

Using Multiple Measures of Demonstrating Competency for Teacher Licensure

Recommendations for the Commission on Professional
Standards in Education

Drafted by the Praxis Core Workgroup

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Praxis Core Workgroup Summary

The Office of Educator Development, Licensure, and Family Engagement (EDLiFE) contracted with WestEd to facilitate a workgroup charged with reviewing research and other jurisdictional policies on the use of multiple measures of demonstrating competency as required for teacher licensure and to address AB225 (2021) which was codified in [NRS 391.021](#). The workgroup is comprised of educators from Carson City School District, Clark County School District, Nye County School District, Washoe County School District, Nevada State College, University of Nevada Las Vegas, and iteach, as well as a State Assembly Member, representatives from the Commission on Professional Standards, the Southern Nevada Regional Professional Development Program (RPDP), and the Public Education Foundation.

In preparing these recommendations for the Commission on Professional Standards in Education (COPS), workgroup members have examined and discussed practices in other states as well as research around testing requirements for teacher licensure. The team also consulted with the Educational Testing Service (ETS) Director of Educational Partnerships to review detailed disaggregated data of Nevada's Praxis Core Examination results, compared to national results.

Current Nevada Regulation

The current regulation allows for the following options to demonstrate basic skills competency for initial teacher licensure.

1. Passing the Praxis Core Exam with a score determined by COPS. The passing scores are currently set at
 - a. Reading – 156
 - b. Writing – 162
 - c. Math – 150

COPS has the authority to set passing scores and usually sets them as recommended by the multistate review team.

2. Passing a test of basic skills tests that is determined by the Department to be equivalent to the Praxis Core Exam such as the California Basic Skills Test (CBEST)
3. Earning a master's degree and passing the Graduate Record Exam (GRE) with an average score at the time the exam was taken

(All scores must be from exams taken within five years preceding the licensure application.)

Suggestions Not Requiring Regulation Changes

After study and discussion, the workgroup proposed the following preliminary suggestions that would not require regulation changes:

SUGGESTION: Change the acceptable passing score by one standard error of measurement

(The exam must have been taken within 5 years of the candidate requesting a provision removal.)

- The standard error of measurement (SEM) represents how well the test score reflects “true ability” and is used to create confidence intervals around a passing score. Changing the acceptable passing score by 1 SEM maintains the validity and integrity of the exam rather than selecting an arbitrary number.

- Kentucky is currently operating a 1-year pilot accepting -1 SEM as its passing score. The pilot will most likely be extended another year.
- In Missouri, test takers can score within the -1 SEM range of the established qualifying score on all initial Missouri teacher certification exams, except the elementary education exam for which the Board set a -2 SEM qualifying score in April 2022.

*Overall Impact on Passing Rates**

- Reading: Setting passing rate at -1 SEM would increase the percentage of those passing from 89.59 to 92.08. (101 more educators would pass reading - assuming 1.6875 educators per month)
- Writing: Setting passing rate at -1 SEM would increase the percentage of those passing from 69.86 to 82.89. (623 more educators would pass writing - assuming 10.375 educators per month)
- Math: Setting passing rate at -1 SEM would increase the percentage of those passing from 84.97 to 88.14. (139 more educators would pass math - assuming 2.3125 educators per month)

* Based on a monthly average from 16 months of data (September 2021 through December 2022) then multiplied by 60 months allowing for exams taken within the last 5 years.

Select Impact on Passing Rates for Candidates of Color

- For Black candidates in reading, setting passing rate at -1 SEM would increase the percentage of those passing from 81.01 to 88.61.
- For American Indian/Native Alaskan candidates in writing, setting passing rate at -1 SEM would increase the percentage of those passing from 33.33 to 55.56.
- For Hispanic candidates in math, setting passing rate at -1 SEM would increase the percentage of those passing from 81.25 to 84.58.

(See tables below for full overview of impact of -1 SEM)

**ETS would automatically calculate -1 SEM scores as passing scores, which would not add time to their reporting process nor require any extra time or analysis from EDLiFE staff to review applications and process licenses.*

There is Nevada precedent for these suggested changes. The paraprofessional assessment (exam for paraprofessional certification) passing score was lowered by five points at the July 2022 State Board of Education meeting and adopted by the Legislative Commission.

SUGGESTION: Accept a composite score (combined reading, writing, and math subtest scores) with a minimum for each subtest

The ACT and SAT exams are reported as composite scores. A composite score could be considered for passing the Praxis Core with safeguards in place to ensure an acceptable minimum for each of the subtests. This option would require EDLiFE staff to manually calculate composite scores and confirm minimum acceptable scores on each subtest, which will slow down application review and processing of licenses.

North Carolina, North Dakota, and Washington, D.C. have a Praxis Core composite score option.

State	Composite	Reading	Writing	Math
North Carolina	468	156	162	150
North Dakota	466	149	153	143
Washington, D.C.	517	168	165	169

Nevada	Composite	Reading	Writing	Math
Current	None	156	162	150
-1 SEM	None	150	156	144

Either of the suggestions above—changing the acceptable cut score by -1 SEM or accepting a composite score—do not require regulation changes. Per [NAC 391.036\(a\)](#), COPS can specify the level of competence for the Praxis Core.

Suggestions Requiring Regulation Changes

The workgroup also made additional suggestions for measuring competency in lieu of the Praxis Core, or in addition to the Praxis Core, that would require regulation changes.

SUGGESTION: Allow the following as alternatives to passing the Praxis Core: obtaining a master’s degree or acceptable passing score on ACT or SAT

- ACT with a passing score of 21 – currently pending in Regulation 118-22
- SAT with a passing score of 1100 – currently pending in Regulation 118-22
- Master’s degree without GRE requirement

SUGGESTION: After the first Praxis Core attempt, accept coursework approved by the Department with a 3.0 GPA

This will require time to work with educator preparation providers to determine appropriate coursework.

SUGGESTION: Receive a Praxis Core score within -2 SEM of passing AND one additional measure

One of the following measures must be met along with -2 SEM score:

- Specified coursework approved by the Department with 3.0 GPA
- Microcredentials to demonstrate competency
- Bachelor’s degree with a GPA of 3.0

SUGGESTION: Allow for the clear out-of-state license to satisfy Nevada coursework and exam provisions

Current Nevada regulation does not allow for the reciprocity pathway if the teacher already has Nevada provisions on their Nevada license.

Data and Research

Data on Nevada Teacher Candidates from the Educational Testing Service (ETS)

The tables below indicate the current pass rate for all Nevada candidates in reading, writing, and math. The ETS data was collected between September 2021 and December 2022.

Reading

Nevada

N size = 1,086

	Current	-1 SEM	-2 SEM
Score	156	150	142
Percent Passed	89.59	92.08	95.76
Number Passed	973	1,000	1,040
Number Failed	116	86	46

National

N = size 34,935

	Current	-1 SEM	-2 SEM
Score	156	150	142
Percent Passed	81.43	86.47	92.00

Writing

Nevada

N size = 1,274

	Current	-1 SEM	-2 SEM
Score	162	156	150
Percent Passed	69.86	82.89	91.60
Number Passed	890	1,056	1,167
Number Failed	384	218	107

National

N size = 39,517

	Current	-1 SEM	-2 SEM
Score	162	156	150
Percent Passed	64.20	77.45	86.98

Math

Nevada

N size = 1,164

	Current	-1 SEM	-2 SEM
Score	150	144	136
Percent Passed	84.97	88.14	91.41
Number Passed	989	1,026	1,064
Number Failed	175	138	100

National

N size = 36,634

	Current	-1 SEM	-2 SEM
Score	150	144	136
Percent Passed	78.74	83.38	88.43

Disaggregated by Ethnicity

The tables below show the total number of Nevada test takers, the percent passing at the current NV cut score, and a sample of current and projected -1 and -2 SEM passing rates by selected ethnicities. The ETS data was collected between September 2021 and December 2022.

Reading

Ethnicity	Total NV Test Takers	% Passing at Current Cut Score	% Passing at -1 SEM	% Passing at -2 SEM
American Indian/ Alaska Native	6	100.00	100.00	100.00
Asian	65	84.62	89.23	95.38
Black	79	81.01	88.61	93.67
Hispanic	220	84.09	87.72	94.55
Pacific Islander	13	92.31	92.31	92.31
White	567	93.83	94.71	97.18
Two or more	70	91.43	94.29	95.71
All NV Test Takers*	1086	89.59	92.08	95.76

* Some subgroups individually reported by ETS were combined in above scores to be consistent with NDE's reporting categories.

Writing

Ethnicity	Total NV Test Takers	% Passing at Current Cut Score	% Passing at -1 SEM	% Passing at -2 SEM
American Indian/ Alaska Native	9	33.33	55.56	55.56
Asian	71	74.65	84.51	92.96
Black	95	51.58	69.47	81.05
Hispanic	272	63.60	78.68	89.71
Pacific Islander	12	83.33	91.67	100.00
White	662	73.87	87.01	93.96
Two or more	82	76.83	84.15	96.34
All NV Test Taskers*	1274	69.86	82.89	91.60

* Some subgroups individually reported by ETS were combined in above scores to be consistent with NDE's reporting categories.

Math

Ethnicity	Total NV Test Takers	% Passing at Current Cut Score	% Passing at -1 SEM	% Passing at -2 SEM
American Indian/ Alaska Native	6	50.00	50.00	66.67
Asian	70	90.00	91.43	91.43
Black	86	58.14	63.95	74.42
Hispanic	240	81.25	84.58	88.33
Pacific Islander	14	92.86	92.86	92.86
Two or more	69	89.86	91.30	91.30
White	608	89.31	92.43	95.07
All NV Test Takers*	1164	84.97	88.14	91.41

* Some subgroups individually reported by ETS were combined in above scores to be consistent with NDE's reporting categories.

Scan of Other State Policies on Measures of Demonstrating Basic Skills Competency for Initial Teacher Licensure

Introduction

Over the last three years, almost every state has passed exam options or alternatives to exams for candidates seeking educator licensure in an attempt to address the teacher shortage. Maine, Montana, New Mexico, Wisconsin, and Colorado have all implemented or are in the process of implementing options to use the Praxis to meet assessment requirements with the option to use a GPA or a passing score on a student-teaching portfolio as an alternative. Candidates seeking initial licensure in California, West Virginia, Utah, Massachusetts, and New Jersey now offer the option to meet the assessment requirement by passing specific exams or by completing content specific coursework with a required GPA. Alabama, Delaware, Missouri, and Mississippi allow score flexibility on assessment requirements based on specific GPA thresholds. Three states—Massachusetts, New Jersey, and Mississippi—have all launched exam options pilot programs with the goal of providing alternatives to assessment requirements while maintaining high standards for the profession. Two states—Iowa and Oklahoma—have passed regulations removing the assessment requirement for initial educator candidates.

The WestEd research team relied on public facing information and utilized state websites to access information about new exam option regulations and initiatives passed between 2020 and 2023.

States have been divided into the following categories:

[Exams and/or GPA and/or Portfolio](#): Maine, Montana, New Mexico, Colorado

[Exams and/or Coursework and/or GPA](#): California, West Virginia, Massachusetts, New Jersey

[Score Flexibility and/or GPA](#): Alabama, Missouri, Mississippi

[Pilot Programs Being Studied](#): Massachusetts, Mississippi, New Jersey

[Removed Exam Requirement](#): Iowa, Oklahoma

Exam Options: Exam and/or GPA and/or Portfolio

State	Policy Language	Description
Maine	Teach Maine Plan 2019	Praxis I is no longer a requirement but remains an option. Additional options include meeting a 3.0 GPA in required coursework or approval of a portfolio submission, based on Maine’s Initial Teaching Certification Standards (Teach Maine Plan, 2019).
Montana	10.57.410 Class 2 Standard Teacher Licensure	Options for Initial Montanan Class 2 Standard Teacher’s License: <ul style="list-style-type: none"> • Passing score on the Praxis Subject Assessment or • Passing score on a student-teaching portfolio or a 3.0 or higher GPA
New Mexico	PED Ends Requirement for Costly Tests for New Teachers	<p>Educators graduating in spring 2024 whose portfolios are accepted by their program will no longer be required to take any of the Praxis tests except elementary educators will still have to pass the \$90 Teaching of Reading: Elementary exam, which is required by statute.</p> <p>The portfolio assessment is an option, not a requirement. Praxis tests still will be available to those who prefer that pathway, for educators from out-of-state teacher preparation programs, and for current teachers seeking additional endorsements.</p> <p>Note: The state’s Assessment Requirement site has not been updated with this information.</p>
Colorado	House Bill 22-1220	Colorado's legislature directed the state to provide a new option for up to a thousand candidates to substitute either a portfolio or sufficiently high grades (a specific definition to be determined) in lieu of taking the state test, although agencies are still working out the specific requirements.

Exam Options: Exams and/or Coursework and/or GPA

State	Policy Language	Description
California	California Commission on Teaching Credentials	<p>Waive elementary content licensure testing requirement for teacher candidates who have a degree or major in their content area.</p> <p>Options for meeting the basic skills assessment requirement</p> <ol style="list-style-type: none"> 1. Pass the CBEST 2. Pass the CSET 3. Pass the CSU Early Assessment Program and the CSU Placement Examinations 4. Achieve qualifying score on the SAT or ACT 5. Pass AP Examination with a 3 or higher 6. Pass a basic skills exam from another state 7. Meet the Basic Skills requirement by coursework (must have a B or better and be at least 3 semester units) 8. Meet the Basic Skills requirement by coursework and exam
West Virginia	West Virginia Board of Education Policy 5202	<p>Waive elementary content licensure testing requirement for teacher candidates who have a degree or major in their content area.</p> <p>Exam Options</p> <p>The state gives candidates 18 different options in place of the pre-professional skills test (reading, writing, mathematics). For more information on these options please follow the Exam Options link above.</p>
Massachusetts	Pilot: Alternative Assessments, 2022	<p>Alternative assessment options</p> <p>Pilot for alternatives to the Performance Review Program for Initial Licensure focused on the assessment of subject matter knowledge.</p> <p>Candidate Eligibility: Individual providers may only offer the assessments they are approved to offer by the Massachusetts Department of Education. The Department will provide a list of eligible providers and Subject Matter Knowledge Attestation (SMK-Alts) that they offer once they have been approved. The following are the minimum eligibility requirements set by the Department:</p> <ul style="list-style-type: none"> • Educators must be seeking a provisional or initial teaching license. Specialists are not eligible. • Educators must have a bachelor's degree.

State	Policy Language	Description
		<ul style="list-style-type: none"> • The following candidates are eligible: <ul style="list-style-type: none"> ○ educators who have taught for at least one school year in the field of the SMK-Alt they seek to take under a waiver, an emergency license, and/or a temporary license; ○ educators who have taught for at least one school year in the field of the SMK-Alt they seek to take at a charter school, a collaborative, an approved special education school, or a private school that uses the Massachusetts Curriculum Frameworks; or ○ educators who have served for at least one school year in a paraprofessional role or as a long-term substitute in a classroom in a Massachusetts public school, collaborative, an approved special education school, or a private school that uses the Massachusetts Curriculum Frameworks, in the field they seek to take. • The following tests are not currently eligible: <ul style="list-style-type: none"> ○ Adult Basic Education Test ○ Bilingual Education Test ○ Communication and Literacy Skills Test ○ Reading Specialist Test ○ Sheltered English Immersion Test ○ Vocational Technical Literacy Skills Test
New Jersey	Regulation PL 2021, CL 224	<p>Five-year pilot program for Limited Certificate of Eligibility (CE) and Limited Certificate of Eligibility with Advanced Standing (CEAS)</p> <ul style="list-style-type: none"> • CE: Must meet one <ul style="list-style-type: none"> ○ GPA ○ content coursework ○ basic Skill Assessment ○ content knowledge assessment • CEAS: Must meet one <ul style="list-style-type: none"> ○ GPA ○ content knowledge assessment

Exam Options: Score Flexibility and/or GPA

State	Policy Language	Description
Alabama	Alabama State Department of Education	<p>Score flexibility for Provisional Certificate in a Teaching Field (PCTF)</p> <ul style="list-style-type: none"> • Option 1: A bachelor’s degree is held, with a minimum overall grade point average (GPA) of at least 2.5 on a 4.0 scale; or • Option 2: A master’s or higher degree is held, with a minimum overall GPA of at least 3.0 on a 4.0 scale; or • Option 3: The individual does not meet the minimum overall 2.5 GPA requirement but has an overall GPA of at least 2.0-2.49 on a 4.0 scale and has earned the required increased Praxis score. <p>Testing requirements</p> <ul style="list-style-type: none"> • Option 1: Individual meets the 2.5 GPA requirement and has earned the current passing Praxis score. • Option 2: Individual meets the 2.5 overall GPA requirements and has scored within one standard error of measure (SEM) of the required Praxis score and has met at least 15 semester hours of coursework with a grade of B or above, in the specific subject areas for which the PCTF is being requested (courses must be approved by ALSDE). • Option 3: The individual does not meet the 2.5 overall GPA requirement but does have an overall GPA of at least 2.0 and has earned the increased Praxis score. • Option 4: If the individual is using the United States Armed Forces Option, the Praxis subject area test is NOT required.
Missouri	Missouri Department of Elementary and Secondary Education	<p>Score flexibility</p> <p>Those test takers that score within the -1 SEM range of the established qualifying score on all initial teacher certification exams, except the elementary education exam for which the Board set a -2 SEM qualifying score in April 2022. All teacher certification candidates must maintain a GPA of 3.0 in their program course work.</p>

State	Policy Language	Description
Mississippi	Division of Educator Licensure, 2019	<p>Special, Non-renewable Performance-Based Licensure (PBL)</p> <p>Candidate must meet the following criteria:</p> <ol style="list-style-type: none"> 1. Standard Mississippi licensure application; 2. Local district request packets; 3. Letter of request and justification; 4. Official, seal transcripts showing completion of a bachelor's degree; 5. Document at least three years lead teaching experience or five years of classroom experience; 6. Documentation verifying student learning impact (STAR, NWEA/MPA, MKAS, MAAP and/or ACT); 7. Three-year commitment to district beyond initial licensure; and 8. Documentation of attendance at and completion of MDE-required summer cohort kickoff session.

Exam Options: Pilot Programs Being Studied

State	Policy Language	Description
Massachusetts	Pilot: Alternative Assessments, 2022	<p>Alternative assessment options</p> <p>Pilot for alternatives to the Performance Review Program for initial licensure focused on the assessment of subject matter knowledge.</p> <p>Candidate Eligibility: Individual providers may only offer the assessments they are approved to offer by the Massachusetts Department of Education. The Department will provide a list of eligible providers and the SMK-Alts that they offer once they have been approved. The following are the minimum eligibility requirements set by the Department:</p> <ul style="list-style-type: none"> • Educators must be seeking a provisional or initial teaching license. Specialists are not eligible. • Educators must have a bachelor's degree. • The following candidates are eligible: <ul style="list-style-type: none"> ○ educators who have taught for at least one school year in the field of the SMK-Alt they seek to take under a waiver, an emergency license, and/or a temporary license; ○ educators who have taught for at least one school year in the field of the SMK-Alt they seek to take at a charter school, a collaborative, an approved special education school, or a private school that uses the Massachusetts Curriculum Frameworks; or ○ educators who have served for at least one school year in a paraprofessional role or as a long-term substitute in a classroom in a Massachusetts public school, collaborative, an approved special education school, or a private school that uses the Massachusetts Curriculum Frameworks, in the field they seek to take. • The following tests are not currently eligible: <ul style="list-style-type: none"> ○ Adult Basic Education Test ○ Bilingual Education Test ○ Communication and Literacy Skills Test ○ Reading Specialist Test ○ Sheltered English Immersion Test ○ Vocational Technical Literacy Skills Test
Mississippi	Division of Educator Licensure, 2019	<p>Special, Non-renewable Performance-Based Licensure (PBL)</p> <p>Candidate must meet the following criteria:</p> <ol style="list-style-type: none"> 1. Standard Mississippi licensure application;

State	Policy Language	Description
		<ol style="list-style-type: none"> 2. Local district request packets; 3. Letter of request and justification; 4. Official, seal transcripts showing completion of a bachelor's degree; 5. Document at least three years lead teaching experience or five years of classroom experience; 6. Documentation verifying student learning impact (STAR, NWEA/MPA, MKAS, MAAP and/or ACT); 7. Three-year commitment to district beyond initial licensure; and 8. Documentation of attendance at and completion of MDE-required summer cohort kickoff session.
New Jersey	Regulation PL 2021, CL 224	<p>Five-year pilot program for Limited Certificate of Eligibility (CE) and Limited Certificate of Eligibility with Advanced Standing (CEAS)</p> <ul style="list-style-type: none"> • CE: Must meet one <ul style="list-style-type: none"> ○ GPA ○ Content coursework ○ Basic skill assessment ○ Content knowledge assessment • CEAS: Must meet one <ul style="list-style-type: none"> ○ GPA ○ content knowledge assessment

Exam Options: Removed Exam Requirements

State	Policy Language	Description
Iowa	House File 2081	Content test requirements were dropped.
Oklahoma	House Bill 3658, 2022	Oklahoma Governor Kevin Stitt signed a bill in May that removes the requirement for teacher-candidates to pass a general education exam that covers communication, critical thinking, and computation.

Annotated Bibliography of Initial Teacher Licensure Exam Correlation with Student Outcomes

This annotated bibliography provides identified and reviewed literature correlating initial teacher licensure exams and student outcomes.

No licensure exam can measure all elements that make an effective teacher. It is important to consider multiple measures when evaluating teacher effectiveness. Measuring the predictivity of licensure exams is made harder because few people become the teacher of record without passing licensure tests (Putnam & Walsh, 2021).

Results

Seminal research indicates that there is a correlation between licensure exam outcomes and teacher effectiveness in the classroom. The research team was able to identify nine studies, which included two large meta-studies using over 300 reviews, that found significant evidence of a positive relationship between passing licensure exams and student outcomes as measured by in-service performance ratings and value added to student test scores.

Seven of Nine studies reviewed for this annotated bibliography, found positive and or statistically significant relationships between exam performances and teacher's classroom effectiveness. While the majority of research found a positive correlation, five of the nine studies also indicated that a key component of positive licensure exam outcomes stems from participating in a high-quality educator preparation program.

Disclaimer: This document provides information based on public-facing data sources. The text is either quoted directly from the following citations or a close paraphrase.

Citations

Chingos, M. M., & Peterson, P. E. (2011). It's easier to pick a good teacher than to train one: Familiar and new results on the correlates of teacher effectiveness. *Economics of Education Review*, 30(3), 449–465.

Description

Researchers use teacher candidate scores on the Florida Teacher Certification Examination (FTCE), linked to student outcomes, to investigate the predictive validity of the teacher licensure test.

Note: This study does not specify which certification exams were used to measure classroom effectiveness.

Key Findings

1. The study finds a moderately strong positive relationship between certification exam performance and teachers' classroom effectiveness. Failing the certification exam one or more times is associated with significantly lower student test scores (.36 standard deviations lower in grades 4–5 math, .28 standard deviation lower in grades 6–8 math, and .03 standard deviations lower in grades 6–8 reading). There is no relationship with grades 4–5 reading scores.

Cowan, J., Goldhaber, D., Jin, Z., & Theobald, R. (2020). Teacher licensure tests: Barrier or predictive tool? CALDER Working Paper No. 245–1020.

Description

Researchers use teacher candidate test scores on the Massachusetts Tests for Educator Licensure (MTEL), linked to student and teacher outcomes in the state, to investigate the predictive validity of these teacher licensure tests.

Note: The Massachusetts Tests for Educator Licensure (MTEL) includes a test of communication and literacy skills as well as test of subject matter skills.

Key Findings

1. MTEL scores are positive and statistically significant predictors of teachers' effectiveness (as measured by in-service performance ratings and value added to student test scores). A one standard deviation in teachers' MTEL performance is associated with an improvement in student test scores of about 0.024 when adjusting only for observable student characteristics but is weaker for language arts as compared to math.
2. Found a significant, positive relationship between licensure test scores and in-service performance ratings. The research did not find that licensure tests were less predictive of teacher performance for teachers of color in Massachusetts.

Goldhaber, D., Gratz, T., Theobald, R. (2016) What's in a Teacher Test? Assessing the Relationship Between Teacher Licensure Test Scores and Student STEM Achievement and Course-Taking. CALDER Working Paper No. 158

Description

This working paper investigates the relationship between teacher licensure test scores and student test achievement and high school course-taking. With a STEM focus the researchers concentrated on middle school math, ninth grade algebra and geometry, and ninth-grade biology and found evidence that a teacher's basic skills test scores are modestly predictive of student achievement in middle and high school math and highly predictive of student achievement in high school biology.

Note: This study analyzed Pearson' basic skills test used in Washington state.

Key Findings

1. Found that achievement findings from middle and high school math about the modest, positive relationships between WEST-B Math (Pearson math basic skills test used in Washington state) scores and student math performance reinforce conclusion from existing literature that basic skills licensure test scores provide a significant, if modest, signal about future math teacher effectiveness.
2. Given the limited evidence about pre-service predictors of future teacher effectiveness, this suggests that basic skills test scores could be used for reasons beyond the pass/fail requirement for initial teacher credentialing.

Hanushek, E. A. (1997). Assessing the effects of school resources on student performance: An update. *Educational Evaluation and Policy Analysis, 19(2)*, 141–164.

Description

This study explores the relationship between school resources and student achievement by conducting a meta-analysis of close to 400 studies.

Note: Hanushek’s analysis does not differentiate which teacher test scores are used across the 400 studies.

Key Findings

1. The authors assert that about a third (37%) of the 41 studies that included teacher test scores found a positive relationship between teacher test scores (though not necessarily content licensure test scores) and student achievement. Ten percent of the studies found a negative and statistically significant relationship.
2. When limited to the studies that use value-added measure of student performance, 27% of the 11 studies examining teacher test scores find a positive and significant relationship, while 9% find a negative and significant relationship.
3. The authors conclude that “of all the explicit measures that lend themselves to tabulation, stronger teacher test scores are more consistently related to higher student achievement, even though only 37% provide positive and significant effects.”

Putman, H. & Walsh, K. (2021). Driven by data: Using licensure tests to build a strong, diverse teacher workforce. *National Council on Teacher Quality*.

Description

The National Council on Teacher Quality (NCTQ) is releasing a previously unavailable pivotal set of data that can help illuminate a point at which too many teacher candidates are lost—teacher licensure tests. Elementary teacher candidates, regardless of race and ethnicity, are too often poorly prepared for their state licensing tests. In fact, more than 50% fail on their first attempt in states that use a well-structured licensing test, and many never persist into the classroom. This is especially true for candidates of color.

Note: This set of data includes a variety of certification exams including basic skills and content knowledge.

Key Findings

1. States with stronger testing systems can more rigorously measure candidates’ knowledge of the subjects they will be expected to teach.
2. States with weaker testing systems have much higher first-attempt pass rates.
3. Providing targeted preparation and support to teacher candidates to meet state standards is the best way to ensure that every teacher has the knowledge and skills needed to be effective in the classroom.
4. Inadequate content preparation disproportionately affects test takers of color, with first attempt pass rates averaging 43%, compared with 58% for White test takers.
5. Across all states that provided relevant data, a quarter of test takers who do not pass the test the first time do not retake it within the three-year period. For candidates of color, 34% of those who fail on their first try do not make another attempt.

Putman, H., & Walsh, K. (2019). A fair chance: Simple steps to strengthen and diversify the teacher workforce. *National Council on Teacher Quality*.

Description

NCTQ analysis reveals both astonishingly high numbers of elementary teacher candidates failing their professional licensing tests each year, as well as widespread evidence that teacher preparation programs give scant attention to the content knowledge candidates need.

Note: This set of data includes a variety of certification exams including basic skills and content knowledge.

Key Findings

1. Fewer than half of teacher candidates (46%) can pass the elementary content exam on their first try.
2. The analysis of the nation's undergraduate preparation programs finds that most required courses are not aligned to content necessary for elementary grades.
3. The analysis finds that no graduate preparation program required adequate coverage of all four subject areas: English language arts, social studies, science, and elementary math.

Putman, H. (2022, October 27). Reducing certification requirements and reviewing the effects: Texas tracks the data on the state's temporary teacher waiver policy. *Teacher Quality Bulletin*. National Council on Teacher Quality.

Description

The lesson from Texas seems to be that short-term reductions in guardrails for entry into the teaching profession do not lead to long-term gains. Teachers who enter the classroom without meeting typical expectations tend to leave sooner, be less likely to earn a standard certification, and earn lower marks from their principals.

Note: This analysis includes content pedagogy, general pedagogy, and professional responsibilities test for initial licensure in Texas.

Key Findings

Temporary Gains

1. The state issued 9,000 more certificates from February 2020 to January 2021 than it did during the same window the year before.
2. Teachers earning intern and waiver intern certificates during this year were more diverse than the teachers earning an intern certificate the year before.

Long-Term Challenges

1. Waiver intern teachers were 27 percentage points less likely to earn a standard certificate compared with a typical intern.
2. Fewer waiver intern teachers continued teaching the following year in comparison to a typical intern teacher.
3. Compared to White waiver interns, Hispanic/Latino candidates were about 16 percentage points less likely to earn a standard certificate and Black waiver interns were about 33 percentage points less likely to earn a standard certificate.
4. Waiver intern teachers scored lower across every domain compared to the preparation of their non-waiver intern colleagues who began teaching the same year.

Shuls, J. V., & Trivitt, J. R. (2015). Teacher effectiveness: An analysis of licensure screens. *Educational Policy, 29*(4), 645-675.

Description

This study of Aransas test outcomes found that teachers' licensure test scores were significant, positive predictor of student achievement. Finding that test scores are more strongly predictive of students' math results than of ELA results.

Note: This set of data includes a variety of certification exams including basic skills and content knowledge.

Key Findings

1. Teachers in the top 10% of the top 25% of Praxis scores are significantly more effective at increasing student achievement in both subjects, with greater statistical significance in math.

Van Cleef, V. (2022). Licensure tests as barriers to the profession. *The State Education Standard, 22*(3), 24–27.

Description

This study focuses on identifying alternatives to standardized test states can utilize to set more meaningful licensure standards focused on demonstrated teaching ability. The research posits that when state policies support innovative approaches to teacher hiring and retention and remove unnecessary barriers into the profession, they will yield a larger, more diverse teacher candidate pool.

Note: Van Cleef does not differentiate standardized test used in this review.

Key Findings

1. Licensure tests are an expensive burden for prospective teachers, especially prospective teacher candidates of color.
2. Inconsistency in the predictive effectiveness of licensure exams undermines the priority to diversify the workforce.

Praxis Workgroup Members

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Shirley Jimenez	Principal	Clark County School District
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