

# **Praxis Summary Report**

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## **Section I. Executive Summary**

Based on the Praxis exam data analysis, both West Virginia (WV) and West Virginia University (WVU) show a concerning downward trend in pass rates from 2020 to 2024, with WV declining from 84.80% to 60.54% and WVU from 97.06% to 71.87%. Despite this decline, WVU consistently maintains approximately 10-15 percentage points higher pass rates than the state average across most years.

Program-specific analysis reveals that WVU outperforms the state average in six key areas: Praxis I Core Tests (8.67% higher), PLT K-6 (8.10% higher), Elementary Education (10.87% higher), English Language Arts (7.69% higher), Literacy (6.31% higher), and Social Studies (7.26% higher). Conversely, WV outperforms WVU in PLT 7-12 (by 6.91%) and Physical Education (by 5.56%). Agriculture shows consistently high performance with near-perfect pass rates for both groups.

The 2023-2024 academic year shows many incomplete data points (marked with asterisks) for WVU, indicating insufficient sample sizes. The consistent downward trend across most subject areas suggests a statewide issue rather than an institution-specific problem, warranting a closer examination of curriculum and preparation strategies. The stark contrast between PLT K-6 (where WVU excels) and PLT 7-12 (where WV performs better) presents an opportunity to identify effective teaching approaches that could be implemented more broadly. Overall, while WVU maintains higher performance than the state average in most areas, the general decline in pass rates across programs indicates a need for intervention at both the university and state levels to ensure teacher candidates are adequately prepared for these essential licensure examinations.

## **Section II. Praxis Core**

Prior to reading the analysis below context for Praxis Core requirements has changed in WV drastically over the past two years. On July 1, 2023, West Virginia Board of Education Policy 5100 stated, the Core Academic Skills for Educators (CASE) exam will no longer be required for program admission for candidates completing a traditional teacher preparation program. As part of our CAEP evidence we have provided the WVDE Testing Directory that outlines how candidates can also meet these requirements presently.

The Praxis Core exam data reveals significant performance trends across testing years, teacher education programs, and gender categories. From 2021-2022 to 2023-2024, exam performance generally declined, particularly in the Writing exam where passing rates fell dramatically from around 55% to below 25%. Mathematics performance also decreased for WV candidates from 74% to 59%, while WVU maintained stronger performance at 86%.

A consistent pattern shows WVU candidates outperforming their WV counterparts across all three exam areas. This performance gap widened over time, especially in Mathematics where WVU's advantage grew from 2% to 27%. The most challenging exam was consistently Writing, with the lowest pass rates across all years and programs. Testing volume decreased substantially over the three academic years, with particularly sharp declines in WVU candidate numbers.

Gender analysis reveals notable differences across the exams. In Reading, males consistently outperformed females by 9-31% with higher mean scores. Mathematics showed a moderate gender gap favoring males in most years, though interestingly, this pattern reversed in 2023-2024 when WV females outperformed males by 9%. Writing exam results displayed mixed gender differences, with males outperforming females in 2022-2023, but females taking the lead in 2023-2024. Female candidates consistently outnumbered male candidates by approximately 3:1 across both programs.

First-attempt candidates generally achieved higher pass rates than second-attempt candidates in Reading and Mathematics, with 20-40% higher pass rates and 8-23 points higher mean scores. However, Writing presented an unusual pattern where second attempts sometimes outperformed first attempts, particularly in 2021-2022 when second attempts had 7-16% higher pass rates than first attempts.

WVU demonstrated notable program strengths with consistently higher mean scores, strong Mathematics passing rates even as WV rates declined, and exceptionally high first-attempt pass rates of 84-100% for Reading and Mathematics. Meanwhile, WV faced more significant challenges with steeper performance declines, particularly problematic Writing exam results, and lower second-attempt success rates. These findings suggest a need for targeted interventions, especially for Writing preparation, support for second-attempt candidates, and addressing gender-specific performance gaps to strengthen the overall teacher preparation pipeline. Tables 1 through 3 give praxis core scores for reading, math, and writing by gender and attempt.

Table 1. Praxis Core Reading Scores by Gender and Attempt

Praxis Core Reading (0713)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	156	641	130	545	115	167	168	413	92	76	80
Female		486	90	410	79	162	154	300	63	62	70
Male		158	33	143	29	171	172	119	26	75	79
1st Attempt		502	109	460	101	169	170	362	85	79	84
2 <sup>nd</sup> Attempt		78	11	51	9	156	154	30	4	59	44
2022-2023	156										
Female		357	52	278	34	154	151	167	22	47	42
Male		155	40	135	36	166	163	113	29	73	73
1st Attempt		311	36	277	28	164	165	189	22	68	79
2 <sup>nd</sup> Attempt		76	16	45	9	150	154	19	5	42	56
2023-2024	156										
Female		95	2	86	2	162	*	58	*	61	*
Male		27	0	25	0	167	*	21	*	78	*
1st Attempt		93	0	85	0	167	*	67	*	72	*
2 <sup>nd</sup> Attempt		19	0	17	0	167	*	67	*	72	*

Table 2. Praxis Core Math Scores by Gender and Attempt

Praxis Core Math (0733)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	150	887	170	744	147	160	163	535	114	74	76
Female		720	137	606	120	157	162	460	94	64	69
Male		207	47	174	40	160	159	140	33	69	70
1st Attempt		649	134	586	117	162	166	451	97	80	83

2 <sup>nd</sup> Attempt		130	26	88	22	151	156	55	13	63	59
2022-2023	150	663	87	521	68	157	162	365	58	70	85
Female		680	123	570	107	154	160	411	82	60	67
Male		128	15	114	14	160	160	90	12	70	80
1st Attempt		456	62	396	56	159	164	292	59	74	87
2 <sup>nd</sup> Attempt		110	13	77	7	150	156	47	6	61	86
2023-2024	150	164	7	144	6	154	165	97	6	59	86
Female		120	5	104	4	155	*	74	*	62	*
Male		43	2	39	2	153	*	23	*	53	*
1st Attempt		122	5	114	5	158	176	82	5	67	100
2 <sup>nd</sup> Attempt		21	0	17	0	135	*	3	*	25	*

Table 3. Praxis Core Writing Scores by Gender and Attempt

Praxis Core Writing (0723)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	162	870	188	651	139	160	161	354	80	54	58
Female		642	126	477	93	158	160	260	56	41	44
Male		228	62	174	46	157	156	94	14	41	39
1st Attempt		511	110	418	87	159	160	220	47	53	54
2 <sup>nd</sup> Attempt		186	39	128	27	162	164	77	19	60	70
2022-2023	162	641	97	120	54	155	152	13	23	18	24
Female		501	70	304	39	152	152	116	16	23	23
Male		150	27	100	15	155	154	43	7	49	26
1st Attempt		297	38	228	24	154	158	88	12	39	50
2 <sup>nd</sup> Attempt		150	29	85	14	156	155	32	6	38	43
2023-2024	162	153	97	120	54	155	152	13	23	18	24
Female		111	4	86	4	155	*	41	*	67	*
Male		42	2	34	2	154	*	15	*	36	*
1st Attempt		81	0	71	0	155	*	34	*	42	*
2 <sup>nd</sup> Attempt		29	2	21	2	157	*	12	*	41	*

### Section III. Principles of Learning and Teaching K-6

The PLT K-6 (5622) exam data reveals several notable trends across academic years, teacher education programs, and gender categories. Overall, candidates from both WV and WVU programs demonstrated strong performance on this exam, with consistently high pass rates compared to the Praxis Core exams.

WVU candidates maintained a perfect 100% pass rate across all three academic years, though with considerably smaller candidate pools (5-8 candidates per year) compared to WV. WV candidates showed fluctuating pass rates: starting at 93% in 2021-2022, improving to 97% in 2022-2023,

then declining to 90% in 2023-2024. Mean scores remained relatively stable for WV candidates, ranging from 173-175 points, showing no significant upward or downward trend over the three-year period.

Gender analysis within the WV program reveals consistent performance differences, with female candidates consistently outperforming their male counterparts. Across all three years, female candidates maintained higher mean scores (2-5 points higher) and higher pass rates (4-7 percentage points higher) than male candidates. This gender gap remained relatively stable over time, showing that female candidates have consistently stronger performance on this elementary education licensure exam.

First-attempt candidates significantly outperformed second-attempt candidates in both mean scores and pass rates. In 2021-2022, first attempts scored 7 points higher with 14% better pass rates than second attempts. This gap widened in 2022-2023, with first attempts scoring 12 points higher and achieving a 31% higher pass rate than second attempts. This suggests that candidates who do not pass on their first attempt face significant challenges in improving their performance sufficiently to pass on subsequent attempts.

A concerning trend is the dramatic decline in testing volume over the three-year period. WV experienced a 77% decrease in candidates, from 262 in 2021-2022 to just 59 in 2023-2024. This substantial reduction is due to a change in the WVDE certification policies that states if a candidate successfully passes the edTPA the PLT exam is waived. WVU maintained a small but stable number of candidates throughout the period.

The gender distribution within the WV program remained heavily skewed toward female candidates, who represented between 85-94% of all test-takers. This gender imbalance appears to be a consistent feature of elementary education preparation programs, reflecting broader patterns in the profession. Interestingly, the percentage of male candidates was at its lowest in 2022-2023 (5.9%) but increased slightly in 2023-2024 (15.3%).

In summary, while PLT K-6 exam performance remains strong overall, particularly at WVU, the significant decline in candidate numbers raises concerns about the teacher preparation pipeline for elementary education. The persistent gender gaps in both representation and performance highlight potential areas for targeted support in teacher preparation programs. Table 4 outlines the scores for principles of learning and teaching K-6 by gender and attempt.

Table 4. Principles of Learning and Teaching K-6 by Gender and Attempt

PLT K-6 (5622)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	160	285	8	262	8	173	178	244	8	93	100
Female		241	4	224	4	172	*	210	*	94	*
Male		45	4	39	4	170	*	35	*	90	*
1st Attempt		260	8	243	8	172	178	228	8	88	100
2 <sup>nd</sup> Attempt		19	0	15	0	165	*	14	*	74	*
2022-2023	160	228	5	209	5	175	174	203	5	97	100
Female		226	3	206	3	175	*	200	*	97	*
Male		15	0	13	0	170	*	35	*	90	*
1st Attempt		207	0	193	0	174	*	190	*	92	*

2 <sup>nd</sup> Attempt		23	0	17	0	162	*	14	*	61	*
2023-2024	160	61	7	59	7	173	174	55	7	90	100
Female		51	0	50	0	174	*	47	*	94	*
Male		10	4	9	4	169	*	8	*	89	*
1st Attempt		58	7	56	7	173	174	53	7	91	100
2 <sup>nd</sup> Attempt		3	0	3	0	*	*	*	*	*	*

#### Section IV. Principles of Learning and Teaching 7-12

The PLT 7-12 exam data reveals several significant trends across academic years, teacher education programs, and gender categories. Overall, this exam showed high performance metrics with passing rates consistently above 85% for both programs, though with noticeable variations over time.

WV program performance showed a declining trend in pass rates from an exceptional 98% in 2021-2022 to 94% in 2022-2023, and further to 88% in 2023-2024. Meanwhile, mean scores remained relatively stable, ranging from 172-173 points across all three years. WVU's performance showed improvement in mean scores, increasing from 167 in 2021-2022 to 178 in 2023-2024, though pass rates fluctuated (86% to 95% and back to 86%).

Gender analysis within the WV program reveals a narrowing performance gap over time. In 2021-2022, female candidates outperformed males by 6 points in mean scores and had a substantial 14% higher pass rate. By 2022-2023, this advantage decreased to 4 points and 4% in pass rates. Interestingly, by 2023-2024, while females still maintained a slight 2-point advantage in mean scores, males showed a higher pass rate by 2%, indicating a reversal in the gender performance gap for pass rates.

The gender distribution remained relatively stable with females representing approximately 60% of candidates and males around 40% across all three years. This gender distribution is notably more balanced compared to the PLT K-6 exam, reflecting different gender representation patterns between elementary and secondary education programs.

First-attempt candidates consistently outperformed second-attempt candidates across all years. The gap widened significantly in 2022-2023, where first attempts scored 16 points higher with a 23% higher pass rate than second attempts, compared to a more modest 7-point and 7% difference in 2021-2022. This suggests increasing challenges for candidates who need multiple attempts.

A dramatic decline in testing volume occurred in 2023-2024, with WV experiencing a 65.2% decrease in candidates from the previous year (198 to 69). WVU maintained a small but steadily declining number of candidates (11 to 8 to 7) over the three-year period. This substantial reduction is due to a change in the WVDE certification policies that states if a candidate successfully passes the edTPA the PLT exam is waived.

Male candidates showed consistent improvement in performance metrics over time, with mean scores increasing from 168 to 172 points and pass rates rising from 80% to 89% over the three-year period. In contrast, female candidates experienced fluctuations, with mean scores remaining relatively steady but pass rates declining from 94% to 87%.

The relationship between WV and WVU programs evolved from WV outperforming WVU in 2021-2022 to WVU achieving higher mean scores in later years. By 2023-2024, WVU candidates scored 5 points higher on average than WV candidates, though their pass rates were slightly lower (86% vs. 88%).

In summary, while PLT 7-12 exam performance remains strong overall, the significant decline in candidate numbers, shifting gender performance patterns, and changing program effectiveness present important considerations for secondary education teacher preparation in both programs. Table 5 outlines the scores for principles of learning and teaching 7-12 by gender and attempt.

Table 5. Principles of Learning and Teaching 7-12 by Gender and Attempt

PLT 7-12 (5264)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	157	217	13	206	11	172	167	191	9	98	86
Female		126	3	123	3	174	*	118	*	94	*
Male		92	10	84	8	168	161	74	6	80	75
1st Attempt		198	10	187	8	172	167	177	8	90	80
2 <sup>nd</sup> Attempt		18	2	18	2	165	*	15	*	83	*
2022-2023	157	211	10	198	8	172	175	187	8	94	95
Female		131	6	128	5	173	174	119	5	91	100
Male		97	4	87	3	169	*	84	*	87	*
1st Attempt		207	8	109	6	173	171	190	6	92	75
2 <sup>nd</sup> Attempt		13	2	10	2	157	*	9	*	69	*
2023-2024	157	74	7	69	7	173	178	65	6	88	86
Female		46	1	42	1	174	*	40	*	87	*
Male		28	6	27	6	172	177	25	5	89	90
1st Attempt		66	7	63	7	174	178	61	6	82	86
2 <sup>nd</sup> Attempt		5	0	4	0	*	*	*	*	*	*

## Section V. Praxis II: Agriculture

The Agriculture Praxis II examination data reveals exceptional performance across West Virginia (WV) and specifically at West Virginia University (WVU). Candidates consistently achieved a perfect 100% pass rate when sufficient data was available, significantly outperforming other subject areas. The passing score for the Agriculture exam (5701) is 147, and candidates regularly exceeded this threshold by substantial margins, with mean scores ranging from 158.8 to 169.0 points.

Despite relatively small sample sizes (20 total examinees over three years), the consistency of results strengthens confidence in these findings. Disaggregating the data by gender was not done due to small cell sizes and we felt that overall scores showed us more trend data to base decisions on. In 2021-2022, Agriculture candidates outperformed the overall state average by 27.47% (WV) and 18.64% (WVU). This gap widened in 2023-2024,

with WV Agriculture candidates exceeding the state average by 41.01%, demonstrating the increasing strength of Agriculture education preparation relative to other subject areas.

First-attempt success rates mirror the overall perfect pass rates, indicating that Agriculture candidates are typically well-prepared for the examination on their initial attempt. Mean scores for first-attempt test-takers were particularly impressive, with WV candidates averaging 167.38 and WVU candidates averaging 169.00 in 2021-2022, demonstrating comprehensive content knowledge.

The exceptional performance of Agriculture candidates suggests effective preparation programs, strong curriculum alignment with examination content, and high candidate readiness. Agriculture maintained stable, perfect performance, establishing it as one of the highest-performing subject areas in West Virginia's teacher preparation programs. Table 6 illustrates scores for Agriculture (5701) on the Praxis II.

Table 6. Praxis II: Agriculture (5701) Scores

Agriculture (5701)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	147	11	10	10	9	164	165	10	9	100	100
Female		9	8	8	7	158	*	8	*	89	*
Male		2	2	2	2	*	*	*	*	*	*
1st Attempt		9	8	8	7	168	169	8	7	100	100
2 <sup>nd</sup> Attempt		2	2	2	2	*	*	*	*	*	*
2022-2023	147	4	1	4	1	*	*	*	*	*	*
Female		2	0	2	0	*	158	*	7	*	88
Male		2	1	2	1	*		*	*	*	*
1st Attempt		4	1	4	1	*	*	*	*	*	*
2 <sup>nd</sup> Attempt		0	0	*	0	*	*	*	*	*	*
2023-2024	147	5	4	5	4	159	*	5	*	100	*
Female		4	3	4	3	*	*	*	*	*	*
Male		1	1	1	1	*	*	*	*	*	*
1st Attempt		5	4	5	4	159	*	5	*	100	*
2 <sup>nd</sup> Attempt		0	0	0	0	*	*	*	*	*	*

(\* less than 5 candidates)

## Section VI. Praxis II: Elementary

The West Virginia Department of Education allows candidates to take the Praxis II 5001 or the 7811 series for elementary (K-6) certification. Praxis 5002 and 7812 are for reading and language arts (Tables ???-???), 5003 and 7813 for math (Tables ???-???), 5004 and 7815 for social studies (Tables ???-???), and 5005 and 7814 for science (Tables ???-???). An in-depth analysis of Elementary Education Praxis II exam data reveals significant patterns in performance across West Virginia (WV) and specifically at West Virginia University (WVU) from 2021 to 2024. The data shows that West Virginia University consistently outperforms the state average across all Elementary Education Praxis II exams, with an overall pass rate of



77.88% compared to the statewide average of 67.37%, representing a substantial 10.51 percentage point advantage for WVU candidates. This comprehensive analysis encompasses data from 4,289 exams taken by WV candidates and 668 exams taken by WVU candidates, providing a robust sample size for drawing meaningful conclusions.

A concerning downward trend is evident across all three academic years for both WV and WVU candidates. In 2021-2022, WV candidates achieved a 74.22% pass rate while WVU candidates reached 91.50%, showing a significant 17.28% difference. By 2022-2023, both groups experienced declines with WV dropping to 67.98% and WVU to 81.48%, narrowing the gap slightly to 13.50%. The most recent year, 2023-2024, continued this downward trajectory with WV falling to 60.77% and WVU to 71.62%, resulting in a 10.85% difference. This represents a substantial decline of 13.45 percentage points for WV and 19.88 percentage points for WVU over the three-year period. While WVU maintains higher pass rates throughout, the gap between WVU and WV has gradually narrowed from 17.28% to 10.85%, primarily due to WVU's steeper rate of decline.

The analysis reveals considerable variation in pass rates across different Elementary Education Praxis II exams. The most taken exam, Elementary Social Studies (5004) with 1,384 total examinees, shows pass rates of 62.12% for WV and 72.24% for WVU, with both groups experiencing declining trends. Elementary Science (5005), taken by 1,264 examinees, demonstrates stronger performance with 72.18% for WV and 81.04% for WVU, though both continue to show declining trends. Elementary Mathematics (5003), with 811 total examinees, exhibits the largest performance gap between institutions, with WV at 71.69% and WVU at 93.59%, representing a substantial 21.90% difference. Elementary Science (7815), taken by 621 examinees, shows pass rates of 60.24% for WV and 75.28% for WVU, and notably is the only exam where WVU demonstrates an improving trend. Elementary Mathematics (7813), with 444 examinees, presents the lowest pass rates among all Elementary exams at 56.90% for WV and 71.14% for WVU, with both showing declining trends. Disaggregating the data by gender was not done due to small cell sizes for male candidates in the EPP's elementary program so we felt that overall scores showed us more trend data to base decisions on.

Key findings from the data reveal that all six Elementary Education Praxis II exams have declining pass rates for WV candidates, and five of six show declining rates for WVU candidates. WVU candidates consistently outperform the state average across all Elementary Education exams, with the performance gap ranging from 8.86% to 21.90%. Mathematics exams, particularly test code 7813, show the lowest pass rates among all Elementary Education tests, suggesting this content area presents the greatest challenge for teacher candidates. Elementary Science (7815) stands as the only exam showing any improvement trend, and this improvement is limited to WVU candidates.

The analysis also identifies significant performance differences between different test codes for the same subject (e.g., Mathematics 5003 vs. 7813), suggesting that newer test versions may be more challenging. The consistent decline across nearly all Elementary Education Praxis II exams indicates a systemic issue affecting teacher preparation throughout West Virginia. While WVU maintains higher pass rates than the state average, its steeper rate of decline is concerning. Despite these challenges, WVU's Elementary Education program significantly outperforms the state average, suggesting that its preparation methods could serve as a model for other institutions. The isolated improvement in Elementary Science (7815) at WVU also warrants investigation to identify successful instructional strategies that could be applied to other content areas. Tables 7-14 illustrates elementary candidates scores on all Praxis II exams related to obtaining certification in elementary education (K-6).

Table 7. Praxis II: Elementary Reading & Language Arts (5002) Scores

Elementary Reading & Language Arts (5002)
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Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	157	439	60	369	49	168	169	312	46	85	94
Female		397	55	55	44	164	164	286	42	71	76
Male		43	5	34	5	164	171	30	5	70	100
1st Attempt		344	48	302	39	168	169	254	36	84	92
2 <sup>nd</sup> Attempt		62	10	45	9	165	169	40	9	89	100
2022-2023	157	308	66	255	49	166	167	209	43	82	88
Female		286	63	63	46	163	162	193	40	67	63
Male		28	2	21	2	162	*	20	0	71	*
1st Attempt		234	46	201	36	167	168	168	32	84	89
2 <sup>nd</sup> Attempt		54	13	41	9	161	164	29	7	71	78
2023-2024	157	279	51	254	48	163	164	193	39	69	77
Female		256	50	50	47	163	164	174	38	68	76
Male		23	1	23	1	170	*	19	0	83	*
1st Attempt		231	47	212	44	165	165	170	36	74	77
2 <sup>nd</sup> Attempt		37	4	31	4	155	*	16	*	43	*

(\* less than 5 candidates)

Table 8. Praxis II: Elementary Reading & Language Arts (7812) Scores

Elementary Reading & Language Arts (7812)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	161	53	0	46	0	163	*	32	*	60	*
Female		50	0	44	0	162	*	30	*	60	*
Male		3	0	2	0	*	*	0	*	*	*
1st Attempt		46	0	40	0	163	*	28	*	61	*
2 <sup>nd</sup> Attempt		6	0	5	0	158	*	3	*	50	*
2022-2023	161	191	50	151	39	163	165	114	33	60	66
Female		181	49	142	38	162	165	107	32	59	65
Male		10	0	9	1	166	*	7	*	70	*
1st Attempt		145	0	117	31	163	165	91	26	63	67
2 <sup>nd</sup> Attempt		31	7	25	6	163	168	18	5	58	71
2023-2024	161	140	13	115	11	161	160	72	7	51	54
Female		135	13	110	11	161	160	71	7	53	54
Male		5	0	5	0	148	*	1	*	20	*
1st Attempt		107	0	87	8	161	160	58	5	54	50
2 <sup>nd</sup> Attempt		27	3	23	3	151	*	14	*	52	*

(\* less than 5 candidates)

Table 9. Praxis II: Elementary Math (5003)

Elementary Math (5003)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	157	449	57	364	46	170	179	294	63	81	95
Female		416	52	334	41	169	178	267	58	80	98
Male		33	5	30	5	176	184	27	5	90	100
1st Attempt		332	46	291	38	171	181	238	37	82	97
2 <sup>nd</sup> Attempt		66	9	40	6	163	172	30	6	75	100
2022-2023	157	327	57	279	47	168	177	210	46	75	98
Female		299	50	256	44	167	177	192	43	75	98
Male		26	6	21	2	174	*	16	*	76	*
1st Attempt		237	47	211	41	170	178	165	40	78	98
2 <sup>nd</sup> Attempt		53	6	39	4	161	*	28	*	72	*
2023-2024	157	295	52	257	49	169	174	193	42	75	86
Female		270	51	238	48	169	174	176	43	74	98
Male		25	1	19	1	175	*	17	*	90	*
1st Attempt		230	48	209	46	169	174	161	39	70	81
2 <sup>nd</sup> Attempt		44	3	32	2	155	*	22	*	50	*

(\* less than 5 candidates)

Table 10. Praxis II: Elementary Math (7813) Scores

Elementary Math (7813)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	150	49	0	43	0	151	*	31	*	63	*
Female		43	0	40	0	153	29	29	*	66	*
Male		5	0	3	0	*	*	0	*	*	*
1st Attempt		43	0	39	0	153	*	28	*	65	*
2 <sup>nd</sup> Attempt		4	0	3	0	*	*	0	*	*	*
2022-2023	150	195	41	159	36	153	161	112	31	57	76
Female		184	39	150	35	152	103	103	30	56	77
Male		11	2	9	1	160	*	9	*	82	*
1st Attempt		150	36	126	33	154	162	91	29	61	81
2 <sup>nd</sup> Attempt		30	3	21	1	150	*	13	*	43	*
2023-2024	150	150	9	127	9	150	159	75	6	50	67
Female		140	9	118	9	151	73	73	6	52	67
Male		10	0	9	0	142	*	2	*	*	*
1st Attempt		113	8	96	8	151	160	57	5	50	63
2 <sup>nd</sup> Attempt		27	1	22	1	148*	*	12	*	44	*

(\* less than 5 candidates)

Table 11. Praxis II: Elementary Social Studies (5004) Scores

Elementary Social Studies (5004)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	155	554	70	377	51	160	163	273	43	72	84
Female		513	65	343	46	154	158	240	38	47	58
Male		41	5	34	5	167	167	33	5	80	100
1st Attempt		317	47	263	36	161	165	189	32	72	89
2 <sup>nd</sup> Attempt		94	14	50	9	160	163	38	9	76	100
2022-2023	155	331	85	253	53	160	162	160	39	63	74
Female		316	82	238	50	155	155	146	36	46	44
Male		21	2	20	2	175	*	18	*	86	*
1st Attempt		219	46	180	30	162	165	120	23	67	76
2 <sup>nd</sup> Attempt		67	20	43	11	155	161	24	9	56	82
2023-2024	155	276	68	235	55	155	158	140	40	51	59
Female		259	67	219	54	154	158	128	39	49	58
Male		17	1	16	1	172	*	12	*	71	*
1st Attempt		201	48	171	38	157	156	106	26	53	54
2 <sup>nd</sup> Attempt		46	12	40	10	152	161	20	9	43	75

(\* less than 5 candidates)

Table 12. Praxis II: Elementary Social Studies (7815) Scores

Elementary Social Studies (7815)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	154	44	*	43	*	169	*	38	*	86	*
Female		76	57	65	46	165	165	7	*	78	*
Male		3	0	2	3	*	*	*	*	*	*
1st Attempt		43	*	42	*	169	*	38	*	88	*
2 <sup>nd</sup> Attempt		1	*	1	*	*	*	*	*	*	*
2022-2023	154	191	42	180	41	168	171	156	38	82	90
Female		256	12	197	12	162	170	145	10	57	83
Male		14	1	8	1	162	*	6	*	43	*
1st Attempt		175	41	167	40	168	171	146	37	83	90
2 <sup>nd</sup> Attempt		12	1	10	1	158	*	7	*	58	*
2023-2024	154	143	13	136	10	168	169	115	9	80	69
Female		190	12	158	12	166	170	107	10	68	83
Male		9	0	9	0	160	*	7	*	78	*
1st Attempt		130	10	125	7	169	173	108	7	83	70
2 <sup>nd</sup> Attempt		12	2	10	2	155	*	6	*	50	*

(\* less than 5 candidates)

Table 13. Praxis II: Elementary Science (5005) Scores

Elementary Science (5005)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	159	484	77	362	51	167	171	286	46	79	90
Female		446	72	329	46	161	163	259	41	58	57
Male		38	5	33	5	169	176	27	5	71	100
1st Attempt		320	46	267	29	167	169	212	24	79	83
2 <sup>nd</sup> Attempt		81	15	49	7	166	168	41	7	84	100
2022-2023	159	317	73	253	50	166	167	192	41	76	82
Female		297	68	239	47	161	162	179	38	60	59
Male		30	4	22	2	168	*	20	*	67	*
1st Attempt		224	12	187	11	167	165	143	9	76	73
2 <sup>nd</sup> Attempt		64	21	45	16	163	166	33	13	73	81
2023-2024	159	258	55	224	47	162	165	159	39	62	71
Female		244	54	210	46	162	165	148	38	61	70
Male		14	1	14	1	177	*	11	*	79	*
1st Attempt		207	45	178	40	164	166	130	33	64	73
2 <sup>nd</sup> Attempt		39	7	33	5	156	158	21	4	54	57

(\* less than 5 candidates)

Table 14. Praxis II: Elementary Science (7814) Scores

Elementary Science (7814)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	161	79	0	67	0	165	*	54	*	68	*
Female		137	0	40	0	168	*	35	*	81	*
Male		3	0	3	0	*	*	0	*	*	*
1st Attempt		67	0	56	0	166	*	47	*	70	*
2 <sup>nd</sup> Attempt		11	0	10	0	161	*	7	*	64	*
2022-2023	161	270	58	205	47	162	165	151	39	56	67
Female		182	41	171	40	167	171	147	37	81	90
Male		9	1	9	1	175	*	9	*	100	*
1st Attempt		198	47	157	39	163	166	119	32	60	68
2 <sup>nd</sup> Attempt		44	7	26	4	158	*	41	*	41	*
2023-2024	161	202	12	167	12	163	170	114	10	56	83
Female		137	13	130	10	169	169	111	9	85	69
Male		6	0	6	0	162	*	4	*	67	*
1st Attempt		148	11	124	11	165	171	92	9	62	82
2 <sup>nd</sup> Attempt		39	1	31	1	159	*	19	*	49	*

(\* less than 5 candidates)

## Section VII. Praxis II: English

The English Language Arts Praxis II exam (5038) demonstrates notable performance patterns among West Virginia (WV) candidates and specifically those from West Virginia University (WVU) over the three-year period from 2021 to 2024. An analysis of the data reveals that English Language Arts candidates generally achieve strong results compared to other subject areas, with WV candidates attaining an average pass rate of 80.16% across the three academic years, while WVU candidates performed even better with an 88.14% average pass rate. This 8% advantage for WVU candidates suggests more effective preparation at the university level compared to the broader state average, despite the exam's relatively high passing threshold of 167-168 points. Disaggregating the data by gender was not done due to small cell sizes so we felt that overall scores showed us more trend data to base decisions on.

Unlike many other subject areas that demonstrate consistent downward trends, the English Language Arts results present a more variable pattern across the three years. In 2021-2022, WV and WVU candidates performed nearly identically with pass rates of 77.68% and 76.92% respectively. The following year, 2022-2023, both groups showed significant improvement, with WV candidates rising to 87.1% and WVU candidates achieving a perfect 100% pass rate. By 2023-2024, both groups experienced a decline, with WV dropping to 75.71% and WVU to 87.5%. Despite this fluctuation, WVU's overall trajectory shows improvement from the first to the third year, contrasting with the declining trends seen in most other subject areas.

When compared to other disciplines, English Language Arts consistently outperforms the average pass rates across subjects. In 2021-2022, WV English candidates outperformed other subject areas by 4.46%, while WVU English candidates underperformed their cross-discipline peers by 5.06%. However, this changed dramatically in 2022-2023, when WV English candidates exceeded the average by 21.14% and WVU by 23.50%. This strong performance continued in 2023-2024, with WV outperforming by 15.69% and WVU by 16.64%. These comparisons clearly establish the English Language Arts program at WVU as one of the stronger areas in teacher preparation across West Virginia.

First-attempt performance data further reinforces the strength of English Language Arts preparation. WV candidates achieved a first attempt pass rate of 83.07%, which exceeds their overall pass rate of 80.16%. Similarly, WVU candidates reached a 90.47% first attempt pass rate compared to their 88.14% overall rate. These higher first-attempt scores indicate strong initial preparation, suggesting that most candidates who need to retake the exam are successful on subsequent attempts, though they slightly lower the overall average. Mean scores across all years consistently exceed the passing threshold by a comfortable margin, with WV candidates scoring 6-9 points above passing and WVU candidates 6-10 points above passing.

A concerning trend emerges in the sample sizes, which show a consistent pattern of decline in the number of test-takers. From 2021-2022 to 2023-2024, WV exams decreased from 147 to 70 (a 52% reduction), while WVU exams fell from 16 to 8 (a 50% reduction). This substantial decline potentially indicates decreasing enrollment in English education programs, which could eventually contribute to teacher shortages in this subject area despite the strong performance of those who do pursue certification.

In conclusion, the English Language Arts Praxis II exam results demonstrate a subject area that is performing well relative to other disciplines, particularly at WVU. While the declining number of candidates raises concerns about the teacher pipeline, those pursuing English education certification are generally well-prepared and successful. The contrast between English's improving trends at WVU and the declining patterns seen in many other subject areas suggests there may be effective instructional practices in WVU's English education program that could potentially be applied to strengthen performance in other subject areas across the state. Table 15 shows candidates scores on the English Language Arts Praxis II.

Table 15. Praxis II: English (5038) Scores

English (5038)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	167	147	16	112	13	173	176	87	10	78	77
Female		125	14	95	12	169	173	74	10	59	71
Male		22	2	17	1	170	*	13	*	59	*
1st Attempt		84	6	71	6	177	177	64	6	90	100
2 <sup>nd</sup> Attempt		18	1	9	*	169	*	6	*	67	*
2022-2023	167	126	6	93	6	176	177	81	6	87	100
Female		105	4	76	4	172	*	64	*	61	*
Male		28	2	20	2	172	*	19	*	68	*
1st Attempt		28	7	26	7	172	175	20	6	77	86
2 <sup>nd</sup> Attempt		22	*	12	*	166	*	8	*	36	*
2023-2024	167	70	8	63	7	172	174	53	7	76	88
Female		58	4	54	4	172	*	45	*	78	*
Male		11	4	8	3	170	*	7	*	64	*

1st Attempt		56	7	51	6	173	175	46	6	82	86
2 <sup>nd</sup> Attempt		8	1	7	1	168	*	8	*	50	*

(\* less than 5 candidates)

## Section VIII. Praxis II: Math

The Mathematics Praxis II examination (5165) reveals concerning trends and significant challenges in mathematics teacher preparation across West Virginia from 2021 to 2024. West Virginia candidates demonstrate notably lower pass rates in mathematics compared to other subject areas, with an average pass rate of just 48.71% over the three-year period, representing a significant underperformance of nearly 19% compared to other disciplines. The total pass rate when calculated across all 161 WV exams drops even lower to 40.99%, indicating that many candidates require multiple attempts to achieve certification. For West Virginia University specifically, the sample size is extremely small with only 12 total examinations over three years, and all results are marked with asterisks (\*) indicating insufficient data for reliable analysis, which prevents meaningful conclusion-drawing about WVU's comparative performance in secondary mathematics. Thus, no disaggregation by gender.

A clear and concerning downward trend is evident in mathematics performance over the three-year period. In 2021-2022, West Virginia candidates achieved a pass rate of 60%, which was already 13.92% below other subject areas that year. This declined sharply to 44.12% in 2022-2023 (23.30% below other subject areas) and fell slightly further to 42% in 2023-2024 (19.68% below other subject areas). This represents an 18 percentage point decline over just three years, more severe than the general downward trend observed across other subject areas. The mean scores follow a similar pattern, falling from 161.32 in 2021-2022 to 153.58 in 2023-2024, leaving very little margin above the passing threshold of 159.

First attempt pass rates for West Virginia candidates average 55.26%, which is 6.55% higher than overall pass rates, suggesting that initial preparation may be somewhat stronger than the overall figures indicate, and that candidates who fail on their first attempt have lower success rates on subsequent attempts. The first attempt rates also show a concerning decline from 61.9% in 2021-2022 to 52.17% in 2022-2023, paralleling the decline in overall performance. This reduction in both initial and subsequent pass rates points to potentially systemic issues in mathematics teacher preparation during this period.

A striking contrast emerges when comparing secondary mathematics performance to elementary mathematics certification. Elementary Mathematics (5003) shows West Virginia pass rates ranging from 65.42% to 75.93%, while Elementary Mathematics (7813) demonstrates pass rates from 50% to 63.27%. Both elementary mathematics exams maintain consistently higher pass rates than the secondary mathematics exam, with an average difference of 15.59%. This substantial gap suggests that the content knowledge requirements for secondary mathematics certification present a much greater challenge for candidates than elementary-level mathematics content, likely reflecting the more advanced and specialized nature of secondary mathematics.

The consistently low and declining pass rates in secondary mathematics suggest a potential bottleneck in the teacher preparation pipeline, which could exacerbate existing mathematics teacher shortages. The significant difference between elementary and secondary mathematics performance indicates that deeper content knowledge requirements at the secondary level may be a substantial barrier for many candidates. The declining trend suggests a potential misalignment between teacher preparation programs and the Praxis examination content, particularly as scores have declined



over time. Additionally, the gap between first attempt and overall pass rates suggests that current remediation strategies may not be sufficiently effective for candidates who fail their initial attempt.

In conclusion, the Mathematics Praxis II examination data reveals a subject area in crisis, with pass rates significantly below other disciplines and showing a concerning downward trajectory. The small number of candidates, coupled with low pass rates, raises serious concerns about the future supply of qualified mathematics teachers in West Virginia. This analysis suggests an urgent need for intervention in mathematics teacher preparation programs to address content knowledge gaps and improve alignment with certification requirements. Without such intervention, the state may face increasing difficulty in staffing mathematics classrooms with properly certified educators. Table 16 shows candidates scores on the Math Praxis II.

Table 16. Praxis II: Math (5165) Scores

Math (5165)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	159	70	5	50	3	161	176	30	7	60	100
Female		28	7	28	7	162	176	17	7	61	100
Male		9	0	8	0	157	*	5	*	56	*
1st Attempt		48	3	42	2	*	*	26	*	62	*
2 <sup>nd</sup> Attempt		11	0	4	*	145	*	0	*	*	*
2022-2023	159	41	4	34	4	153	*	15	*	44	*
Female		46	4	31	2	150	*	17	7	37	*
Male		24	1	19	1	158	*	13	*	54	*
1st Attempt		25	4	23	4	156	*	12	*	52	*
2 <sup>nd</sup> Attempt		9	1	8	*	146	*	2	*	25	*
2023-2024	159	50	3	37	2	154	*	21	*	42	*
Female		32	3	24	2	153	*	13	*	41	*
Male		18	0	13	0	155	*	8	*	44	*
1st Attempt		29	2	22	1	159	*	15	*	52	*
2 <sup>nd</sup> Attempt		13	1	8	1	146	*	4	*	31	*

(\* less than 5 candidates)

## Section IX. Praxis II: Physical Education

The analysis of Physical Education Praxis II examination data spanning from 2021 to 2024 reveals several significant trends and patterns. This comprehensive examination of test performance encompasses both West Virginia (WV) overall and West Virginia University (WVU) specific results, providing valuable insights into first-time and repeat test-taker performance during this three-year period.

Pass rates for the Physical Education Praxis II exam have shown a concerning downward trajectory over the analyzed timeframe. The WV overall pass rate has experienced a substantial decline, dropping from 86.96% in the 2021-2022 academic year to 60.98% in 2023-2024, representing a decrease of nearly 26 percentage points. This decline is even more pronounced for WVU specifically, where the pass rate fell dramatically from 80.00% in 2021-2022 to just 40.91% in 2023-2024, constituting a decline of approximately 39 percentage points. When averaged across the entire

three-year period, WV maintained a 75.46% overall pass rate while WVU averaged 67.75%, indicating that WV generally outperformed WVU when considering all test administrations collectively.

First-time test-takers consistently demonstrated higher success rates compared to those retaking the exam. The data reveals that WV first attempt pass rates decreased from a high of 91.67% in 2021-2022 to 75.00% in 2023-2024, marking a decline of 16.67 percentage points. WVU first-time test-takers exhibited more variability, achieving their highest success rate of 92.31% in 2022-2023 before dropping sharply to 60.00% in 2023-2024. Despite this volatility, first attempt pass rates averaged 82.39% for WV and 78.98% for WVU across the three years, substantially exceeding the overall and second attempt averages in both cases.

Students retaking the Praxis II exam demonstrated consistently lower pass rates compared to first-time test-takers. The WV second attempt pass rates fluctuated over the three-year period, starting at 66.67% in 2021-2022, rising to 80.00% in 2022-2023, then declining to 62.50% in 2023-2024. This represents an overall decline of 4.17 percentage points from the beginning to end of the analysis period. The three-year average for WV second attempts was 69.72%, approximately 12.66 percentage points lower than the first attempt average. Notably, WVU second attempt data was insufficient for meaningful analysis, as indicated by asterisks in the data, suggesting very small sample sizes that preclude statistical reporting. Examination of mean scores provides further insight into student performance relative to the passing threshold of 150. The WV overall mean scores showed a gradual decline from 154.43 in 2021-2022 to 151.83 in 2023-2024, while remaining above the passing threshold throughout the period. WVU mean scores were more variable, peaking at 157.12 in 2022-2023 before dropping below the passing threshold to 149.32 in 2023-2024. This decline in mean scores aligns with the observed drop in pass rates during the same period.

The difference between first and second attempt mean scores was particularly revealing. First attempt mean scores averaged 154.81 for WV and 155.15 for WVU, both comfortably above the passing threshold. In contrast, second attempt mean scores averaged 149.69 for WV, falling below the minimum passing score of 150. This indicates that many second-time test-takers are approaching but not quite reaching the necessary threshold for success, suggesting a need for targeted interventions for this group. The direct comparison between first and second attempts reveals a consistent pattern where first-time test-takers significantly outperform those retaking the exam. WV first attempt test-takers achieved an average pass rate of 82.39% compared to 69.72% for second attempts, representing a substantial difference of 12.66 percentage points. This pattern is reinforced by the mean score data, with first attempts averaging 5.12 points higher than second attempts (154.81 vs. 149.69). These findings suggest that students who do not pass on their first attempt face considerable challenges in improving their performance sufficiently to succeed on subsequent attempts.

The data analysis identified several noteworthy performance extremes. The highest observed pass rate was 92.31% for WVU first-time test-takers in 2022-2023, while the lowest was 40.91% for WVU overall in 2023-2024. This considerable range highlights the volatility in performance, particularly for WVU, and underscores the concerning nature of the most recent year's results. For WV, the highest pass rate was 91.67% for first-time test-takers in 2021-2022, while the lowest was 60.98% overall in 2023-2024, again emphasizing the general downward trend.

The consistent decline in pass rates over the three-year period warrants serious attention and investigation. The particularly sharp drop in 2023-2024 suggests potential systemic issues that may include changes in exam content, curriculum alignment challenges, shifts in student preparation approaches, or possibly lingering effects from educational disruptions. A comprehensive review of program curriculum in relation to current Praxis II content specifications would be prudent to ensure appropriate alignment. The significant performance gap between first and second attempts points to a need for specialized support mechanisms for students who must retake the exam. Targeted interventions focusing on specific content

weaknesses, test-taking strategies, and addressing test anxiety could help narrow this gap. Implementing diagnostic assessments to identify at-risk students before their first attempt could also prove beneficial in improving overall success rates.

Additionally, the declining mean scores suggest that many students, particularly second-time test-takers, are falling just short of the passing threshold. Providing additional structured review sessions, practice tests, and personalized feedback might help these students bridge the narrow gap to achieve passing scores. The particularly concerning performance decline in the most recent academic year (2023-2024) merits immediate attention to determine whether this represents an anomaly or the beginning of a more problematic trend.

This analysis of Physical Education Praxis II exam data from 2021 to 2024 reveals a clear pattern of declining performance, with particularly troubling results in the most recent academic year. The consistent performance gap between first and second attempts highlights the need for targeted interventions for repeat test-takers. Moving forward, ongoing data collection and analysis, particularly at the content area level, would provide even more valuable insights to guide program improvements and student support initiatives. Addressing these challenges promptly is essential to ensure future physical education candidates are well-prepared to meet certification requirements. Table 17 shows candidates scores on the Physical Education Praxis II.

Table 17. Praxis II: Physical Education (5091) Scores

Physical Education (5091)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	150	57	17	46	15	154	154	40	12	87	80
Female		17	5	10	5	151	155	13	4	76	80
Male		40	12	32	10	152	152	27	8	68	67
1st Attempt		44	15	36	13	156	155	33	11	92	85
2 <sup>nd</sup> Attempt		9	4	6	1	150	*	4	*	67	*
2022-2023	150	64	23	51	17	154	157	40	14	78	82
Female		29	6	25	5	153	159	21	5	72	83
Male		35	17	26	12	151	152	19	9	54	53
1st Attempt		48	15	41	13	155	160	33	12	80	92
2 <sup>nd</sup> Attempt		10	3	5	2	150	*	4	0	80	*
2023-2024	150	41	22	29	12	152	149	25	9	61	41
Female		13	5	10	3	154	*	8	*	62	*
Male		28	17	19	9	152	149	17	7	61	41
1st Attempt		24	10	19	6	154	151	18	6	75	60
2 <sup>nd</sup> Attempt		9	4	6	3	149	*	5	*	63	*

(\* less than 5 candidates)

## Section X. Praxis II: Science

The analysis of the Science Praxis II exam data reveals several important trends and patterns across various science disciplines. Overall, West Virginia (WV) candidates achieved an average pass rate of 55.12% across all science exams, while West Virginia University (WVU) candidates achieved a slightly lower average of 53.14%. However, this modest difference masks significant variation between specific exams and years.

Biology exams show the most complete dataset with substantial numbers of test-takers. For the Biology Praxis (5235), WVU candidates outperformed the state average with a 58.88% pass rate compared to WV's 55.23%. However, this advantage was not consistent across years, as WVU's performance declined significantly from 73.33% in 2021-2022 to 44.44% in 2022-2023, while WV's decline was less severe (60.47% to 50%). During this time the WVDE was transitioning to Biology Praxis (5236). We believe the change decline in passing rate was due to candidates taking 5236 instead of 5235. Tables 18 and 19 illustrates scores achieved by candidates across both Biology versions.

The Chemistry Praxis (5245) presents a notable exception to the typical pattern, as WV candidates significantly outperformed WVU candidates (55.56% vs. 41.67%), representing a substantial 13.89 percentage point advantage. Once again, the WVDE was transitioning to Chemistry Praxis (5246) and some of the candidates chose that version. We as an EPP also had low numbers if candidates taking this exam thus, resulting in a skewed analysis. Tables 20 and 21 illustrates scores achieved by candidates across both Chemistry versions.

Physics exams show very limited data, with only 7 WV and 3 WVU candidates taking the Physics Praxis (5265) during the reporting period, and minimal data for the Physics 5266 exam. The small sample sizes make it difficult to draw reliable conclusions, though WV's 57.14% pass rate for Physics is slightly higher than the science average. Tables 22 and 23 illustrates scores achieved by candidates across both Physics versions.

Table 18 Praxis II: Biology (5235) Scores

Biology (5235)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	152	43	15	35	13	154	157	26	11	60	73
Female		20	11	18	9	157	157	14	8	70	73
Male		23	4	17	4	152	*	12	*	52	*
1st Attempt		34	13	32	12	157	160	25	11	74	85
2 <sup>nd</sup> Attempt		2	1	0	0	*	*	*	*	*	*
2022-2023	152	28	9	21	6	154	151	14	4	50	44
Female		15	9	11	6	154	151	7	4	47	44
Male		13	0	10	0	153	*	7	*	54	*
1st Attempt		17	5	16	4	162	*	13	*	76	*
2 <sup>nd</sup> Attempt		3	1	0	0	*	*	*	*	*	*

(\* less than 5 candidates)

Table 19. Praxis II: Biology (5236) Scores

Biology (5236)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2022-2023	154	7	4	5	2	155		4		57	
Female		7	4	5	2	155	*	4	*	57	*
Male		0	0	0	0	*	*	*	*	*	*
1st Attempt		4	2	3	1	*	*	*	*	*	*
2 <sup>nd</sup> Attempt		2	0	1	0	*	*	*	*	*	*
2023-2024	154	12	3	10	3	147		6		50	
Female		8	3	8	3	155	*	4	*	57	*
Male		4	0	2	0	*	*	*	*	*	*
1st Attempt		10	3	9	3	153	*	6	*	60	*
2 <sup>nd</sup> Attempt		1	1	0	0	*	*	*	*	*	*

(\* less than 5 candidates)

Table 20. Praxis II: Chemistry (5245) Scores

Chemistry (5245)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	157	18	12	14	9	156	154	10	5	56	42
Female		15	0	11	0	155	*	7	*	47	*
Male		3	0	3	0	*	*	*	*	*	*
1st Attempt		11	9	9	7	155	155	5	4	42	44
2 <sup>nd</sup> Attempt		3	2	2	1	*	*	*	*	*	*

(\* less than 5 candidates)

Table 21. Praxis II: Chemistry (5246) Scores

Chemistry (5246)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2022-2023	146	3	1	3	1	*	*	*	*	*	*
Female		2	1	2	1	*	*	*	*	*	*
Male		1	0	1	0	*	*	*	*	*	*
1st Attempt		3	1	3	1	*	*	*	*	*	*
2 <sup>nd</sup> Attempt		0	0	0	0	*	*	*	*	*	*

(\* less than 5 candidates)

Table 22. Praxis II: Physics (5265) Scores

Physics (5265)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	126	7	3	7	3	131	*	4	*	57	*
Female		2	1	2	1	*	*	*	*	*	*
Male		5	2	5	2	131	*	3	*	60	*
1st Attempt		6	3	6	3	134	*	4	*	66	*
2 <sup>nd</sup> Attempt		0	0	0	0	*	*	*	*	*	*

(\* less than 5 candidates)

Table 23. Praxis II: Physics (5266) Scores

Physics (5266)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2023-2024	145	1	1	1	1	*	*	*	*	*	*
1st Attempt		1	1	1	1	*	*	*	*	*	*
2 <sup>nd</sup> Attempt		0	0	0	0	*	*	*	*	*	*

(\* less than 5 candidates)

## Section XI. Praxis II: Social Studies

The Social Studies Praxis II exam (5081) demonstrates impressively high pass rates across the analyzed timeframe. The average pass rate for WV examinees stands at 86.37%, reflecting strong preparation and content mastery. Even more remarkable is the WVU average pass rate of 98.04%, indicating near-perfect performance from this institution's candidates. WV pass rates showed a positive trajectory over the three-year period, increasing from 82.54% in 2020-2021 to 87.88% in 2022-2023, representing a growth of 5.34 percentage points. WVU achieved perfect 100% pass rates in both 2020-2021 and 2022-2023, demonstrating exceptional preparation of its candidates in most years. The mean scores for both populations exceed the passing threshold, with WV examinees averaging 160.34 and WVU examinees averaging 161.94, although both remain below the passing score of 167, suggesting that while most students pass, they typically do not exceed the threshold by a large margin.

First-time test-takers consistently demonstrated strong performance, though with some concerning trends emerging over time. The WV average first attempt pass rate of 87.94% indicates that many initial test-takers successfully meet the certification requirements. Similarly, WVU first-time test-takers achieved an impressive 90.79% average pass rate. However, a troubling pattern emerges when examining the trend over the three-year period. WV first attempt pass rates declined steadily from 91.86% in 2020-2021 to 83.72% in 2022-2023, representing a substantial drop of 8.14 percentage points. More dramatically, WVU first attempt pass rates plummeted in the final year of analysis, falling to 78.26% in 2022-2023 after achieving a perfect 100% success rate in 2021-2022. This significant decline suggests a potential shift in preparation, curriculum alignment, or student readiness that warrants further investigation. Mean scores for first attempts averaged 162.74 for WV examinees, higher than the overall average but still below the passing threshold of 167, indicating that even successful first-time test-takers typically pass by a relatively narrow margin.

Students retaking the Social Studies Praxis II exam faced more substantial challenges compared to their first-attempt counterparts. The average WV second attempt pass rate of 81.30%, while still relatively high, falls 6.64 percentage points below the first attempt rate. Perhaps most concerning is the mean score for second attempts, which averaged just 151.53, significantly lower than first attempts and substantially below the passing threshold of 167. This wide gap suggests that students who fail their first attempt often struggle to make sufficient improvements for their second try. WV second attempt pass rates showed volatility, reaching a high of 88.89% in 2021-2022 before declining to 75.00% in 2022-2023. Limited WVU data for second attempts prevents meaningful analysis of this population, suggesting very small sample sizes that preclude statistical reporting. The consistently lower performance of second-attempt test-takers highlights a need for targeted remediation and support for this vulnerable population.

The examination of test volume reveals changing patterns that merit attention. The overall number of WV exams decreased consistently each year, dropping from 158 in 2020-2021 to 118 in 2022-2023. This declining trend could indicate reduced program enrollment, changing certification pathways, or other systemic changes affecting teacher preparation. Conversely, WVU exam volume fluctuated over the period, reaching its highest number (31) in 2022-2023, suggesting potential growth in this program. First attempt volume for WV remained stable in the first two years (94 and 95) but dropped sharply to 47 in 2022-2023, a dramatic reduction that coincides with the decline in pass rates. Similarly, second attempt volume for WV decreased from 21 to 13 over the three years. These changing patterns in test volume may reflect broader trends in teacher preparation, changes in certification requirements, or shifting student demographics that could influence performance outcomes.

Despite generally strong performance, several concerning trends emerge from the data that warrant careful consideration. The downward trajectory in first attempt pass rates for both WV and WVU represents a significant shift that could have implications for teacher preparation programs. The 8.14% decrease for WV and particularly the 15.86% decrease for WVU from 2020-2021 to 2022-2023 suggest potential issues with curriculum alignment, preparation strategies, or student readiness. The substantial gap between first and second attempt performance indicates that current remediation approaches may be insufficient to address the needs of students who fail their initial attempt. The significantly lower mean scores for second attempts compared to first attempts (151.53 vs. 162.74) suggest that students who fail their first attempt face substantial barriers to improvement. Additionally, the consistent decline in WV exam volume raises questions about program enrollment, certification pathways, or other systemic factors affecting the teacher preparation pipeline.

Several targeted interventions could address the identified concerns and strengthen Social Studies teacher preparation. A comprehensive investigation into factors contributing to the declining first attempt pass rates should examine curriculum alignment, preparation resources, assessment approaches, and potential changes in student demographics or preparation. The dramatic drop in WVU first attempt pass rates in 2022-2023 (from 100% to 78.26%) deserves particular scrutiny to identify any programmatic changes or issues. Enhanced support systems for students preparing for second attempts should be developed, addressing the significant gap between their average scores and the passing threshold through targeted content review, test-taking strategies, and personalized feedback. A thorough review of content alignment between program curriculum and exam content requirements could identify areas where preparation falls short, particularly focusing on topics challenging for second-attempt test-takers. Implementation of early identification systems for at-risk students before their first attempt could allow for proactive intervention through diagnostic assessments aligned with exam content. Monitoring volume trends and investigating the declining number of overall WV exams would help determine if this represents a program enrollment issue, changing certification patterns, or other factors requiring attention. Finally, developing threshold-focused preparation could help students bridge the gap between current performance and passing requirements, especially for those approaching but not quite reaching the passing score.

The Social Studies Praxis II exam results demonstrate generally strong performance overall, particularly for first-time test-takers, suggesting effective preparation programs across West Virginia. However, the emerging downward trends in pass rates and the substantial performance gaps between first and second attempts highlight areas requiring attention and intervention. By addressing these specific concerns through targeted improvements in curriculum, preparation strategies, and support systems, teacher preparation programs can ensure continued success and further strengthen the pipeline of qualified Social Studies educators. The declining test volume also warrants careful monitoring to understand broader trends in teacher preparation and certification. Through thoughtful analysis and responsive programming, the identified challenges can be addressed to maintain and enhance the strong foundation already established in Social Studies teacher preparation. Table 24 shows candidates scores on the Social Studies (5081) Praxis II.

Table 24. Praxis II: Social Studies (5081) Scores

Social Studies (5081)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	167	158	23	126	22	160	167	104	22	83	100
1st Attempt		94	17	86	17	163	160	79	16	92	94
2 <sup>nd</sup> Attempt		21	2	10	2	151	*	8	*	80	*
2022-2023	167	135	17	106	17	160	160	94	16	89	94
1st Attempt		95	25	85	22	162	159	75	22	88	100
2 <sup>nd</sup> Attempt		13	0	9	0	152	*	8	*	89	*
2023-2024	167	118	31	99	26	161	160	87	26	88	100
1st Attempt		47	24	43	23	163	162	36	18	84	79
2 <sup>nd</sup> Attempt		13	2	8	2	152	*	6	*	75	*

(\* less than 5 candidates)

## Section XII: Praxis II: Literacy (Advanced)

The Praxis II Literacy exam (5302) results from 2021 to 2024 demonstrate significant improvement in candidate performance across West Virginia. Over this three-year period, the overall pass rates for West Virginia candidates increased markedly from 43% in 2021-2022 to 64% in 2023-2024, reflecting a substantial 21 percentage point improvement. This positive trajectory suggests that preparation programs and educational initiatives within the state have been increasingly effective in preparing candidates for this critical certification assessment.

Mean scores on the Literacy exam have shown consistent growth, rising from 163 in 2021-2022 to 166 in 2023-2024, with scores now exceeding the required passing threshold of 165. This upward trend in average performance indicates that candidates are demonstrating stronger literacy content knowledge and pedagogical skills. The improvement in first-attempt pass rates is particularly noteworthy, increasing from 54% to 64% statewide over the three-year period, which suggests enhanced initial preparation for the exam.

West Virginia University candidates have maintained relatively strong performance throughout this period, with pass rates consistently at or above 60%. WVU's first-attempt pass rates have improved from 63% to 68%, and their mean scores have remained at or above the passing threshold across



all three years. Interestingly, while WVU candidates initially outperformed the broader state statistics by a significant margin, the gap has narrowed as statewide performance has improved, indicating more consistent preparation across various preparation programs throughout West Virginia.

The data reveals changes in examination volume as well, with total statewide exams decreasing from 53 to 41, while WVU's proportion of total candidates has increased substantially from approximately 30% to 68% of the state total. This shift may reflect changing enrollment patterns in teacher preparation programs or indicate consolidation of preparation resources. Second-attempt pass rates have remained stable at approximately 60% for West Virginia candidates, suggesting consistent remediation effectiveness for those who initially do not meet the passing threshold.

These Praxis II results demonstrate measurable progress in preparing West Virginia's future educators with the literacy knowledge and skills necessary for effective classroom instruction. The steady improvement in performance metrics suggests that preparation programs have successfully adapted their approaches to better align with the exam's requirements while strengthening candidates' foundational understanding of literacy education principles and practices. Table 25 shows candidates scores on the Literacy (5302) Praxis II.

Table 25. Praxis II: Literacy (5302) Scores

Literacy (5302)											
Testing Year	Passing Score	Exams Taken		Number of Candidates		Mean Score		Number Passing		Percentage Passing	
		WV	WVU	WV	WVU	WV	WVU	WV	WVU	WV	WVU
2021-2022	165	71	16	53	16	163	165	30	10	43	63
1st Attempt		52	16	45	16	164	165	28	10	54	63
2 <sup>nd</sup> Attempt		8	0	4	0	*	*	*	*	*	*
2022-2023	165	80	35	56	27	165	166	45	21	56	60
1st Attempt		45	25	35	21	166	167	28	16	62	64
2 <sup>nd</sup> Attempt		15	6	10	4	165	*	9	*	60	*
2023-2024	165	44	30	41	28	166	166	28	19	64	63
1st Attempt		39	28	36	26	166	167	25	19	64	68
2 <sup>nd</sup> Attempt		5	2	5	2	165	*	3	*	60	*

(\* less than 5 candidates)