

Evidence 2023.2.1.9: PCMAS 2021-2023 Focal Group Data Analysis

Evidence Overview

In the study involving UPRM EPP completers from the 2021-2023 cohorts who participated in the 2023 focal group, we conducted an examination of various factors. Specifically, we calculated the average scores on the State teacher certification exam (PCMAS), which was found to be 109.35. This average signifies that all completers in this group passed the exam, making them eligible for licensure and teaching during the focal group meeting.

Furthermore, the UPRM EPP conducted an analysis of variance (ANOVA) to assess potential differences in PCMAS scores concerning administration year, gender, and school zone. The results of this analysis allowed the EPP to identify significant factors. Importantly, our statistical analysis, using a significance level (α) of 0.05, indicated that an individual's gender (p-value, 0.989 > 0.05) does not have a significant impact on their performance in the PCMA tests. A similar outcome was observed concerning the school's location, whether urban or rural, with a p-value of 0.715, which also exceeded the significance threshold of 0.05. When considering administration years, the p-value was determined to be 0.678, again surpassing the alpha value.

Based on these findings, the UPRM EPP concluded that there are no statistically significant differences in PCMAS scores across these three variables. Completers of the UPRM EPP performed consistently well in various administration years, regardless of their gender or the school zone where they are currently teaching. This interpretation underscores the EPP's consistent and effective preparation of teacher candidates.

CAEP Standards Alignment

Initial	Advanced
2.1	

The Evidence

This evidence presents the study of UPRM EPP completers from the 2021-2023 cohorts revealed that they consistently passed the State teacher certification exam (PCMAS), and a statistical analysis showed that gender, school location, and administration year had no significant impact on their performance, indicating the EPP's effective teacher candidate preparation.

Gender	School Zone	Concentration	PCMAS Administration Cohort	PCMAS General Score
1	1	Horticulture	2021	95
2	1	Art	2022	100
1	1	English	2022	118
1	2	Math	2021	110
1	2	Spanish	2022	107
1	1	Math	2022	112
2	1	English	2022	100
2	2	English	2021	112
2	1	Biology	2021	111
2	1	Agriculture	2021	131
1	2	Physical Education	2023	100
2	1	Spanish	2021	97
2	2	Science	2021	120
1	1	Math	2022	118
Average				109.357

Data Table.

Gender	
Male	1
Female	2

Data Table Gender Values.

School Zone	
1	Urban
2	Rural

Data Table School Zone Values.

Factor Information

Factor	Type	Levels	Values
PCMAS Administration Cohort	Fixed	3	2021, 2022, 2023
School Zone	Fixed	2	1, 2
Gender	Fixed	2	1, 2

Anova Analysis Table.

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
PCMAS Administration Cohort	2	112.74	56.371	0.41	0.678
School Zone	1	19.78	19.776	0.14	0.715
Gender	1	0.03	0.026	0.00	0.989
Error	9	1250.97	138.996		
Lack-of-Fit	3	610.97	203.655	1.91	0.229
Pure Error	6	640.00	106.667		
Total	13	1375.21			

Approved at the CEPP October 27, 2023 meeting UPRM EPP

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