.47	5	2.39	15	0	100%
<b>Scientific Inquiry; Processes; and Social Perspectives</b>	11.93	12	9.20	7	1.74	15	0	100%

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 5265: Physics—Content Knowledge Results sorted by Socioeconomic Status*

Category	<150	150-154	155-159	160-164	165-169	170-174	175-179	180-184	185-189	190-194	195-199	200	Total
<b>SES 1</b>	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
<b>SES 2</b>	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
<b>SES 3</b>	2	0	0	0	0	0	2	0	0	0	0	0	<b>4</b>
<b>SES 4</b>	0	2	0	1	0	0	1	1	0	0	0	0	<b>5</b>
<b>SES 5</b>	0	1	1	0	2	2	0	0	0	0	0	0	<b>6</b>
<b>SES 6</b>	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
<b>Total</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>

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



# **BYU Educator Preparation Program 2017 – 2018 Annual Report**

**Report for Teaching Physical Science (BS)**

Prepared by the EPP Support Team  
August 2018

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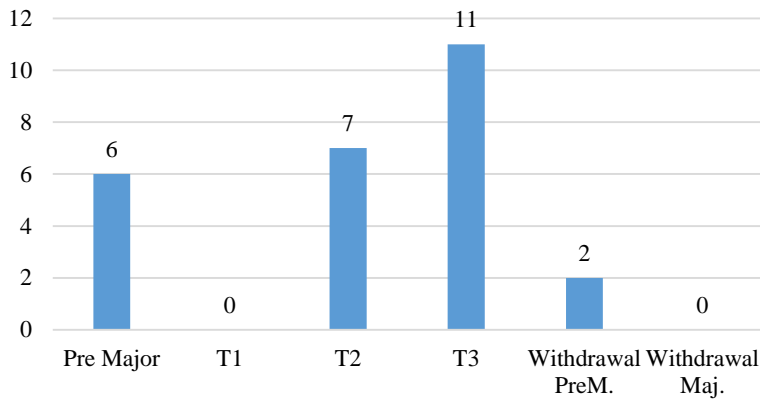
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# BYU Educator Preparation Program Annual Report

## Teaching Physical Science

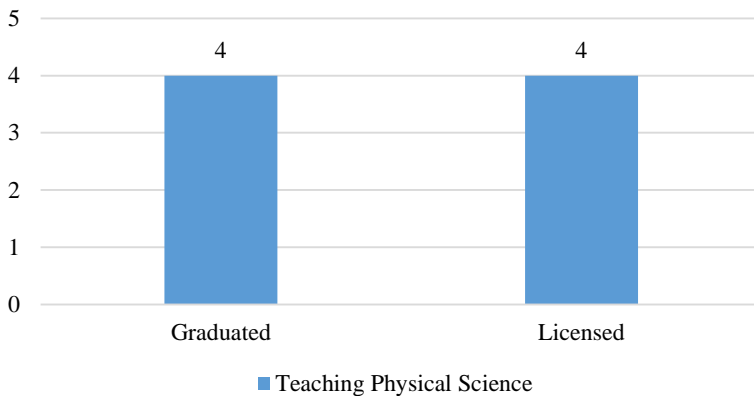
### Administrative Overview

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



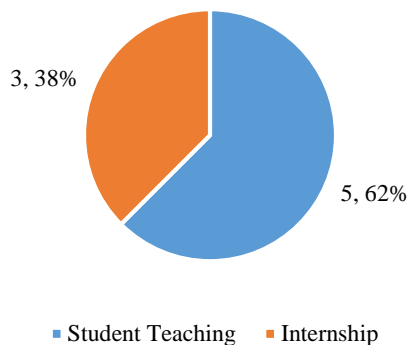
In 2017-2018, the Teaching Physical Science program had 6 candidates enrolled in its pre-major, 0 candidates in Transition 1, 7 candidates in Transition 2, and 11 candidates in Transition 3.

Figure 1. Program Flow



Four students graduated from Teaching Physical Science. All candidates received licensure.

Figure 2. Graduated and Licensed



The accurate and available data shows that candidates prefer completing student teaching over an internship, with 62% of the candidates choosing student teaching.

Figure 3. Clinical Experiences for T3 Candidates



# BYU Educator Preparation Program Annual Report

## Teaching Physical Science

### Biographic Overview

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

#### Gender

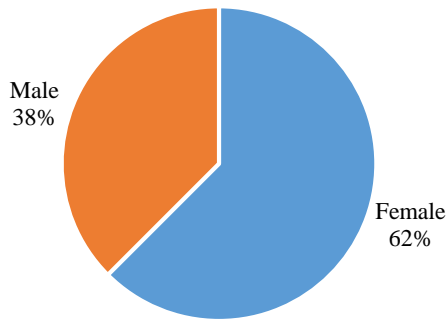


Table 1.

#### Gender

Gender	Count	Percent of Total
Female	15	62.50%
Male	9	37.50%
Total	24	100.00%
Missing	0	0.00%
Grand Total	24	100.00%

Figure 4. Gender

#### Socioeconomic Status

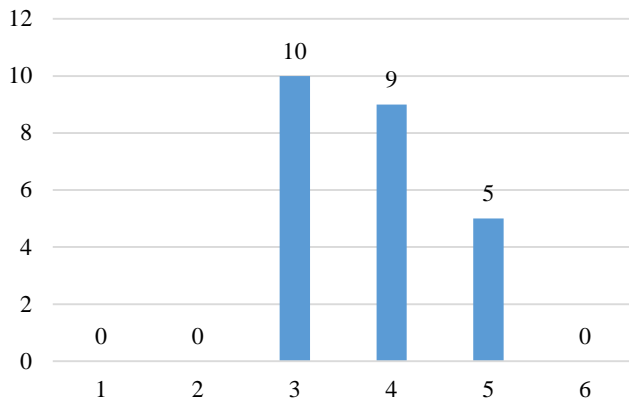


Table 2.

#### Socioeconomic Status

SES Category	Count	Percent of Total
SES 1	0	0.00%
SES 2	0	0.00%
SES 3	10	41.67%
SES 4	9	37.50%
SES 5	5	20.83%
SES 6	0	0.00%
Total	24	100.00%
Missing	0	0.00%
Grand Total	24	100.00%

Note: See Appendix A for SES explanation.

Figure 5. Socioeconomic Status

#### Marital Status

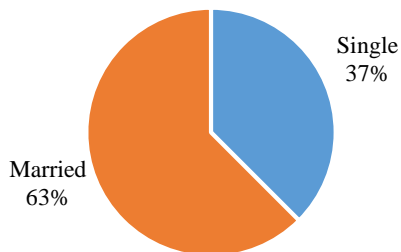


Table 3.

#### Marital Status

Marital Status	Count	Percent of Total
Single	9	37.50%
Married	15	62.50%
Total	24	100.00%
Missing	0	0.00%
Grand Total	24	100.00%

Figure 6. Marital Status

# BYU Educator Preparation Program Annual Report

## Teaching Physical Science

### Biographic Overview

#### Age

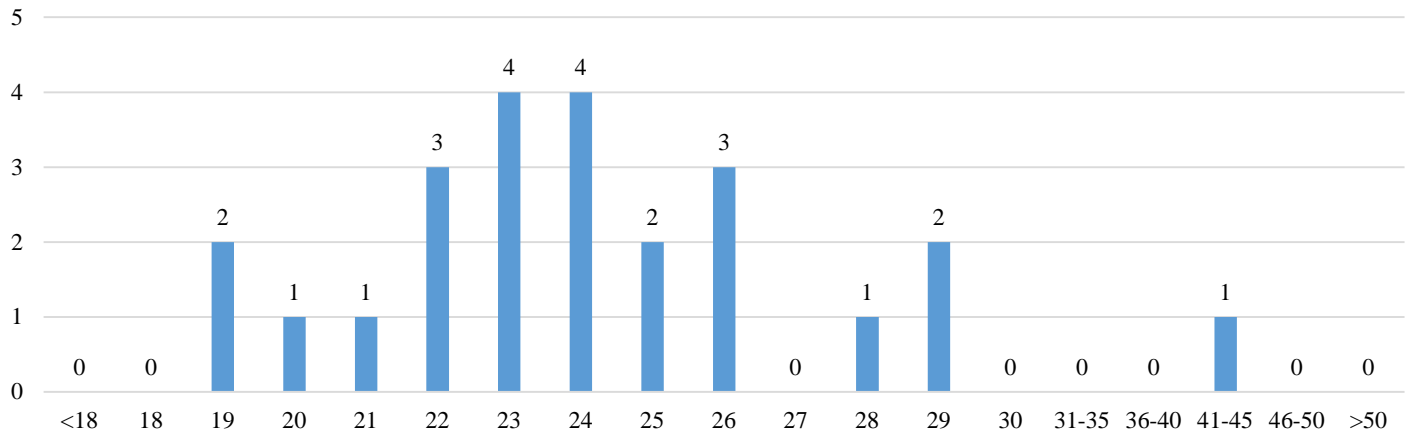


Figure 7. Age

Table 4.

#### Age

Age	Count	Percent of Total
<18	0	0.00%
18	0	0.00%
19	2	8.33%
20	1	4.17%
21	1	4.17%
22	3	12.50%
23	4	16.67%
24	4	16.67%
25	2	8.33%
26	3	12.50%
27	0	0.00%
28	1	4.17%
29	2	8.33%
30	0	0.00%
31-35	0	0.00%
36-40	0	0.00%
41-45	1	4.17%
46-50	0	0.00%
>50	0	0.00%
<b>Total</b>	<b>24</b>	<b>100.00%</b>
<b>Missing</b>	<b>0</b>	<b>0.00%</b>
<b>Grand Total</b>	<b>24</b>	<b>100.00%</b>

BYU Educator Preparation Program Annual Report

Teaching Physical Science

Biographic Overview

Ethnicity

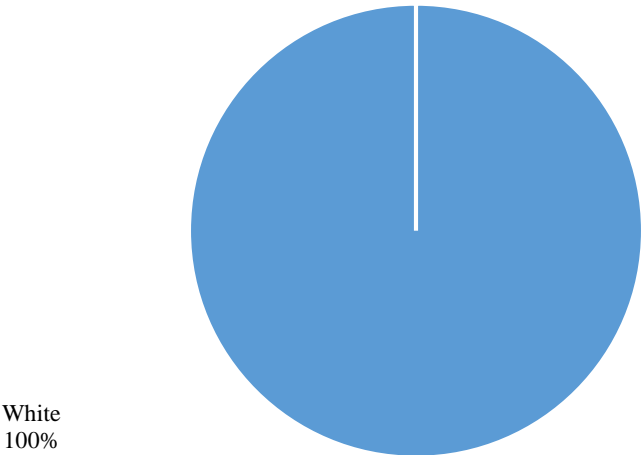


Figure 8. Ethnicity

Table 5.  
Ethnicity

Ethnicity	Count	Percent of Total
White	24	100.00%
Total	24	100.00%
Missing	0	0.00%
Grand Total	24	100.00%

# BYU Educator Preparation Program Annual Report

## Teaching Physical Science

### 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

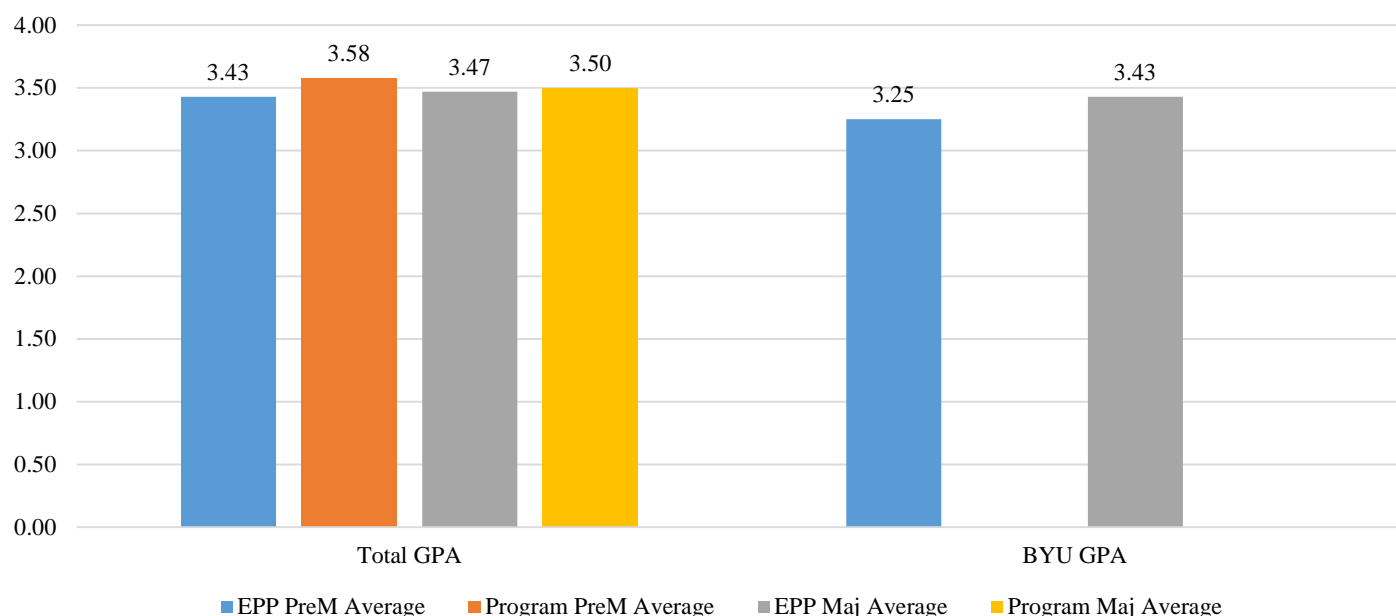


Figure 9. Total and BYU GPA at Admissions

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)
<b>Max</b>	4.00	3.99	4.00	3.87	4.00	3.87	4.00	-
<b>Min</b>	0.18	3.12	0.53	3.12	0.18	3.12	0.53	-
<b>Average</b>	3.43	3.58	3.47	3.50	3.25	3.49	3.43	-
<b>St Dev</b>	0.57	0.34	0.48	0.30	0.65	0.30	0.51	-
<b>Count</b>	1258	6	491	5	858	5	466	0
<b>% of Total</b>	77.94%	100.00%	96.46%	83.33%	53.16%	83.33%	91.55%	-
<b>Missing</b>	356	0	18	1	756	1	43	0

# BYU Educator Preparation Program Annual Report

## Teaching Physical Science

### Transition 1: Admissions

% of Total	22.06%	0.00%	3.54%	16.67%	46.84%	16.67%	8.45%	-
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Note: M = major, PRE = premajor

## ACT

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

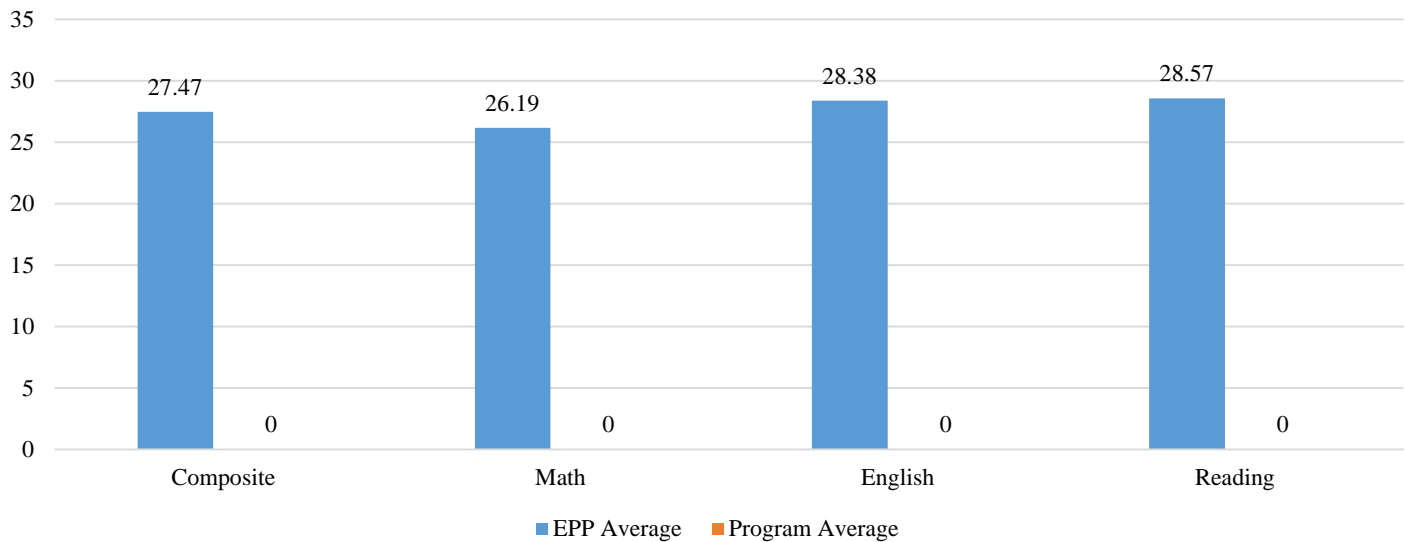


Figure 10. Pre-major ACT Results

Table 7.

Pre-major ACT Results

N = 0	EPP Average	Program Average	EPP St Dev	Program St Dev	Program Min	Program Max	Count	% of Total
<b>Composite</b>	27.47	0	3.66	-	-	-	0	-
<b>Math</b>	26.19	0	3.78	-	-	-	0	-
<b>English</b>	28.38	0	4.74	-	-	-	0	-
<b>Reading</b>	28.57	0	4.66	-	-	-	0	-

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.

# BYU Educator Preparation Program Annual Report

## Teaching Physical Science

### Transition 1: Admissions

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

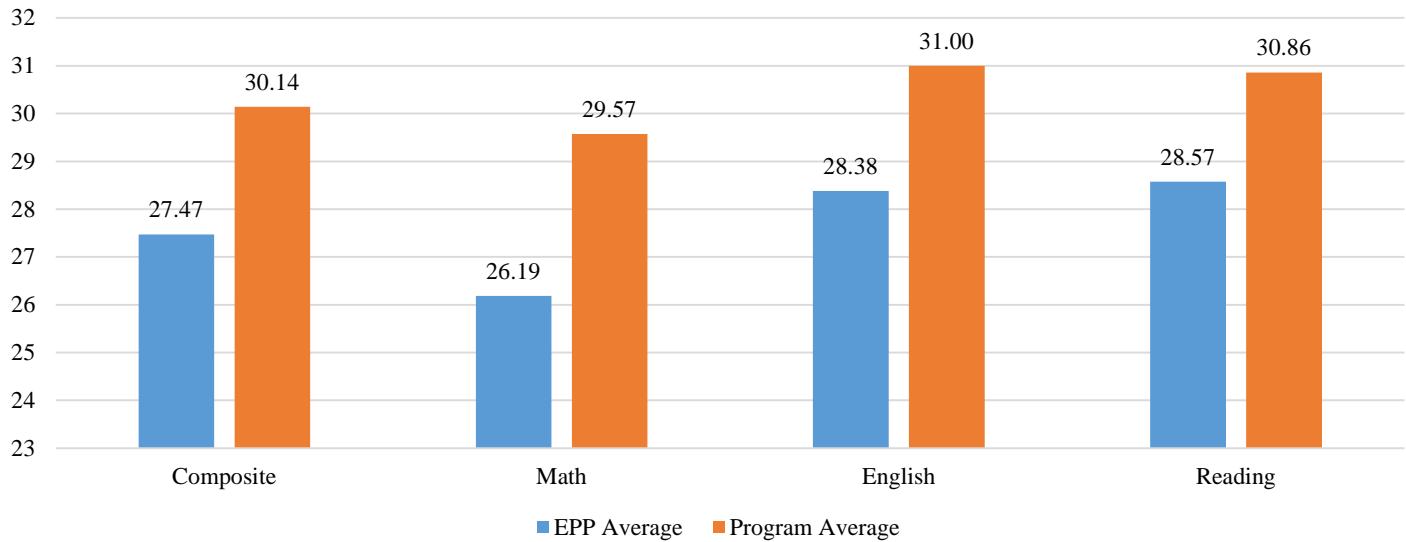


Figure 11. Major ACT Results

Table 8.

Major ACT Results

N = 7	EPP Average	Program Average	EPP St Dev	Program St Dev	Program Min	Program Max	Count	% of Total
Composite	27.47	30.14	3.66	5.01	21	35	7	100.00%
Math	26.19	29.57	3.78	3.31	25	34	7	100.00%
English	28.38	31.00	4.74	5.42	22	36	7	100.00%
Reading	28.57	30.86	4.66	6.01	18	36	7	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.

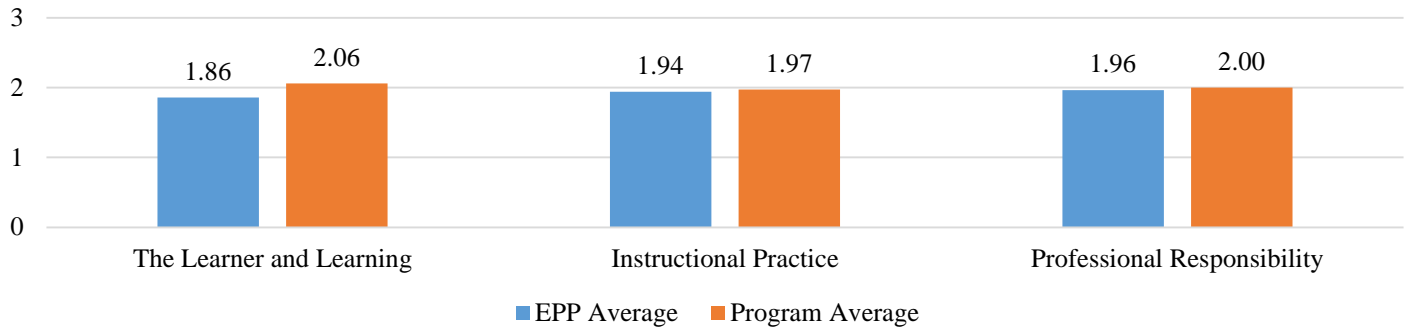
# BYU Educator Preparation Program Annual Report

## Teaching Physical Science

### 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.



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

Figure 12. T1 UTESS by UETS Domains

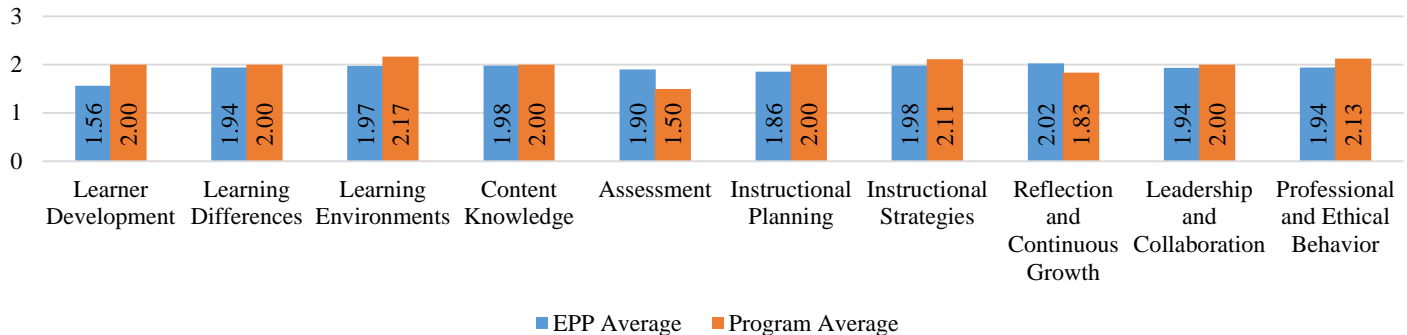


Figure 13. T1 UTESS by UET Standards

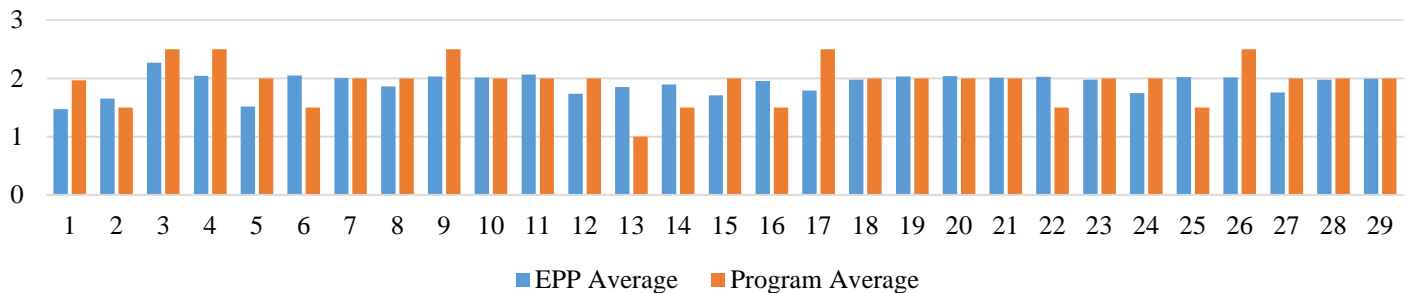


Figure 14. T1 UTESS by Items

# BYU Educator Preparation Program Annual Report

## Teaching Physical Science

### Transition 1: Admissions

#### TSA

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

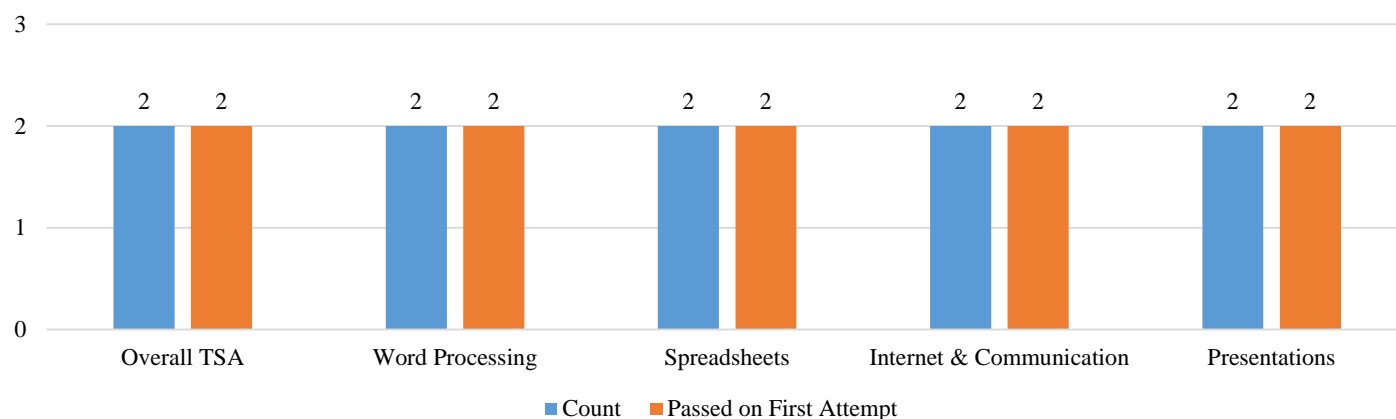


Figure 15. T1 TSA Results of Candidates Passing on the First Attempt.

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
<b>Overall TSA</b>	2	28.57%	2	100.00%	86.28%
<b>Word Processing</b>	2	28.57%	2	100.00%	95.53%
<b>Spreadsheets</b>	2	28.57%	2	100.00%	92.95%
<b>Internet &amp; Communication</b>	2	28.57%	2	100.00%	98.29%
<b>Presentations</b>	2	28.57%	2	100.00%	97.41%



# BYU Educator Preparation Program Annual Report

## Teaching Physical Science

### 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

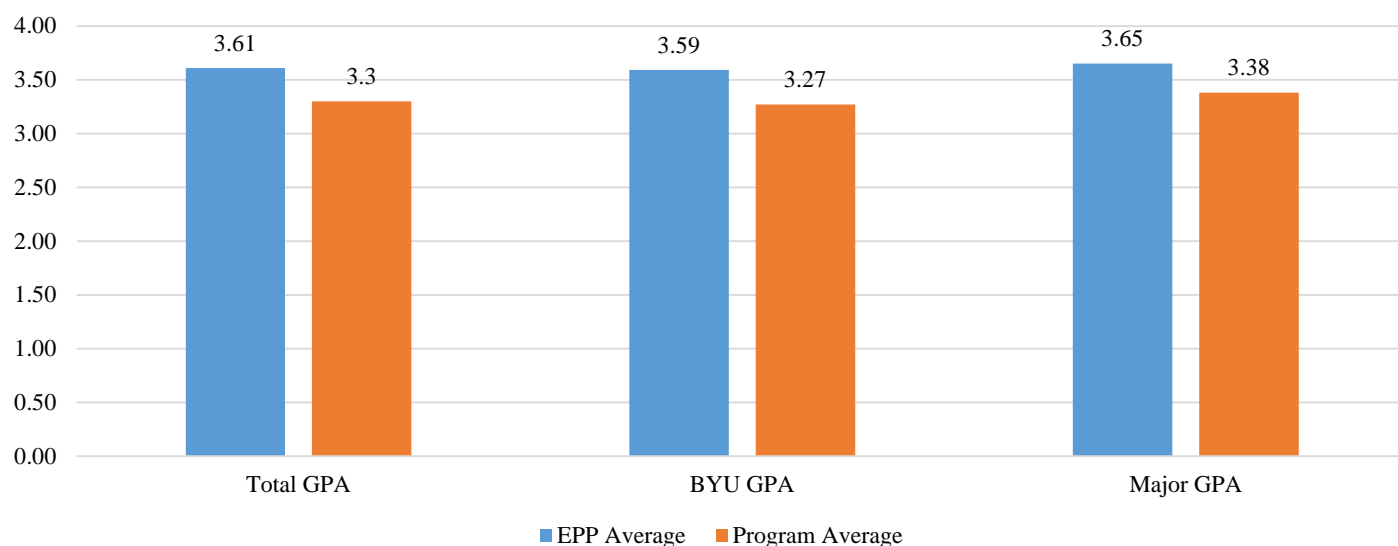


Figure 15. T2 Total, BYU, and Major GPA

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
<b>Max</b>	4.00	3.96	4.00	3.96	4.00	3.96
<b>Min</b>	1.77	2.41	1.36	2.41	1.00	2.86
<b>Average</b>	3.61	3.3	3.59	3.27	3.65	3.38
<b>St Dev</b>	0.30	0.56	0.33	0.56	0.31	0.41
<b>Count</b>	1099	7	1099	7	1094	7
<b>% of Total</b>	100.00%	100.00%	100.00%	100.00%	99.55%	100.00%
<b>Missing</b>	0	0	0	0	5	0
<b>% of Total</b>	0.00%	0.00%	0.00%	0.00%	0.45%	0.00%

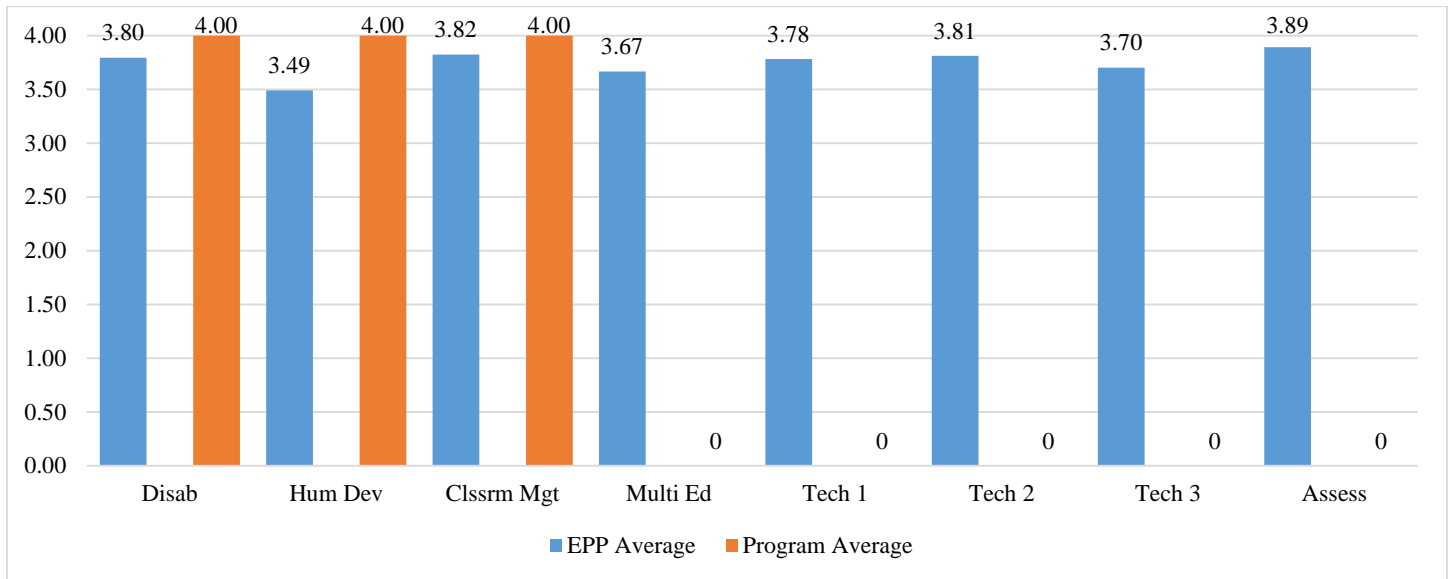
# BYU Educator Preparation Program Annual Report

Teaching Physical Science

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 11.

EPP Core GPA

	Disab	Hum Dev	Clssrm Mgt	Multi Ed	Tech 1	Tech 2	Tech 3	Assess
<b>EPP Average</b>	3.80	3.49	3.82	3.67	3.78	3.81	3.70	3.89
<b>Program Average</b>	4.00	4.00	4.00	-	-	-	-	-
<b>Course Count</b>	3	2	2	0	0	0	0	0
<b>St Dev</b>	0.00	0.00	0.00	-	-	-	-	-

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

# BYU Educator Preparation Program Annual Report

## Teaching Physical Science

### 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.

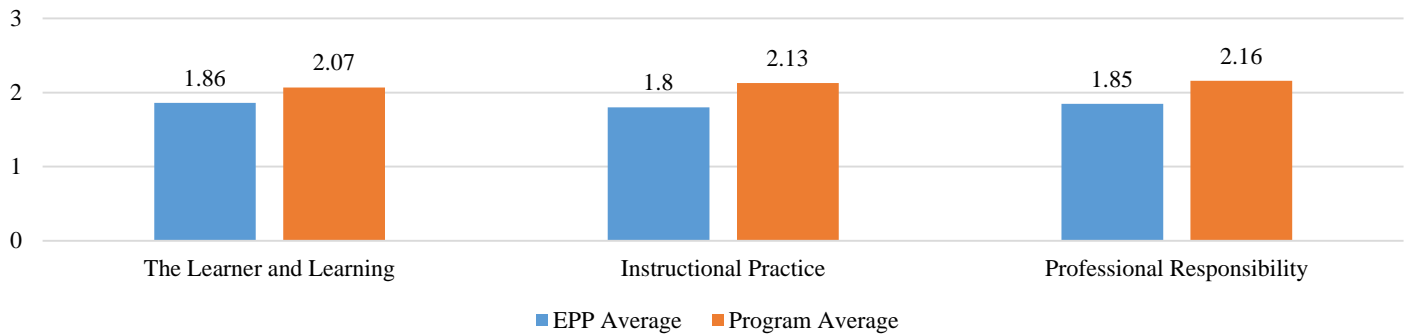


Figure 17. T2 PAES US by UETS Domains

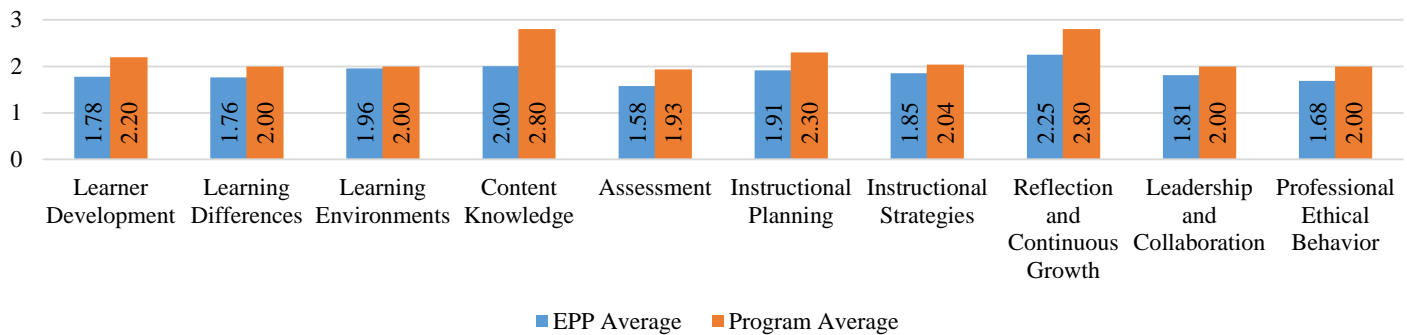


Figure 18. T2 PAES US by UET Standards

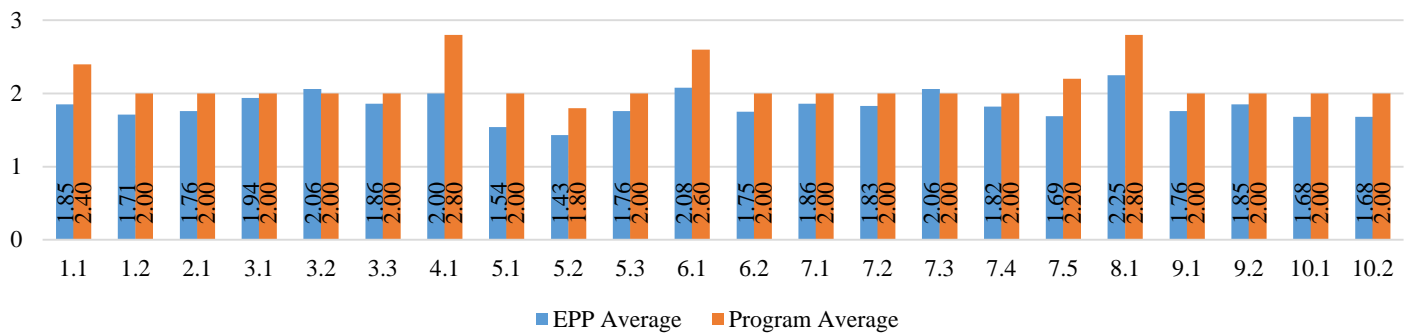


Figure 19. T2 PAES US by Items

# BYU Educator Preparation Program Annual Report

## Teaching Physical Science

### 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

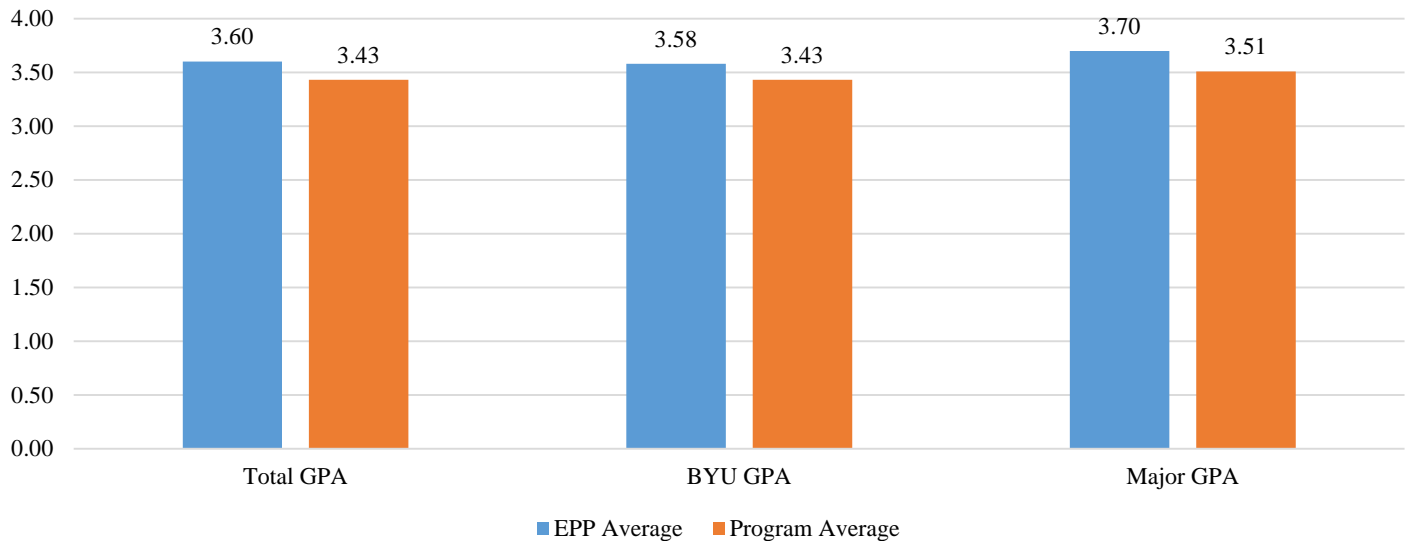


Figure 20. T3 Total, BYU, and Major GPA

Table 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
<b>Max</b>	4.00	3.94	4.00	3.94	4.00	3.98
<b>Min</b>	2.30	2.40	2.12	2.37	2.70	2.81
<b>Average</b>	3.60	3.43	3.58	3.43	3.70	3.51
<b>St Dev</b>	0.29	0.52	0.31	0.52	0.26	0.40
<b>Count</b>	493	11	493	11	490	11
<b>% of Total</b>	100.00%	100%	100.00%	100%	99.39%	100%
<b>Missing</b>	0	0	0	0	3	0
<b>% of Total</b>	0.00%	0%	0.00%	0%	0.61%	0%

# BYU Educator Preparation Program Annual Report

## Teaching Physical Science

### Transition 3: Clinical

#### PAES US

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

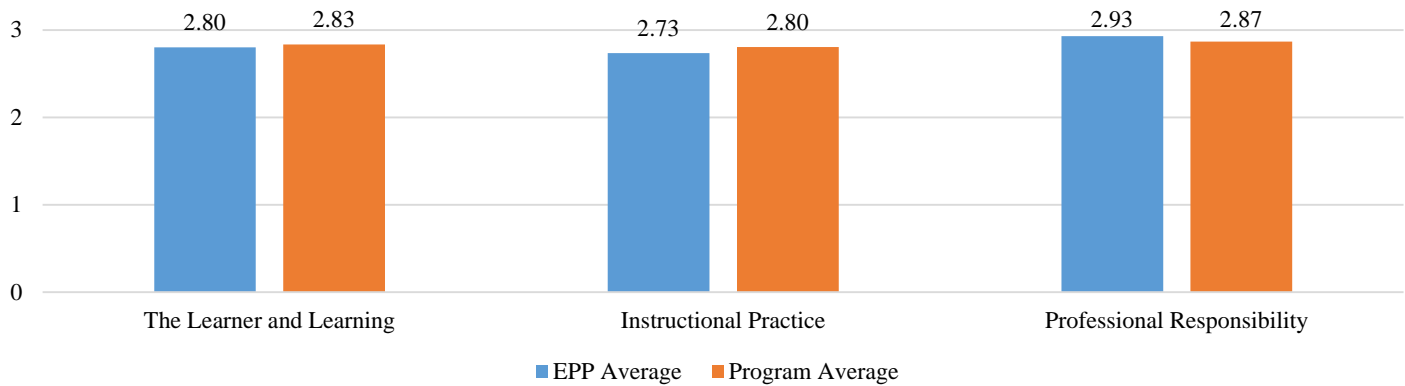


Figure 21. T3 PAES US by UETS Domains

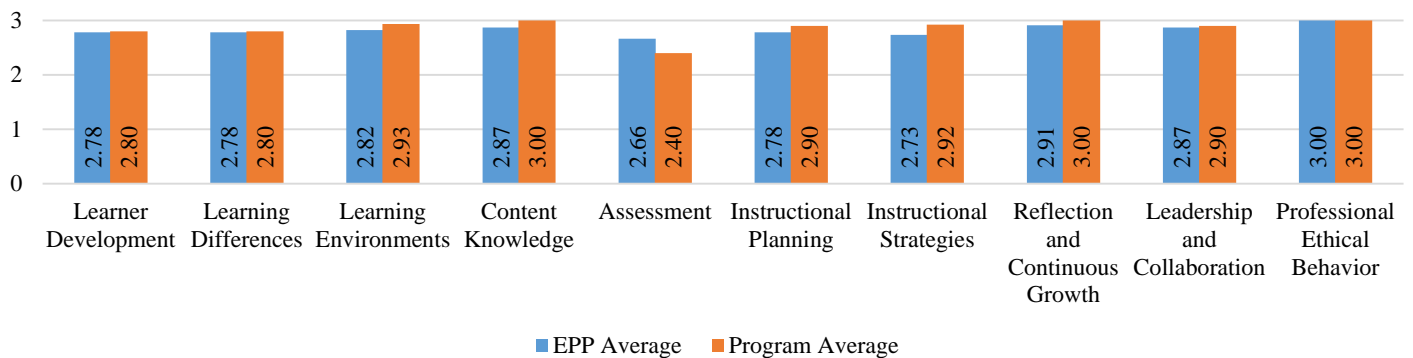


Figure 22. T3 PAES US by UET Standards

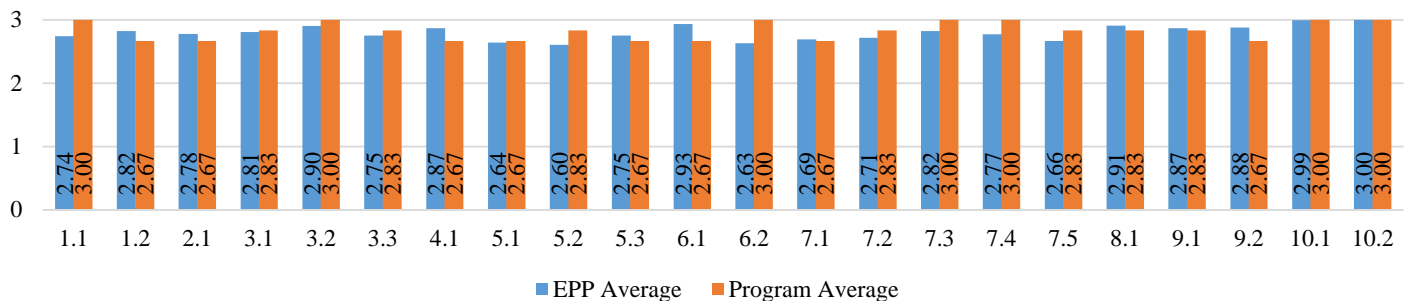


Figure 23. T3 PAES US by Items

# BYU Educator Preparation Program Annual Report

## Teaching Physical Science

### Transition 3: Clinical

#### PAES MT

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

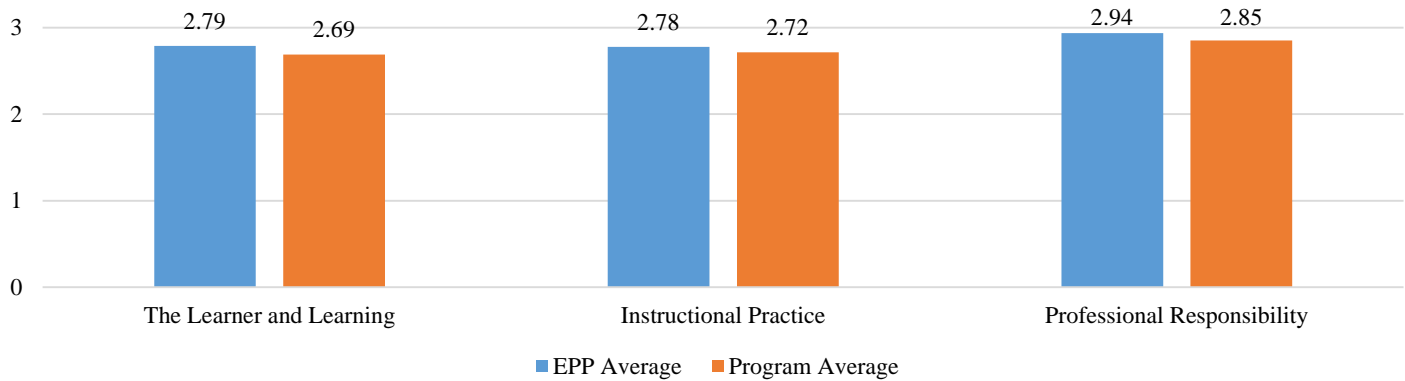


Figure 24. T3 PAES MT by UETS Domains

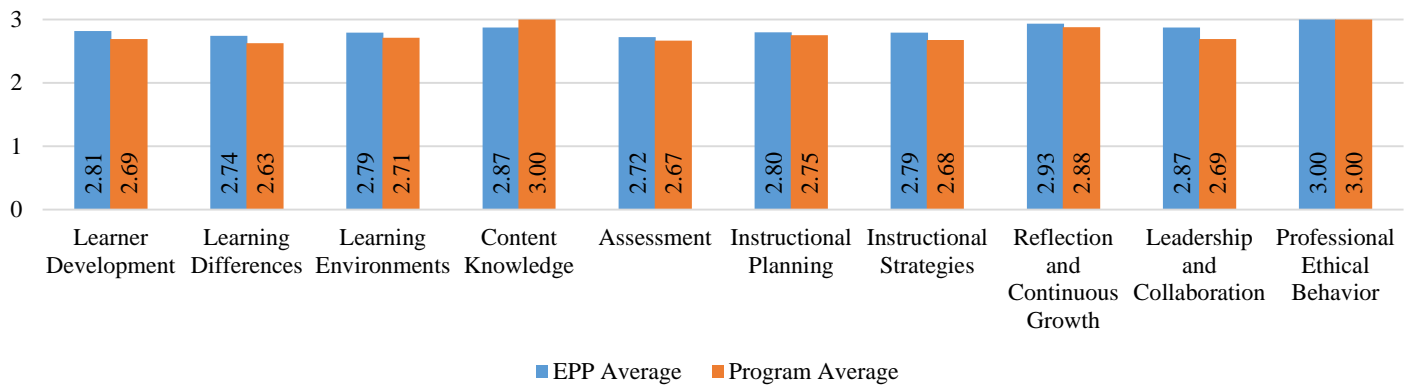


Figure 25. T3 PAES MT by UET Standards

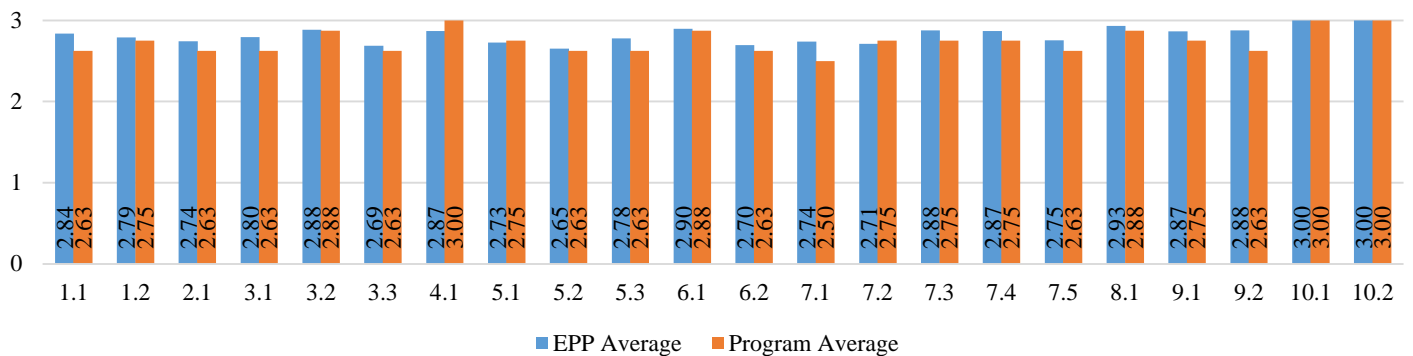


Figure 26. T3 PAES MT by Items

# BYU Educator Preparation Program Annual Report

## Teaching Physical Science

### 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.

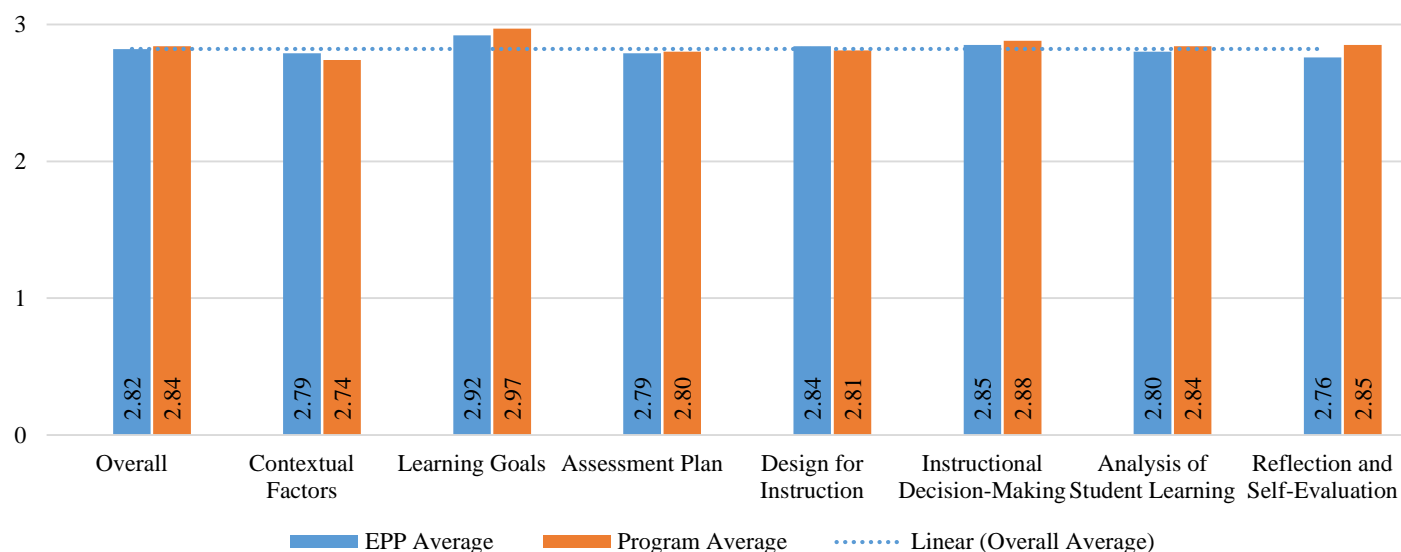


Figure 27. T3 RTWS

Table 13.

T3 RTWS

Section	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Overall</b>	2.82	2.84	0.15	0.07	8
<b>Contextual Factors</b>	2.79	2.74	0.05	0.01	8
<b>Learning Goals</b>	2.92	2.97	0.20	0.09	8
<b>Assessment Plan</b>	2.79	2.80	0.27	0.15	8
<b>Design for Instruction</b>	2.84	2.81	0.21	0.12	8
<b>Instructional Decision-Making</b>	2.85	2.88	0.31	0.23	8
<b>Analysis of Student Learning</b>	2.80	2.84	0.28	0.17	8
<b>Reflection and Self-Evaluation</b>	2.76	2.85	0.31	0.14	8

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## Teaching Physical Science

### 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.

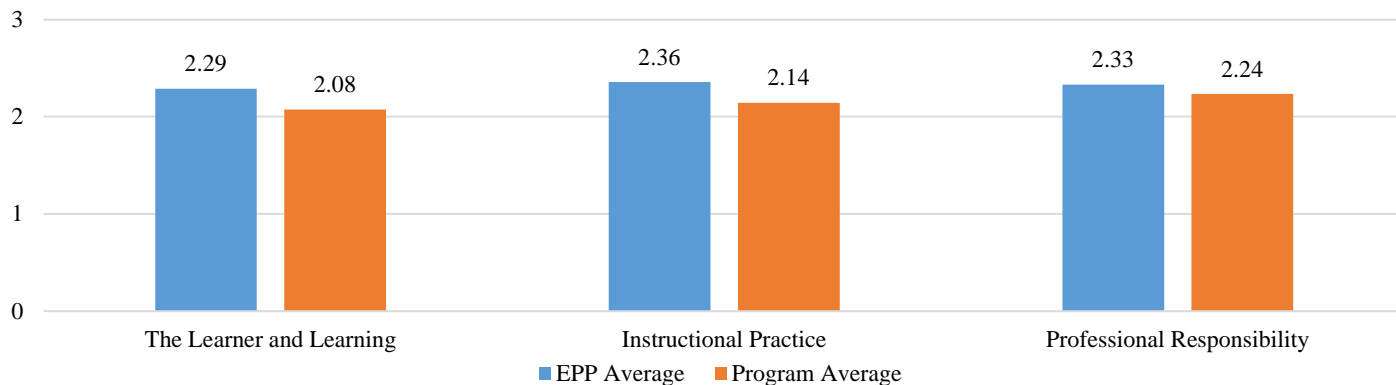


Figure 28. T3 UTESS by UETS Domains

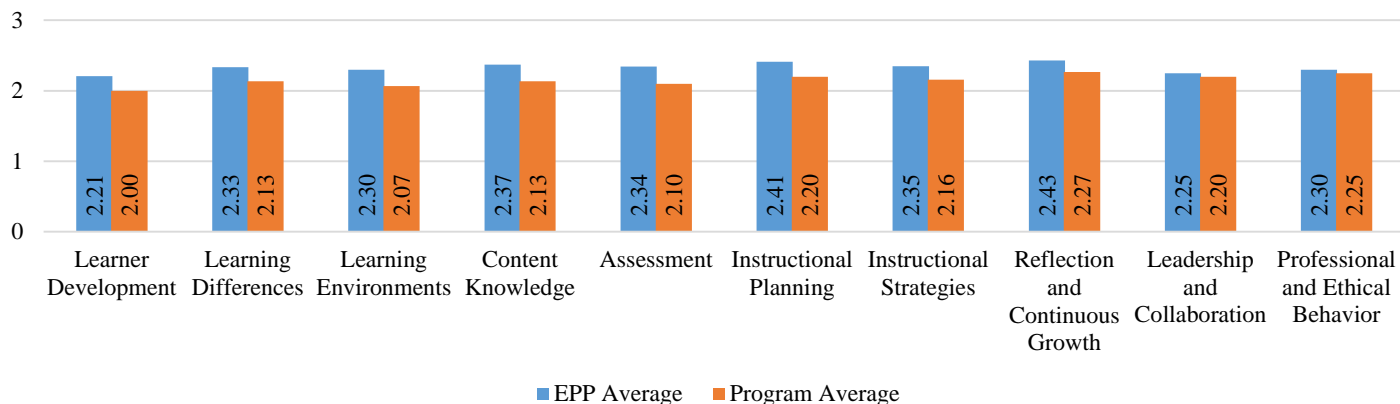


Figure 29. T3 UTESS by UET Standards

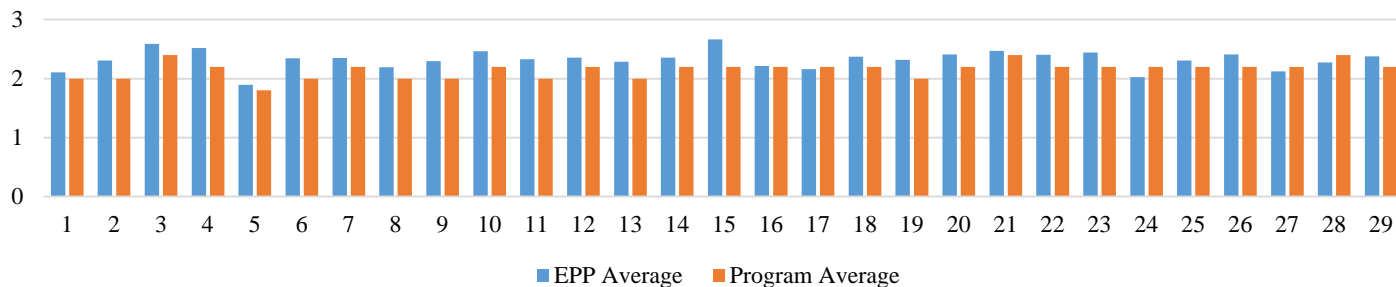


Figure 30. T3 UTESS by Items



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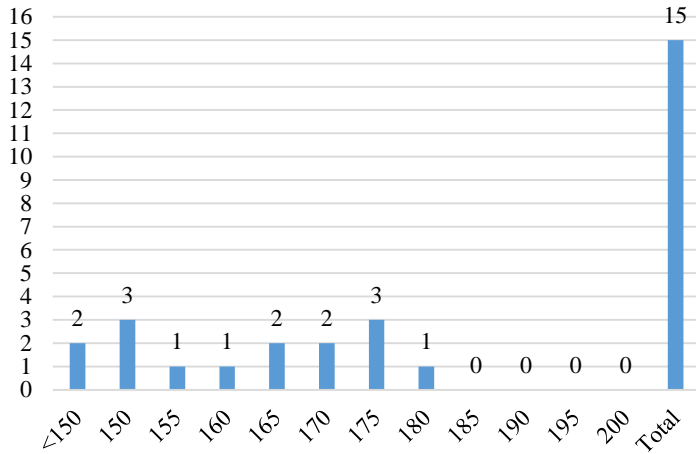
Teaching Physical Science

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 5265: Physics



Note: Test 5265 is scored out of 200 maximum points and a minimum passing score of 136

Figure 31. Praxis Test 5265 Results

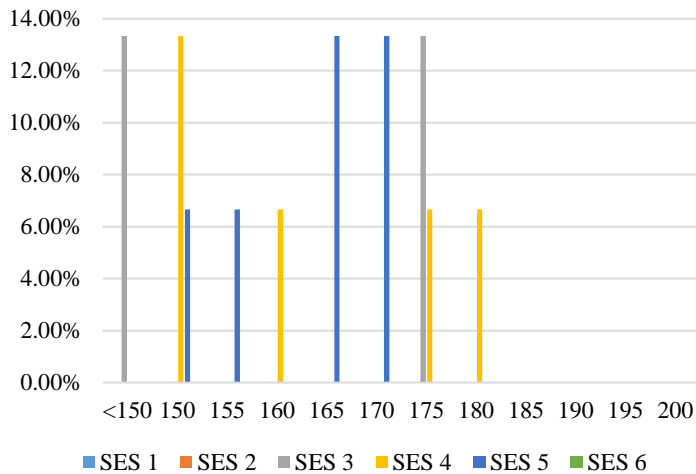


Figure 32. Test 5265 Results by SES

Table 14.  
Praxis Test 5265 Results

Result	Frequency
<150	2
150	3
155	1
160	1
165	2
170	2
175	3
180	1
185	0
190	0
195	0
200	0
<b>Total</b>	<b>15</b>

Table 15.  
SES Categories

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

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Appendix A

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## 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 12.50% 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.

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Appendix A

## Administrative Overview

Table A.1.

*Program Flow*

Transition	Pre-Major	T1	T2	T3	Withdrawal PreM	Withdrawal Maj	Grand Total
<b>Count</b>	6	0	7	11	2	0	26
<b>Withdrawal %</b>	-	-	-	-	33%	0%	8%
<b>% Total</b>	23.07%	0.00%	26.92%	42.31%	7.69%	0.00%	100.00%

Table A.2.

*Graduated and Licensed*

	Graduated	Licensed
<b>Count</b>	4	4
<b>% of T3</b>	36.36%	36.36%
<b>Total T3</b>	11	11

Table A.3.

*Clinical Experiences for T3 Candidates*

	Student Teaching	Internship	Missing	Total
<b>Count</b>	5	3	5	13
<b>Percent of Total</b>	38.46%	23.08%	38.46%	100.00%

## Transition 1

## UTESS

Table A.4.

*T1 UTESS by UETS Domains*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	1.86	2.06	0.67	0.27	2
<b>Instructional Practice</b>	1.94	1.97	0.68	0.12	2
<b>Professional Responsibility</b>	1.96	2.00	0.70	0.00	2

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Table A.5.

*T1 UTESS by UET Standards*

UET Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	1.56	2.00	0.83	0.71	2
<b>Learning Differences</b>	1.94	2.00	0.73	0.47	2
<b>Learning Environments</b>	1.97	2.17	0.75	0.24	2
<b>Content Knowledge</b>	1.98	2.00	0.71	0.00	2
<b>Assessment</b>	1.90	1.50	0.78	0.71	2
<b>Instructional Planning</b>	1.86	2.00	0.78	0.00	2
<b>Instructional Strategies</b>	1.98	2.11	0.65	0.00	2
<b>Reflection and Continuous Growth</b>	2.02	1.83	0.73	0.24	2
<b>Leadership and Collaboration</b>	1.94	2.00	0.74	0.00	2
<b>Professional and Ethical Behavior</b>	1.94	2.13	0.74	0.18	2

Table A.6.

*T1 UTESS by Items*

Measure	EPP Average	Program Average	EPP St Dev	Program St Dev	N
1	1.47	1.97	0.88	0.71	2
2	1.66	1.50	0.89	0.71	2
3	2.27	2.50	0.82	0.71	2
4	2.04	2.50	0.88	0.00	2
5	1.52	2.00	0.92	0.71	2
6	2.05	1.50	0.82	0.00	2
7	2.00	2.00	0.86	0.00	2
8	1.86	2.00	0.83	0.71	2
9	2.03	2.50	0.81	0.00	2
10	2.01	2.00	0.79	0.00	2
11	2.07	2.00	0.82	0.00	2
12	1.74	2.00	0.90	1.41	2
13	1.85	1.00	0.86	0.71	2
14	1.90	1.50	0.87	0.00	2
15	1.71	2.00	0.98	0.71	2
16	1.96	1.50	0.83	0.71	2
17	1.79	2.50	0.85	0.00	2
18	1.98	2.00	0.79	0.00	2
19	2.03	2.00	0.78	0.00	2
20	2.04	2.00	0.84	0.00	2
21	2.01	2.00	0.89	0.71	2
22	2.03	1.50	0.79	0.00	2

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<b>23</b>	1.98	2.00	0.80	0.00	2
<b>24</b>	1.75	2.00	0.87	0.71	2
<b>25</b>	2.02	1.50	0.83	0.71	2
<b>26</b>	2.02	2.50	0.86	0.00	2
<b>27</b>	1.76	2.00	0.86	0.00	2
<b>28</b>	1.98	2.00	0.85	0.00	2
<b>29</b>	1.99	2.00	0.83	0.71	2
<b>Overall</b>	<b>1.91</b>	<b>2.50</b>	<b>0.67</b>	<b>0.15</b>	<b>2</b>

## Transition 2

## PAES

Table A.7.

*T2 PAES US by UETS Domains*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	1.86	2.07	0.5	0.09	5
<b>Instructional Practice</b>	1.8	2.13	0.49	0.05	5
<b>Professional Responsibility</b>	1.85	2.16	0.41	0.09	5

Table A.8.

*T2 PAES US by UET Standards*

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	1.78	2.20	0.49	0.27	5
<b>Learning Differences</b>	1.76	2.00	0.59	0.00	5
<b>Learning Environments</b>	1.96	2.00	0.59	0.00	5
<b>Content Knowledge</b>	2.00	2.80	0.65	0.45	5
<b>Assessment</b>	1.58	1.93	0.58	0.15	5
<b>Instructional Planning</b>	1.91	2.30	0.58	0.27	5
<b>Instructional Strategies</b>	1.85	2.04	0.49	0.09	5
<b>Reflection and Continuous Growth</b>	2.25	2.80	0.68	0.45	5
<b>Leadership and Collaboration</b>	1.81	2.00	0.55	0.00	5
<b>Professional Ethical Behavior</b>	1.68	2.00	0.47	0.00	5

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### Appendix A

Table A.9.

*T2 PAES US by Items*

Measure	EPP Average	Program Average	EPP St Dev	Program St Dev	N
1.1	1.85	2.40	0.54	0.55	5
1.2	1.71	2.00	0.64	0.00	5
2.1	1.76	2.00	0.59	0.00	5
3.1	1.94	2.00	0.60	0.00	5
3.2	2.06	2.00	0.73	0.00	5
3.3	1.86	2.00	0.66	0.00	5
4.1	2.00	2.80	0.65	0.45	5
5.1	1.54	2.00	0.63	0.00	5
5.2	1.43	1.80	0.71	0.45	5
5.3	1.76	2.00	0.68	0.00	5
6.1	2.08	2.60	0.65	0.55	5
6.2	1.75	2.00	0.74	0.00	5
7.1	1.86	2.00	0.53	0.00	5
7.2	1.83	2.00	0.67	0.00	5
7.3	2.06	2.00	0.66	0.00	5
7.4	1.82	2.00	0.67	0.00	5
7.5	1.69	2.20	0.61	0.45	5
8.1	2.25	2.80	0.68	0.45	5
9.1	1.76	2.00	0.68	0.00	5
9.2	1.85	2.00	0.56	0.00	5
10.1	1.68	2.00	0.00	0.00	5
10.2	1.68	2.00	0.00	0.00	5

## Transition 3

## PAES US

Table A.10.

*T3 PAES US by UETS Domains*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	2.80	2.83	0.22	0.26	6
<b>Instructional Practice</b>	2.73	2.80	0.22	0.31	6

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<b>Professional Responsibility</b>	2.93	2.87	0.14	0.21	6
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Table A.11.

*T3 PAES US by UET Standards*

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	2.78	2.80	0.30	0.27	5
<b>Learning Differences</b>	2.78	2.80	0.42	0.45	5
<b>Learning Environments</b>	2.82	2.93	0.27	0.15	5
<b>Content Knowledge</b>	2.87	3.00	0.34	0.00	5
<b>Assessment</b>	2.66	2.40	0.35	0.15	5
<b>Instructional Planning</b>	2.78	2.90	0.29	0.22	5
<b>Instructional Strategies</b>	2.73	2.92	0.27	0.18	5
<b>Reflection and Continuous Growth</b>	2.91	3.00	0.29	0.00	5
<b>Leadership and Collaboration</b>	2.87	2.90	0.28	0.22	5
<b>Professional Ethical Behavior</b>	2.99	3.00	0.07	0.00	5

Table A.12.

*T3 PAES US by Items*

Measure	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>1.1</b>	2.74	3.00	0.44	0.00	6
<b>1.2</b>	2.82	2.67	0.38	0.52	6
<b>2.1</b>	2.78	2.67	0.42	0.52	6
<b>3.1</b>	2.81	2.83	0.39	0.41	6
<b>3.2</b>	2.90	3.00	0.31	0.00	6
<b>3.3</b>	2.75	2.83	0.44	0.41	6
<b>4.1</b>	2.87	2.67	0.34	0.52	6
<b>5.1</b>	2.64	2.67	0.48	0.52	6
<b>5.2</b>	2.60	2.83	0.50	0.41	6
<b>5.3</b>	2.75	2.67	0.44	0.52	6
<b>6.1</b>	2.93	2.67	0.26	0.52	6
<b>6.2</b>	2.63	3.00	0.50	0.00	6
<b>7.1</b>	2.69	2.67	0.47	0.52	6
<b>7.2</b>	2.71	2.83	0.47	0.41	6
<b>7.3</b>	2.82	3.00	0.39	0.00	6

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<b>7.4</b>	2.77	3.00	0.45	0.00	6
<b>7.5</b>	2.66	2.83	0.49	0.41	6
<b>8.1</b>	2.91	2.83	0.29	0.41	6
<b>9.1</b>	2.87	2.83	0.34	0.41	6
<b>9.2</b>	2.88	2.67	0.33	0.52	6
<b>10.1</b>	2.99	3.00	-	-	6
<b>10.2</b>	3.00	3.00	-	-	6

## PAES MT

Table A.13.

*T3 PAES MT by UETS Domains*

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	2.79	2.69	0.22	0.24	8
<b>Instructional Practice</b>	2.78	2.72	0.20	0.26	8
<b>Professional Responsibility</b>	2.94	2.85	0.13	0.18	8

Table A.14.

*T3 PAES MT by UET Standards*

Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	2.81	2.69	0.29	0.37	8
<b>Learning Differences</b>	2.74	2.63	0.44	0.52	8
<b>Learning Environments</b>	2.79	2.71	0.29	0.38	8
<b>Content Knowledge</b>	2.87	3.00	0.35	0.00	8
<b>Assessment</b>	2.72	2.67	0.32	0.36	8
<b>Instructional Planning</b>	2.80	2.75	0.29	0.27	8
<b>Instructional Strategies</b>	2.79	2.68	0.23	0.32	8
<b>Reflection and Continuous Growth</b>	2.93	2.88	0.25	0.35	8
<b>Leadership and Collaboration</b>	2.87	2.69	0.28	0.37	8
<b>Professional Ethical Behavior</b>	3.00	3.00	0.00	0.00	8



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Table A.15.

*T3 PAES MT by Items*

Measure	EPP Average	Program Average	EPP St Dev	Program St Dev	N
1.1	2.84	2.63	0.38	0.52	8
1.2	2.79	2.75	0.42	0.46	8
2.1	2.74	2.63	0.44	0.52	8
3.1	2.80	2.63	0.40	0.52	8
3.2	2.88	2.88	0.33	0.35	8
3.3	2.69	2.63	0.47	0.52	8
4.1	2.87	3.00	0.35	0.00	8
5.1	2.73	2.75	0.45	0.46	8
5.2	2.65	2.63	0.48	0.52	8
5.3	2.78	2.63	0.43	0.52	8
6.1	2.90	2.88	0.32	0.35	8
6.2	2.70	2.63	0.47	0.52	8
7.1	2.74	2.50	0.44	0.53	8
7.2	2.71	2.75	0.47	0.46	8
7.3	2.88	2.75	0.33	0.46	8
7.4	2.87	2.75	0.34	0.46	8
7.5	2.75	2.63	0.45	0.52	8
8.1	2.93	2.88	0.25	0.35	8
9.1	2.87	2.75	0.36	0.46	8
9.2	2.88	2.63	0.34	0.52	8
10.1	3.00	3.00	-	0.00	8
10.2	3.00	3.00	-	0.00	8

## UTESS

Table A.A.16.

T3 UTESS by UETS Domains

Domain	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>The Learner and Learning</b>	2.29	2.08	0.40	0.36	5
<b>Instructional Practice</b>	2.36	2.14	0.36	0.47	5
<b>Professional Responsibility</b>	2.33	2.24	0.37	0.43	5

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Table A.17.

*T3 UTESS by UET Standards*

UET Standard	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>Learner Development</b>	2.21	2.00	0.83	0.00	5
<b>Learning Differences</b>	2.33	2.13	0.73	0.38	5
<b>Learning Environments</b>	2.30	2.07	0.75	0.60	5
<b>Content Knowledge</b>	2.37	2.13	0.71	0.51	5
<b>Assessment</b>	2.34	2.10	0.78	0.55	5
<b>Instructional Planning</b>	2.41	2.20	0.78	0.45	5
<b>Instructional Strategies</b>	2.35	2.16	0.65	0.43	5
<b>Reflection and Continuous Growth</b>	2.43	2.27	0.73	0.43	5
<b>Leadership and Collaboration</b>	2.25	2.20	0.74	0.45	5
<b>Professional and Ethical Behavior</b>	2.30	2.25	0.74	0.43	5

Table A.18.

*T3 UTESS by Items*

Measure	EPP Average	Program Average	EPP St Dev	Program St Dev	N
<b>1</b>	2.11	2.00	0.65	0.00	5
<b>2</b>	2.31	2.00	0.65	0.00	5
<b>3</b>	2.59	2.40	0.57	0.55	5
<b>4</b>	2.52	2.20	0.59	0.45	5
<b>5</b>	1.90	1.80	0.76	0.45	5
<b>6</b>	2.34	2.00	0.56	0.71	5
<b>7</b>	2.35	2.20	0.59	0.45	5
<b>8</b>	2.20	2.00	0.59	0.71	5
<b>9</b>	2.30	2.00	0.59	0.71	5
<b>10</b>	2.46	2.20	0.53	0.45	5
<b>11</b>	2.33	2.00	0.56	0.71	5
<b>12</b>	2.36	2.20	0.60	0.45	5
<b>13</b>	2.29	2.00	0.59	0.71	5
<b>14</b>	2.35	2.20	0.59	0.45	5
<b>15</b>	2.67	2.20	0.53	0.45	5
<b>16</b>	2.22	2.20	0.57	0.45	5
<b>17</b>	2.16	2.20	0.59	0.45	5
<b>18</b>	2.37	2.20	0.53	0.45	5
<b>19</b>	2.32	2.00	0.58	0.00	5
<b>20</b>	2.41	2.20	0.56	0.45	5

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<b>21</b>	2.47	2.40	0.57	0.55	5
<b>22</b>	2.41	2.20	0.56	0.45	5
<b>23</b>	2.44	2.20	0.54	0.45	5
<b>24</b>	2.03	2.20	0.66	0.45	5
<b>25</b>	2.31	2.20	0.56	0.45	5
<b>26</b>	2.41	2.20	0.56	0.45	5
<b>27</b>	2.12	2.20	0.61	0.45	5
<b>28</b>	2.27	2.40	0.60	0.55	5
<b>29</b>	2.38	2.20	0.55	0.45	5
<b>Overall</b>	<b>2.32</b>	<b>2.15</b>	<b>0.35</b>	<b>0.41</b>	<b>5</b>

## Praxis

### Praxis Test 5265: Physics—Content Knowledge

Table A.19.

*Praxis Test 5265: Physics—Content Knowledge Overall Results*

	Max	Average	Min	St Dev
<b>Score</b>	183	163.20	131	14.57
<b>N Size</b>	15	15	15	15
<b>N Missing</b>	0	0	0	0
<b>Percentage</b>	100.00%	100.00%	100.00%	100.00%

Table A.20.

*Praxis Test 5265: Physics—Content Knowledge Section Results*

	Points Available	Max	Average	Min	St Dev	N Size	Missing	Percentage
<b>Mechanics</b>	32.00	32	25.80	16	3.78	15	0	100.00%
<b>Electricity and Magnetism</b>	19.00	18	13.33	5	3.79	15	0	100.00%
<b>Optics and Waves</b>	13.00	13	10.33	7	1.84	15	0	100.00%
<b>Heat; Energy; and Thermodynamics</b>	12.00	12	8.67	5	1.68	15	0	100.00%
<b>Modern Physics; Atomic and Nuclear Structure</b>	12.00	12	8.47	5	2.39	15	0	100.00%
<b>Scientific Inquiry; Processes; and Social Perspectives</b>	11.93	12	9.20	7	1.74	15	0	100%

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Table A.21.

*Praxis Test 5265: Physics—Content Knowledge Attempts*

	First Attempt	Second Attempt	Third Attempt	Total
<b>N Size</b>	15	1	1	15
<b>Count</b>	15	1	0	15
<b>Missing</b>	0	0	1	1
<b>Passed</b>	14	0	-	14
<b>Failed</b>	1	1	-	1
<b>% Who Passed The Attempt</b>	93.33%	0%	-	-
<b>% Who Passed the Test</b>	93.33%	0%	-	93.33%

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 5265: Physics—Content Knowledge Results sorted by Socioeconomic Status*

Category	<150	150-154	155-159	160-164	165-169	170-174	175-179	180-184	185-189	190-194	195-199	200	Total
<b>SES 1</b>	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
<b>SES 2</b>	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
<b>SES 3</b>	2	0	0	0	0	0	2	0	0	0	0	0	<b>4</b>
<b>SES 4</b>	0	2	0	1	0	0	1	1	0	0	0	0	<b>5</b>
<b>SES 5</b>	0	1	1	0	2	2	0	0	0	0	0	0	<b>6</b>
<b>SES 6</b>	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
<b>Total</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>

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

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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):
  - 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 (UTES) for UTESS:
  - Each item in the UTESS corresponds to one or more of the ten (10) Utah Effective Teaching Standards (UTES). 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.
  - Of the twenty-nine (29) UTESS items, eight (8) (27.59%) correspond to two UETS items.



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- UETS Professional Domains
  - 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.