Missouri

Are New Teachers Being Prepared for College- and Career-Readiness Standards?

2014 State Teacher Policy Yearbook

National Council on Teacher Quality

Acknowledgments

STATES

State education agencies remain our most important partners in this effort, and their gracious cooperation has helped to ensure the factual accuracy of the final product. Although this year's edition did not require the extensive review that comprehensive editions require, we still wanted to make sure that we captured all relevant policy changes and that states' perspectives were represented. Every state formally received a draft of the policy updates we identified in June 2014 as well as a draft of analyses and recommendations for the new indicators related to college- and career-readiness standards for comment and correction. States also received a final draft of their reports a month prior to release. All but two states responded to our inquiries. While states do not always agree with our recommendations, their willingness to engage in dialogue, explain their differing points of view and often acknowledge the imperfections of their teacher policies are important steps in moving forward.

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Teacher Preparation Policy Priorities for Missouri

Prepare all teachers to meet the instructional shifts of college- and career-readiness standards for students.

- Strengthen preparation requirements to ensure teacher candidates have the ability to address the use of informational texts as well as incorporate complex informational texts into classroom instruction.
 Priority for elementary, middle, secondary and special education teacher preparation.
- Through testing frameworks or teacher standards, include literacy skills and using text to build content knowledge in history/social studies, science, technical subjects and the arts.
 Priority for elementary, middle, secondary and special education teacher preparation.
- Ensure teachers are prepared to intervene and support students who are struggling with reading. *Priority for elementary, middle, secondary and special education teacher preparation.*

Additional priorities for elementary teacher preparation:

- Require a rigorous assessment in the science of reading instruction.
- Require early childhood education teachers who teach at the elementary level to pass a content test with separate passing scores for each of the core subject areas.
- Require a content specialization in an academic subject area.

Additional priorities for special education teacher preparation:

- Require elementary special education candidates to pass a rigorous assessment in the science of reading instruction.
- Ensure secondary special education teachers possess adequate content knowledge for the grades and subjects they teach.

Raise admission requirements:

• Limit admission to teacher preparation programs to candidates in the top half of the college-going population, measured by a test normed to the general college-bound population or minimum GPA.

Hold preparation programs accountable:

- Collect performance data to monitor programs, including student achievement gains.
- Set minimum standards for program performance with consequences for failure to meet those standards.
- Publicly report performance data.

Teacher Preparation in Missouri

The 2014 *State Teacher Policy Yearbook* keeps the spotlight on the critical issue of teacher preparation. In addition to updating the full set of teacher preparation policies reviewed in last year's comprehensive edition, the 2014 *Yearbook* casts a critical eye on whether states have established requirements for teacher preparation and licensure that help to ensure that teachers are ready for the increased demands of states' college- and career-readiness standards for K-12 students.

Current Status of Missouri Teacher Prep Policy

B- 2014 Teacher Prep Grade

Prior Grades: C-2013 D+2012 D+2011					
Yearbook Goal	Торіс	2014 Score	2013 Score		
1-A	Admission into Preparation Programs	٠	٠		
1-B	Elementary Teacher Preparation		\bigcirc		
1-C	Elementary Teacher Preparation in Reading Instruction	4			
1-D	Elementary Teacher Preparation in Mathematics	•	٠		
1-Е	Middle School Teacher Preparation		•		
1-F	Secondary Teacher Preparation	•	•		
1-G	Secondary Teacher Preparation in Science		•		
1-H	Special Education Teacher Preparation	•	\bigcirc		
1-1	Assessing Professional Knowledge				
1-J	Student Teaching				
1-К	Teacher Preparation Program Accountability	٠			
 Does Not Meet Meets Only a Small Part Partially Meets Nearly Meets Fully Meets 					

2014 Teacher Prep Policy Update for Missouri

Based on a review of state legislation, rules and regulations, NCTQ has identified the following recent teacher prep policy changes in Missouri:

Elementary Teacher Preparation

Teacher candidates are now required to pass the Missouri Educator Gateway Assessments (MEGA) Elementary Education Multi-Subject test. This test includes four separate content tests: reading, English/language arts; mathematics; science; and social studies. Candidates must pass each subtest to be eligible for licensure. *MEGA Test Requirements*

http://www.mo.nesinc.com/PageView.aspx?f=GEN_Tests.html

Special Education Teacher Preparation

Missouri continues to certify Mild-Moderate Cross-Categorical with a Grades K-12 Certificate. However, new licensing rules in the state require candidates to choose one of three options when working toward this certification. They must pass either the Elementary Multi-Content Assessment or the new Middle/Secondary Content Assessment (English, mathematics, science and social studies) or choose one of the specific content assessments for a specific area of certification. *MEGA Test Requirements*

http://www.mo.nesinc.com/PageView.aspx?f=GEN_Tests.html

Assessing Professional Knowledge

Beginning in fall 2015, candidates will be required to pass a standards -based performance assessment named the Missouri Pre-Service Teacher Assessment (MoPTA).

MEGA Test Requirements

http://www.mo.nesinc.com/PageView.aspx?f=GEN_Tests.html

Missouri Response to Policy Update

States were asked to review NCTQ's identified updates and also to comment on policy changes related to teacher preparation that have occurred in the last year, pending changes, or teacher preparation in the state more generally.

Missouri was helpful in providing NCTQ with additional information about policy changes related to teacher preparation. Missouri asserted that a performance-based assessment of reading is incorporated in the Missouri Pre-Service Teacher Assessment (MoPTA). Elementary candidates are required to dedicate Task #2 or Task #3 to reading and math. A candidate must pass all four tasks to receive certification.

Missouri also noted that in addition to passing the required content assessment(s), middle school teacher candidates must also pass the MoPTA. Also, Missouri educator preparation programs encourage candidates to become certified in another content area. In order to do this, candidates must pass a content assessment for each of the additional areas.

In addition, as included in the 2013 State Teacher Policy Yearbook, Missouri stated:

- Middle school teacher candidates earn a subject specific-certificate; not a generalist certificate.
- Secondary candidates must pass a grade-level, specific content assessment and the Missouri Pre-Service Teachers Assessment. Those earning a social studies certificate must pass all subtests included in the Multi-Content Assessment for Social Studies. The assessment includes U.S. history, world history, geography, economics, political science and behavioral sciences. A candidate seeking to add social studies certification must pass this multicontent assessment.
- Candidates seeking the United Science Certification must pass the regular content assessment matching their major and additional content assessments in the other three core science subjects (chemistry, physics and earth science).

Figure A

igure A		/		1
Delivering well-				
orepared teachers	2014 GRADE	2013 GRADE	2012 GRADE	2011 GRADE
Alabama	B-	В	B-	С
Alaska	F	F	F	F
Arizona	D	D-	D-	D-
Arkansas	C+	C+	С	С
California	D+	D+	D	D
Colorado	D-	D-	D	D-
Connecticut	B-	B-	C+	C-
Delaware	B-	C+	D-	D-
District of Columbia	C-	D+	D	D
Florida	B+	B+	B-	B-
Georgia	C+	C+	С	С
Hawaii	D-	F	D	D
Idaho	D+	D+	D	D
Illinois	D+	D+	D	D
Indiana	B+	B+	B-	C+
lowa	D+	D+	D	D
Kansas	D+	D+	D+	D+
Kentucky	B-	B-	C+	C-
Louisiana	С	C-	С	С
Maine	D+	D+	D+	D
Maryland	D+	D+	D+	D+
Massachusetts	B-	B-	C+	C+
Michigan	D+	D	D+	D+
Minnesota	C+	C+	C+	С
Mississippi	С	C-	С	С
MISSOURI	B-	C-	D+	D+
Montana	F	F	F	F
Nebraska	D-	F	D-	D-
Nevada	D-	D-	D-	D-
New Hampshire	C-	C-	C-	D
New Jersey	B-	B-	C-	D+
New Mexico	D+	D	D+	D+
New York	В	B-	C-	D+
North Carolina	C+	C+	D-	D-
North Dakota	D	D	D	D
Ohio	С	С	C-	D+
Oklahoma	С	С	С	С
Oregon	D+	D	D-	D-
Pennsylvania	C	С	С	С
Rhode Island	B+	B+	C	D+
South Carolina	C+	C	C-	C-
South Dakota	D	D-	D	D
Tennessee	B-	B-	B-	B-
Texas	B	B	C+	C+
Utah	C-	D+	D	D
Vermont	C	C	C-	D+
Virginia	B-	C+	C-	C-
Washington	D+	D+	D+	D+
West Virginia	C+	C+	C-	C-
Wisconsin	C	C-	D+	D
Wyoming	D-	F	F	F
Average State Grade		C-	D+	D
Average State Grade		C-	D+	U

Figure B

Delivering well.

Delivering well- prepared teachers	2014 GRADE
Florida	B+
Indiana	B+
Rhode Island	B+
New York	В
Texas	В
Alabama	B-
Connecticut	B-
Delaware	B-
Kentucky	B-
Massachusetts	B-
MISSOURI	B-
New Jersey	B-
Tennessee	B-
Virginia	B-
Arkansas	C+
Georgia	C+
Minnesota	C+
North Carolina	C+
South Carolina	C+
West Virginia	C+
Louisiana	С
Mississippi	C
Ohio	C
Oklahoma	C
Pennsylvania	C
Vermont	C
Wisconsin	C
District of Columbia	C-
New Hampshire	C-
Utah	C-
California	D+
Idaho	D+
Illinois	D+
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Kansas	D+
Maine	D+
Maryland	D+
Michigan	D+
New Mexico	D+
Oregon	D+
Washington	D+
Arizona	D
North Dakota	D
South Dakota	D
Colorado	D-
Hawaii	D-
Nebraska	D-
Nevada	D-
Wyoming	D-
Alaska	F
Montana	F
Average State Grade	C
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Elementary Teacher Preparation

Key Components

(The factors considered in determining the states' ratings for this topic.)

- The state should ensure that all elementary teachers are sufficiently prepared for the ways that college- and career-readiness standards affect instruction of all subject areas. Specifically,
 - A. The state should require that all new elementary teachers are prepared to incorporate complex texts and academic language into instruction.
 - B. The state should ensure that all new elementary teachers are prepared to incorporate literacy skills as an integral part of every subject.
 - C. The state should ensure that all new elementary teachers of English language arts are prepared to support struggling readers.
- 2. The state should require that new elementary teachers, including those who can teach elementary grades on an early childhood license, pass a rigorous test of reading instruction in order to attain licensure.
- 3. The state should ensure that all elementary teacher candidates, including those who can teach elementary grades on an early childhood license, possess sufficient content knowledge in all core subjects, including mathematics.
- 4. The state should require that its approved teacher preparation programs deliver a comprehensive program of study in broad liberal arts coursework. An adequate curriculum is likely to require approximately 45 credit hours to ensure appropriate depth in the core subject areas of English, mathematics, science, social studies and fine arts.
- 5. The state should require elementary teacher candidates to complete a content specialization in an academic subject area. In addition to enhancing content knowledge, this requirement ensures that prospective teachers have taken higher-level academic coursework.



PREPARING ELEMENTARY TEACHERS FOR COLLEGE- AND CAREER-READINESS STANDARDS

The new demands of college- and career-readiness standards for students heighten the need for elementary teachers to have a strong content background in all of the subject matter taught in the elementary grades. Missouri, like most states, has adopted such standards and must ensure that its preparation and licensure requirements for new teachers address this need.

Currently, Missouri offers an elementary license to teach grades 1-6. The state also offers an early childhood license for birth to grade 3. Key licensing requirements for elementary school teachers in Missouri include:

MISSOURI ELEMENTARY TEACHER PREP SNAPSHOT

State requires passing a content test in each of the four core subjects.

- State requires adequate test on the science of reading.
- X State requires academic content specialization.
- State has adequate/appropriate requirements for teachers who teach elementary grades on an early childhood license.

X No

Yes

In addition to the strong content background called for by college- and career-readiness standards, teacher candidates must also be prepared for the key instructional shifts that differentiate these standards from their predecessors. Elementary teachers in Missouri are required to pass the Missouri Educator Gateway Assessments (MEGA) elementary test. According to the framework, teachers must be able to "understand text comprehension and vocabulary development." The state then offers the following examples, which incorporate the instructional shifts in the use of text associated with Missouri's college- and career-readiness standards for students:

- Demonstrate an understanding of how emergent text comprehension in the early elementary grades relates to text comprehension in the later grades and to essential text comprehension skills needed for college and career readiness
- Apply knowledge of quantitative tools and measures for evaluating text complexity, qualitative dimensions of text complexity (e.g., levels of meaning, text structure, language conventionality and clarity, knowledge demands) and the role of reader variables (e.g., motivation, knowledge, experiences) and task variables (e.g., purpose, complexity) in matching a reader to text and task

RECOMMENDATIONS

Ensure that elementary teachers are prepared to meet the instructional requirements of college- and careerreadiness standards for students.

Incorporate informational text of increasing complexity into classroom instruction.

Although Missouri is on the right track with its proposed framework for content tests, which address knowledge of informational texts, the in-depth coverage of the topic is presented as examples. Therefore, the extent to which this information is required is unclear. Missouri is encouraged to make certain both frameworks capture the major instructional shifts of college- and career-readiness standards, thereby ensuring that all elementary teacher candidates have the ability to adequately incorporate complex informational text into classroom instruction.

Incorporate literacy skills as an integral part of every subject.

To ensure that elementary students are capable of accessing varied information about the world around them, Missouri should strengthen its policy and more specifically include literacy skills and using text to build content knowledge in history/ social studies, science, technical subjects and the arts.

Support struggling readers.

Missouri should articulate specific requirements ensuring that elementary teachers are prepared to intervene and support students who are struggling. The early elementary grades are an especially important time to address reading deficiencies before students fall behind.

Require that all teacher candidates who teach elementary grades to pass a rigorous assessment in the science of reading instruction.

Missouri should require a rigorous reading assessment tool to ensure that its elementary teacher candidates are adequately prepared in the science of reading instruction Apply knowledge of strategies for facilitating comprehension before, during, and after reading; for integrating, analyzing and evaluating knowledge and ideas from literary and informational texts; and for using textual evidence to support analysis, reflection and research.

The English language arts competencies also require teachers to "demonstrate the ability to comprehend, interpret, and analyze literary and informational texts," followed by these examples:

- Demonstrate knowledge of key characteristics, elements, organizational structures, and textual and graphic features of various types of informational text, including biographies, autobiographies, nonfiction texts on a range of topics, technical texts, and digital sources, as well as information displayed in graphs, charts, or maps
- Demonstrate how to use textual evidence to support analysis of an informational text's explicit and implicit meanings and its theme or central ideas and to determine the author's point of view or purpose and how it is conveyed in a text
- Recognize an accurate, objective summary of an informational text
- Determine the meaning of words and phrases as they are used in a literary or informational text, including figurative, connotative and technical meanings and analyze the impact of specific word choices on meaning and tone.

Further, Missouri addresses literacy within its science competencies by requiring teachers to "apply literacy skills to the interpretation, synthesis, and analysis of information from scientific and technical sources (e.g., explaining central ideas, interpreting domain-specific terminology, recognizing how texts structure information into categories and hierarchies)." The state's framework also requires historical, geographic and political science and economic literacy.

Early childhood education teachers in Missouri must pass the MEGA Early Childhood Education test, which requires teachers to "apply knowledge of strategies for promoting children's developing understanding and analysis of key ideas and details, craft and structure in literature and informational texts and their skill in integrating knowledge and ideas in texts."

Missouri has no requirements for the preparation of elementary teachers that address struggling readers.

Supporting Research

Missouri Educator Gateway Assessments www.mo.nesinc.com Compendium of Certification Requirements http://www.dese.mo.gov/schoollaw/rulesregs/EducCertManual/Index.htm

RECOMMENDATIONS CONTINUED

before entering the classroom. The state is on the right track in assessing elementary teachers' knowledge of the science of reading. However, the test must not only adequately address the five instructional components of scientifically based reading instruction-phonemic awareness, phonics, fluency, vocabulary, and comprehension—but also it should report a subscore for the science of reading specifically. Elementary teachers who do not possess the minimum knowledge in this area should not be eligible for licensure. Further, Missouri should require its early childhood education teacher candidates who teach elementary grades to also pass a rigorous assessment to ensure that they are adequately prepared in science of reading instruction before entering the classroom.

Ensure that early childhood education teachers are adequately prepared to teach at the elementary level.

Missouri should require all early childhood teacher candidates who teach the elementary grades to pass a content test with separate passing scores for each of the core subject areas including reading/language arts, mathematics, science and social studies. Although the state requires appropriate testing for elementary teachers teaching on an elementary certificate, Missouri creates a significant loophole by not holding early childhood teachers who teach elementary grades to the same requirements.

Require elementary teacher candidates to complete a content specialization in an academic subject area.

Although Missouri's policy requires that elementary teacher candidates have an area of concentration, the state's language does not ensure that these teachers will earn a content specialization in an academic subject area.

MISSOURI RESPONSE TO ANALYSIS

Missouri contended that its current rules require literacy skills. All elementary educators must complete a Methods of Teaching Reading in the Content Fields course. In addition, new certification rules require 12 semester hours in elementary school literacy, which must include reading/ writing in the content area as well as instructional interventions for students with learning deficits.

The state also noted that its Missouri Pre-Service Teacher Assessment (MoPTA) will be implemented in the fall of 2015. Elementary educators will need to address and demonstrate competency in teaching reading in either task #2 or task #3. Both tasks are scored individually, and all four tasks must be passed to earn an elementary certificate.

RECOMMENDATIONS CONTINUED

Ensure that teacher preparation programs deliver a comprehensive program of study in broad liberal arts coursework.

Missouri should either articulate a more specific set of standards or establish comprehensive coursework requirements for elementary teacher candidates that align with college- and career-readiness standards to ensure that candidates will complete coursework relevant to the common topics in elementary grades. An adequate curriculum is likely to require approximately 45 credit hours in the core subject areas of English, mathematics, science, social studies and fine arts.

Figure 1 Image: Constructional shifts associated with college- and career-readiness standards? Alabama Image: Constructional shifts associated with college- and career-readiness standards? Alabama Image: Constructional shifts associated with college- and career-readiness standards? Alabama Image: Constructional shifts associated with college- and career-readiness standards? Alabama Image: Constructional shifts associated with college- and career-readiness standards? California Image: Constructional shifts associated with college- and career construct construct associated with college- and career construct construct construct construct associated with college- and career construct construct construct associated with college- and career construct constr				
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SUMMARY OF ELEMENTARY TEACHER **PREP FIGURES**

Figure 1

Requirements for instructional shifts associated with college- and career-readiness standards

- Figure 2 Content test requirements
- Figure 3 Specific subject-matter requirements
- Figure 4 Science of reading requirements
- Figure 5 Math requirements
- Figure 6

Requirements for academic concentrations

- Figure 7 Requirements for early childhood teachers
- Figure 8

Teacher Prep Review findings about elementary teacher prep

Fully addresses instructional component 🛛 Partially addresses instructional component

Figure 2		Elementary content tech	Elementary content +	* /
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### EXAMPLES OF BEST PRACTICE

Both Arkansas and California ensure that elementary teachers are prepared to meet the instructional requirements of collegeand career-readiness standards for students. These states specify that elementary teacher candidates must have the ability to not only build content knowledge and vocabulary through careful reading of informational and literary texts, but also to challenge students with texts of increasing complexity.

Candidates are also required to incorporate literacy skills as an integral part of every subject and are prepared to intervene and support students who are struggling.

In addition, Indiana ensures that all candidates licensed to teach the elementary grades, including early childhood education candidates, possess the requisite knowledge of core content and of the key elements of scientifically based reading instruction before entering the classroom. Elementary and early childhood teacher candidates are required to pass a content test comprised of four independently scored subtests, including mathematics. In addition, these candidates are required to pass a comprehensive assessment that tests the five elements of scientifically based reading instruction: phonemic awareness, phonics, fluency, vocabulary and comprehension. Elementary teacher candidates in Indiana must also earn either a major or minor in an academic content area.

Massachusetts's MTEL mathematics subtest continues to set the standard in this area by evaluating mathematics knowledge beyond an elementary school level and challenging candidates' understanding of underlying mathematics concepts.

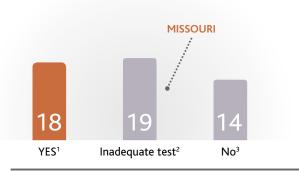
1. Alaska does not require testing for initial licensure.

2. Massachusetts and North Carolina require a general curriculum test that does not report scores for each elementary subject. A separate score is reported for math.

3. Only teachers of grades 4 and 5 are required to pass a content test in Ohio.

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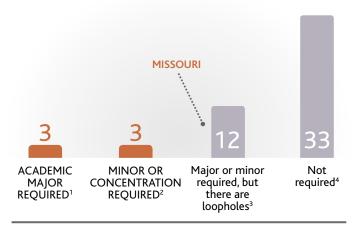
*Do states measure new elementary teachers' knowledge of the science of reading?* 



- Strong Practice: Alabama, California⁴, Connecticut, Florida, Indiana, Massachusetts, Minnesota, Mississippi, New Hampshire, New Mexico, New York, North Carolina⁵, Ohio, Oklahoma, Tennessee, Virginia, West Virginia, Wisconsin
- 2. Arizona, Arkansas, Delaware, District of Columbia, Georgia, Idaho, Kentucky, Maine, Missouri, New Jersey, Oregon, Pennsylvania, Rhode Island, South Carolina, Texas, Utah, Vermont, Washington, Wyoming
- 3. Alaska, Colorado, Hawaii, Illinois, Iowa, Kansas, Louisiana, Maryland, Michigan, Montana, Nebraska, Nevada, North Dakota, South Dakota
- California allows an exemption from the state's reading test for teachers who already have a single subject credential.
- 5. Teachers have until their second year to pass the reading test.

#### Figure 6

*Do states expect elementary teachers to complete an academic concentration?* 



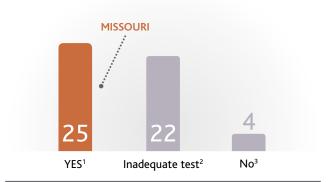
- 1. Strong Practice: Colorado, Massachusetts, New Mexico
- 2. Strong Practice: Indiana, Mississippi, Oklahoma
- 3. California, Connecticut, Iowa, Maryland, Michigan, Missouri, New Jersey, New York, Tennessee, Texas, Vermont, Virginia

These states require a major, minor or concentration but there is no assurance it will be in an academic subject area.

- 4. Alabama, Alaska, Arizona, Arkansas, Delaware, District of Columbia, Florida, Georgia, Hawaii, Idaho, Illinois, Kansas, Kentucky, Louisiana, Maine, Minnesota, Montana, Nebraska, Nevada, New Hampshire⁵, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Utah, Washington, West Virginia, Wisconsin, Wyoming
- 5. Only K-8 teachers must complete an area of concentration in a field such as humanities, fine arts, social sciences and sciences.

#### Figure 5

*Do states measure new elementary teachers' knowledge of math?* 



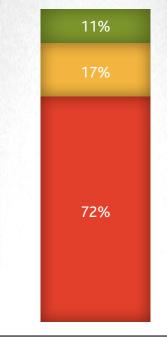
- Strong Practice: Alabama, Arkansas, Connecticut, Delaware, District of Columbia, Florida, Idaho, Indiana, Kentucky, Maine, Massachusetts, Minnesota, Missouri, New Hampshire, New Jersey, New York, North Carolina, Rhode Island, South Carolina, Texas, Utah, Vermont, Virginia, West Virginia, Wyoming
- Arizona, California, Colorado, Georgia, Illinois, Iowa, Kansas, Louisiana, Maryland, Michigan, Mississippi, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, Pennsylvania, South Dakota, Tennessee, Washington, Wisconsin
- 3. Alaska⁴, Hawaii, Montana, Ohio⁵
- 4. Testing is not required for initial licensure.
- 5. Only teachers of grades 4 and 5 are required to pass an adequate content test.

#### Figure 7 CONTENT TEST WITH SUBSCORES FOR EACH SUBJECT ADEQUATE SCIENCE OF READING TEST What do states require of early childhood teachers who teach elementary grades? Alabama Alaska¹ Arizona Arkansas¹ California¹ Colorado Connecticut Delaware District of Columbia Florida Georgia Hawaii Idaho Illinois Indiana lowa Kansas Kentucky¹ Louisiana Maine Maryland Massachusetts Michigan¹ Minnesota Mississippi¹ MISSOURI Montana¹ Nebraska Nevada New Hampshire New Jersey New Mexico New York North Carolina¹ North Dakota Ohio¹ Oklahoma Oregon¹ Pennsylvania¹ Rhode Island 2 South Carolina South Dakota $\square$ Tennessee Texas¹ Utah **Z** Vermont Virginia Washington West Virginia Wisconsin Wyoming 6 13

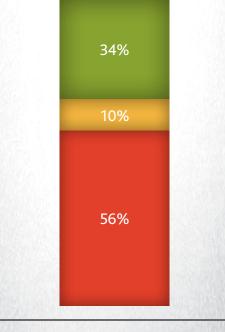
#### Figure 8

#### **TEACHER PREP REVIEW FINDINGS**

Only 11 percent of preparation programs ensure that elementary teachers are well prepared in the subjects they will teach.



Just 34 percent of preparation programs provide adequate training to elementary teachers in the science of reading instruction.



From NCTQ's 2014 *Teacher Prep Review* Standard 6: Elementary Content (n=1,166 elementary programs) and Standard 2: Early Reading (n=959 elementary and special education programs)

#### Figure 7

 These states do not offer a standalone early childhood certification that includes elementary grades or the state's early childhood certification is the de facto license to teach elementary grades.

2. Early childhood candidates may pass either multiple subjects (subscores) or content knowledge (no subscores) test.

# **Middle School Teacher Preparation**

#### **Key Components**

# (The factors considered in determining the states' ratings for this topic.)

- The state should ensure that all middle school teachers are sufficiently prepared for the ways that college- and career-readiness English language arts standards affect instruction of all subject areas. Specifically,
  - A. The state should require that all new middle school teachers are prepared to incorporate complex texts and academic language into instruction.
  - B. The state should ensure that all new middle school teachers are prepared to incorporate literacy skills as an integral part of every subject.
  - C. The state should ensure that all new middle school teachers of English language arts are prepared to support struggling readers.
- 2. The state should require that new middle school teachers pass a licensing test in every core academic area they are licensed to teach.
- The state should not permit middle school teachers to teach on a generalist license that does not differentiate between the preparation of middle school teachers and that of elementary teachers.

How well are states ensuring that middle school teachers are prepared for college- and career-readiness standards?

> Alaska, Arizona, California, Hawaii, Idaho, Maine, Michigan, Montana, Nebraska, New Mexico, Oklahoma, Oregon, South Dakota, Utah, Washington, Wyoming

16

Colorado, Massachusetts, Nevada, North Dakota, Wisconsin

Alabama, Connecticut, Delaware, District of Columbia, Iowa, Kansas, Kentucky, Louisiana, Maryland, Minnesota, Mississippi, **MISSOURI**, New Hampshire, New Jersey, New York, North Carolina, Ohio, Rhode Island, South Carolina, Vermont, Virginia, West Virginia

Florida, Georgia, Illinois, Pennsylvania, Tennessee, Texas

Arkansas, Indiana

#### PREPARING MIDDLE SCHOOL TEACHERS FOR COLLEGE-AND CAREER-READINESS STANDARDS

The middle school years are critical to students' education, but, too often, states fail to distinguish the knowledge and skills needed by middle school teachers from those needed by an elementary teacher. Middle school teachers should not only be prepared to teach grade-level content, but should also be prepared to meet the increased instructional requirements of college- and career-readiness standards for students.

Currently, Missouri offers a middle school license to teach grades 5-9. Key licensing requirements for middle school teachers in Missouri include:

### MISSOURI MIDDLE SCHOOL TEACHER PREP SNAPSHOT

State requires teachers to pass a content test for each subject they teach.

State requires middle school teachers to hold a middle grade or secondary license.

👗 No

Yes

Preparation and licensure requirements for middle school teachers must address more than just content knowledge; the key instructional shifts articulated in college- and career-readiness standards must also be incorporated. Missouri addresses some of the instructional shifts toward building content knowledge and vocabulary through careful reading of informational and literary texts associated with the state's college- and career-readiness standards for students through its required assessment for middle school English teachers, the MEGA Middle School Education: English assessment.

The MEGA frameworks also mention literacy in other subject tests. The social studies multicontent test requires the demonstration of historical, economic, geographic, political science, psychological, sociological and anthropological literacy. Also, the science tests require teachers to "understand crosscutting concepts in the sciences and engineering." This statement is followed by this example:

 Apply literacy skills to the interpretation, synthesis and analysis of information from scientific and technical sources (e.g., explaining central ideas, interpreting domain-specific terminology, recognizing how texts structure information into categories and hierarchies).

Missouri has no requirements for the preparation of middle school teachers that address struggling readers.

#### RECOMMENDATIONS

Ensure that middle school teachers are prepared to meet the instructional requirements of college- and careerreadiness standards for students.

Incorporate informational text of increasing complexity into classroom instruction.

Although Missouri is on the right track with its proposed framework for the English language arts middle school content test, which addresses knowledge of informational texts, the in-depth coverage of the topic is presented as examples. Therefore, the extent to which this information is required is unclear. Missouri is encouraged to make certain that the framework captures the major instructional shifts of college- and career-readiness standards, thereby ensuring that all middle school English teacher candidates have the ability to adequately incorporate complex informational text into classroom instruction.

# Incorporate literacy skills as an integral part of every subject.

To ensure that middle school students are capable of accessing varied information about the world around them, Missouri should strengthen its policy and more specifically include literacy skills and using text to build content knowledge in history/ social studies, science, technical subjects and the arts.

#### Support struggling readers.

Missouri should articulate requirements ensuring that middle school teachers are prepared to intervene and support students who are struggling. While college- and career-readiness standards will increase the need for all middle school teachers to be able to help struggling readers to comprehend grade-level material, training for English language arts teachers in particular must emphasize identification and remediation of reading deficiencies.

#### Supporting Research

MEGA Test Requirement http://www.mo.nesinc.com/PageView.aspx?f=HTML_FRAG/ GENRB_PrepFrameworks_draft.html

Compendium of Certification Requirements http://www.dese.mo.gov/schoollaw/rulesregs/EducCertManual/Index.htm Adding Endorsements http://dese.mo.gov/eq/cert/alreadycertified.html#addarea

#### **MISSOURI RESPONSE TO ANALYSIS**

Missouri contented that its current rules do require literacy skills. All middle school educators must complete five semester hours of reading instruction, including a Methods of Teaching Reading in the Content Fields course. The new certification rules require six semester hours in Middle School Literacy, which must include reading/writing in the content area, as well as instructional interventions for students with reading deficits.

#### **RECOMMENDATIONS CONTINUED**

Close the loophole that allows teachers to add middle grade levels to an existing license without demonstrating content knowledge.

Missouri allows teachers to add areas of certification with either coursework or a passing score on a content test. The state is urged to require that all teachers who add the middle grade levels to their certificates pass a rigorous subject-matter test to ensure content knowledge of all subject areas before they are allowed in the classroom.

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📕 Fully addresses instructional component 🥖 Partially addresses instructional component

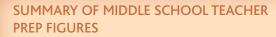


Figure 9

Requirements for instructional shifts associated with college- and career-readiness standards

Figure 10

Distinctions in licenses betweeen middle and elementary teachers

Figure 11

Content test requirements

Figure 12

Teacher Prep Review findings about middle school teacher prep

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### **EXAMPLES OF BEST PRACTICE**

Illinois ensures that middle school teachers are prepared to meet the instructional requirements of college- and career-readiness standards for students. The state's new standards for the middle grades include the instructional shifts toward building content knowledge and vocabulary through increasingly complex texts and careful reading of informational and literary texts associated with these standards. The standards also address the needs of struggling readers.

Illinois's requirements connecting literacy to all subject areas are particularly noteworthy. All middle school teachers must understand "the role, perspective and purpose of text in specific disciplines" and be able to perform tasks such as scaffolding reading to allow students to understand and learn from challenging text; guiding reading discussions that require students to identify key ideas and details of a text; analyze craft and structure and critically evaluate the text; and model reading strategies to improve comprehension.

In addition, Georgia, Mississippi, New Jersey and South Carolina ensure that all middle school teacher candidates are adequately prepared to teach middle school-level content. None of these states offers a K-8 generalist license and all require passing scores on subject-specific content tests. Georgia, Mississippi and South Carolina explicitly require at least two content-area minors, and New Jersey requires a content major along with a minor for each additional area of certification.

1. Offers 1-8 license.

- 2. California offers a K-12 generalist license for all self-contained classrooms.
- 3. With the exception of mathematics.

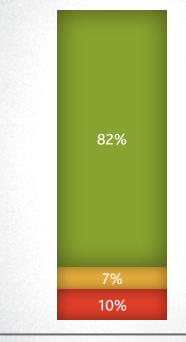
4. Oregon offers 3-8 license.

Figure 11           Do middle school teachers have to pass an appropriate content test in every core subject they are licensed to teach?           Alabama           Arizona           Arizona           California           Connecticut           Delaware           District of Columbia           Florida           Ilinois           Ilinois           Ilinois           Ilinois           Ilinois           Ilinois           Ilinois         Ilinois			1	\$ 1	1
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#### Figure 12

#### **TEACHER PREP REVIEW FINDINGS**

82 percent of programs ensure that middle school teachers are well prepared in the subjects they will teach.



From NCTQ's 2014 Teacher Prep Review Standard 7: Middle School Content (n=375 middle school programs). State licensing test requirements are also included in evaluating this standard.

- 1. Alaska does not require content tests for initial licensure.
- 2. Candidates teaching multiple subjects only have to pass the elementary test. Single-subject credential does not require content test.
- 3. For K-8 license, Idaho also requires one single-subject test.
- 4. Illinois requires candidates to take a middle level core content test if a test is available. It is not clear that this will result in teachers passing a test in each subject and draft test frameworks are not yet available for review.
- 5. Maryland allows elementary teachers to teach in departmentalized middle schools if not less than 50 percent of the teaching assignment is within the elementary grades.
- 6. New Hampshire requires K-8 candidates to pass a middle school content test in one core area.
- 7. For nondepartmentalized classrooms, generalist in middle childhood education candidates must pass the new assessment with three subtests.
- 8. Teachers may have until second year to pass tests, if they attempt to pass them during their first year

# **Secondary Teacher Preparation**

#### **Key Components**

# (The factors considered in determining the states' ratings for this topic.)

- The state should ensure that all secondary teachers are sufficiently prepared for the ways that collegeand career-readiness English language arts standards affect instruction of all subject areas. Specifically,
  - A. The state should require that all new secondary teachers are prepared to incorporate complex texts and academic language into instruction.
  - B. The state should ensure that all new secondary teachers are prepared to incorporate literacy skills as an integral part of every subject.
  - C. The state should ensure that all new secondary teachers of English language arts are prepared to support struggling readers.
- 2. The state should require that secondary teachers pass a licensing test in every subject they are licensed to teach.
- 3. The state should require secondary general science and general social studies teachers to pass a subject-matter test of each discipline they are licensed to teach.
- 4. The state should require that secondary teachers pass a content test when adding subject-area endorsements to an existing license.

How well are states ensuring that secondary teachers are prepared for college- and career-readiness standards?



Alaska, California, Hawaii, Montana, New Mexico, Wyoming

Alabama, Arizona, Colorado, Connecticut, Delaware, District of Columbia, Idaho, Illinois, Iowa, Louisiana, Massachusetts, Michigan, Mississippi, Nebraska, Nevada, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Washington, Wisconsin

Florida, Georgia, Kansas, Kentucky, Maine, Maryland, MISSOURI, New Hampshire, New Jersey, Rhode Island, South Dakota, Texas, Utah, Vermont, Virginia, West Virginia

Arkansas, Indiana, Minnesota, New York, Tennessee

20 : NCTQ STATE TEACHER POLICY YEARBOOK 2014 MISSOURI

## PREPARING SECONDARY TEACHERS FOR COLLEGE- AND CAREER-READINESS STANDARDS

To be prepared to meet the instructional requirements of college- and career-readiness standards for their students, secondary teachers must be experts in the subject matter they teach. States should ensure that secondary teachers have sufficient content knowledge in all the subjects they are licensed to teach.

Currently, Missouri offers a secondary license in grades 9-12. Key licensing requirements for secondary school teachers in Missouri include:



Not only must secondary teachers possess strong backgrounds in content knowledge as required by college- and career-readiness standards, they must also be able to address the key instructional shifts associated with the standards. Missouri's assessment for English language arts teachers includes the instructional shifts toward building content knowledge and vocabulary through careful reading of informational and literary texts associated with the state's college- and career-readiness standards for students. The state requires secondary English teachers to pass the MEGA English assessment. The framework articulates that teachers must be able to "demonstrate the ability to comprehend, interpret, and analyze informational and persuasive texts" and includes an extensive list of examples.

The MEGA frameworks also mention literacy in other subject tests. The social studies multicontent test requires the demonstration of historical, economic, geographic, political science, psychological, sociological and anthropological literacy. Also, the science tests

#### RECOMMENDATIONS

Ensure that secondary teachers are prepared to meet the instructional requirements of college- and careerreadiness standards for students.

Incorporate informational text of increasing complexity into classroom instruction.

Although Missouri is on the right track with its proposed framework for the secondary English language arts content test, which addresses knowledge of informational texts, the in-depth coverage of the topic is presented as examples. Therefore, the extent to which this information is required is unclear. Missouri is encouraged to make certain that both frameworks capture the major instructional shifts of college- and career-readiness standards, thereby ensuring that all secondary English teacher candidates have the ability to adequately incorporate complex informational text into classroom instruction.

# Incorporate literacy skills as an integral part of every subject.

To ensure that secondary students are capable of accessing varied information about the world around them, Missouri should strengthen its policy and more specifically include literacy skills and using text to build content knowledge in history/ social studies, science, technical subjects and the arts.

#### Support struggling readers.

Missouri should articulate requirements ensuring that secondary teachers are prepared to intervene and support students who are struggling. While college- and career-readiness standards will increase the need for all secondary teachers to be able to help struggling readers to comprehend grade-level material, training for English language arts teachers in particular must emphasize identification and remediation of reading deficiencies. require teachers to "understand crosscutting concepts in the sciences and engineering." This statement is followed by this example:

• Apply literacy skills to the interpretation, synthesis and analysis of information from scientific and technical sources (e.g., explaining central ideas, interpreting domain-specific terminology, recognizing how texts structure information into categories and hierarchies).

Missouri has no requirements for the preparation of secondary teachers that address struggling readers.

Supporting Research MEGA Tests www.mo.nesinc.com

#### MISSOURI RESPONSE TO ANALYSIS

Missouri asserted that its current rules do require literacy skills. All middle school educators must complete a Methods of Teaching Reading in the Content Fields course. Certification rules require six semester hours in Secondary School Literacy, which must include reading/writing in the content area, as well as instructional interventions for students with reading deficits.

#### **RECOMMENDATIONS CONTINUED**

#### Require subject-matter testing when adding subject-area endorsements.

Missouri should require passing scores on subject-specific content tests, regardless of other coursework or degree requirements, for teachers who are licensed in core secondary subjects and wish to add another subject area, or endorsement, to their licenses. While coursework may be generally indicative of background in a particular subject area, only a subject-matter test ensures that teachers know the specific content they will need to teach.

#### Explicitly articulate that general science teachers may only teach general science courses.

Although Missouri requires its Core Data Process to verify that teachers holding the general science certificate are only teaching general science courses, the state is encouraged to clarify its policy to ensure that districts are aware of this license restriction. This would ensure that general science placements are as the state intends before school begins, rather than rely on the current system of verification after the fact.

igure 13	USE OF MEORNAR	AN I	SUPPORTING STRUCCING READERS TO STRUCCING
Are states ensuring that		HT I	
new secondary teachers	, C		187
are prepared for the	M		521
instructional shifts associated	ð	80	
with college-and career-	¥.	28	Q SI
readiness standards?	म		EAD SUP
	~ /	ر بری ا	~~
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Alaska			
Arizona			
Arkansas			
California			
Colorado			
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Delaware			
District of Columbia			
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lowa			
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Kentucky			
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Maine			
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Nevada			
New Hampshire			
New Jersey			
New Mexico			
New York			
North Carolina			
North Dakota			
Ohio			
Oklahoma			
Oregon			
Pennsylvania			
Rhode Island			
South Carolina			
South Dakota			
Tennessee			
Texas			
Utah			
Vermont			
Virginia			
Washington			
West Virginia			
Wisconsin			
Wyoming			

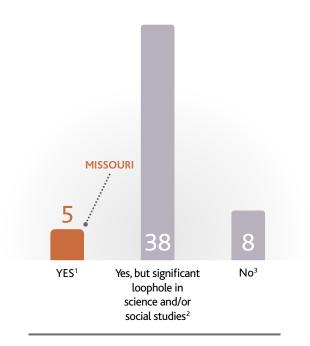
#### SUMMARY OF SECONDARY TEACHER **PREP FIGURES**

- Figure 13
  - Requirements for instructional shifts associated with college- and career-readiness standards
- Figure 14 Content test requirements
- Figure 15 Requirements for general science teachers
- Figure 16 Requirements for general social studies teachers
- Figure 17

Teacher Prep Review findings about secondary teacher prep

📕 Fully addresses instructional component 🛛 Partially addresses instructional component

Do secondary teachers have to pass a content test in every subject area for licensure?



1. Strong Practice: Indiana, Minnesota, Missouri, South Dakota, Tennessee

- 2. Alabama, Arkansas, Connecticut, Delaware, District of Columbia, Florida, Georgia, Idaho, Illinois, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Mississippi, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina⁴, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin [For more on loopholes, see Figure 15 (science) and Figure 16 (social studies).]
- 3. Alaska⁵, Arizona⁶, California, Colorado, Hawaii, Montana, Washington, Wyoming
- 4. Teachers may have until second year to pass tests, if they attempt to pass them during their first year.
- 5. Alaska does not require content tests for initial licensure.
- 6. Candidates with a master's degree in the subject area do not have to pass a content test.

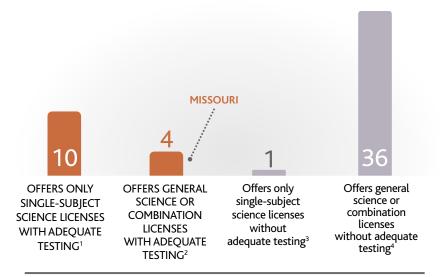
### **EXAMPLES OF BEST PRACTICE**

Arkansas has done more than other states to ensure that secondary teachers are prepared to meet the instructional requirements of college- and career-readiness standards for students. Not only does the state address the instructional shifts toward building content knowledge and vocabulary through increasingly complex informational texts and careful reading of informational and literary texts associated with these new standards in its educator competencies for secondary English language arts teachers, it also requires teachers to incorporate literacy skills into all content areas. For example, the secondary social studies competency to "incorporate disciplinary literacy" states that "reading competencies for literacy in history/social studies for grades 7-12 include the ability to read informational texts in history and social studies closely and critically to analyze the key ideas and details as well as craft and structure with the purpose of integrating knowledge and ideas both within and across texts." A similar competency exists for both the life science and physical science secondary certifications.

Indiana, Minnesota and Tennessee require that all secondary teacher candidates pass a content test to teach any core subject both as a condition of licensure and to add an additional field to a secondary license. Further, neither of these states offers secondary certification in general social studies or science; all teachers must be certified in a specific discipline.

Also worthy of mention is **Missouri**, which requires general social studies teachers to pass a multi-content test with six independently scored subtests. Missouri also offers a general science license that can only be used to teach general science courses. All other science teachers must be certified in a specific discipline.

Do states ensure that secondary general science teachers have adequate subject-matter knowledge?



1. Strong Practice: Florida, Indiana, Kansas, Kentucky, Massachusetts, Minnesota, New York, South Dakota, Tennessee, Virginia

2. Strong Practice: Missouri, New Jersey, Rhode Island⁵, West Virginia⁵

3. California

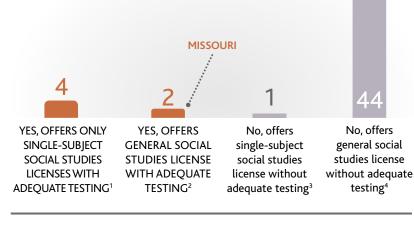
4. Alabama, Alaska, Arizona⁶, Arkansas, Colorado, Connecticut, Delaware, District of Columbia, Georgia⁷, Hawaii, Idaho, Illinois, Iowa, Louisiana, Maine, Maryland, Michigan, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Texas, Utah, Vermont, Washington, Wisconsin, Wyoming

5. Teachers with the general science license may only teach general science courses.

6. Arizona limits teachers with the general science license to teaching only general science courses. However, candidates with a master's degree in the subject area do not have to pass a content test.

7. Georgia's science test consists of two subtests.

*Do states ensure that secondary general social studies teachers have adequate subject-matter knowledge?* 



1. Strong Practice: Georgia, Indiana, South Dakota, Tennessee

2. Strong Practice: Minnesota⁵, Missouri

3. Arizona⁶

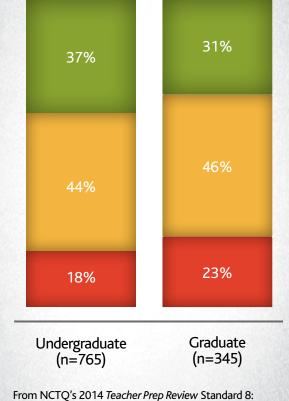
4. Alabama, Alaska, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Hawaii, Idaho, Illinois, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma⁷, Oregon, Pennsylvania, Rhode Island, South Carolina, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming

- 5. Minnesota's test for general social studies is divided into two individually scored subtests.
- 6. Candidates with a master's degree in the subject area do not have to pass a content test.

7. Oklahoma offers combination licenses without adequate testing.

#### Figure 17 TEACHER PREP REVIEW FINDINGS

Less than 40 percent of preparation programs ensure that secondary teachers are well prepared in the subjects they will teach.



High School Content (n=1,110 high school programs). State licensing test requirements are also considered in evaluating this standard.

# **Special Education Teacher Preparation**

#### **Key Components**

### (The factors considered in determining the states' ratings for this topic.)

- The state should ensure that all special education teachers are sufficiently prepared for the ways that college- and career-readiness English language arts standards affect instruction of all subject areas. Specifically,
  - A. The state should ensure that all new secondary special education teachers are prepared to support struggling readers.
  - B. The state should require that all new secondary special education teachers are prepared to incorporate complex texts and academic language into instruction.
  - C. The state should ensure that all new secondary special education teachers are prepared to incorporate literacy skills as an integral part of every subject.
- 2. The state should require that new elementary special education teachers pass a rigorous test of reading instruction in order to attain licensure.
- The state should not permit special education teachers to teach on a K-12 license that does not differentiate between the preparation of elementary teachers and that of secondary teachers.
- All elementary special education candidates should be required to pass a subject-matter test for licensure that is no less rigorous than what is required of general education candidates.
- 5. The state should ensure that secondary special education teachers possess adequate content knowledge.



- Idaho, Iowa, Maryland, New Jersey, Tennessee, Virginia
- Alabama, Indiana, Louisiana, Massachusetts, MISSOURI, North Carolina, Pennsylvania, Rhode Island, Texas, West Virginia, Wisconsin

New York

MISSOURI NCTQ STATE TEACHER POLICY YEARBOOK 2014 : 27

# PREPARING SPECIAL EDUCATION TEACHERS FOR COLLEGE- AND CAREER-READINESS STANDARDS

Although most special education students are expected to meet the same high college- and career-readiness standards as typical students, too many states set an even lower bar for the preparation and licensure requirements of special education teachers. States must ensure that special education teachers are well grounded in all of the subject matter they will be licensed to teach.

Currently, Missouri offers a K-12 Elementary Mild to Moderate Option or a K-12 Middle/Secondary Mild to Moderate Option. The state also offers an early childhood special education certification for birth to grade 3. Key licensing requirements for special education teachers in Missouri include:

# MISSOURI SPECIAL ED TEACHER PREP SNAPSHOT State only offers discrete elementary and secondary special education licenses.

Elementary subject-matter test required for special education license.

Secondary test in at least one subject area required for secondary special education license.

Special education teachers must also be prepared for the key instructional shifts that differentiate college- and career-readiness standards from previous student standards.

X No

Yes

Candidates applying for K-12 Elementary Mild to Moderate Option certification are required to pass the Missouri Educator Gateway Assessments (MEGA) elementary test. Although it addresses the science of reading, it does not amount to a stand-alone reading test. The MEGA Early Childhood Special Education test does not address the science of reading.

According to the elementary test framework, teachers must be able to "understand text comprehension and vocabulary development." The state then offers extensive examples that incorporate some of the instructional shifts in the use of text associated with Missouri's college- and career-readiness standards for students. English language arts competencies also require teachers to "demonstrate the ability to comprehend, interpret, and analyze literary and informational texts."

The early childhood test framework does not address informational texts.

Candidates applying for the K-12 Middle/Secondary Mild to Moderate Option certificate are required to pass the MEGA Mild/

#### RECOMMENDATIONS

Ensure that special education teachers are prepared to meet the instructional requirements of college- and careerreadiness standards for students.

Require all elementary special education teacher candidates to pass a rigorous assessment in the science of reading instruction.

Missouri should require a rigorous reading assessment tool to ensure that its elementary special education teacher candidates are adequately prepared in the science of reading instruction before entering the classroom. The assessment should clearly test knowledge and skills related to the science of reading and address all five instructional components of scientifically based reading instruction: phonemic awareness, phonics, fluency, vocabulary and comprehension. If the test is combined with an assessment that also tests general pedagogy or elementary content, it should report a subscore for the science of reading specifically. Elementary special education teachers who do not possess the minimum knowledge in this area should not be eligible for licensure.

# Incorporate informational text of increasing complexity into classroom instruction.

Although Missouri is on the right track with its elementary and middle/secondary testing frameworks, which address knowledge of informational texts, the in-depth coverage of the topic is presented as examples. Therefore, the extent to which this information is required is unclear. Missouri is encouraged to make certain that both frameworks capture the major instructional shifts of college- and career-readiness standards, thereby ensuring that all special education teacher candidates have the ability to adequately incorporate complex informational text into classroom instruction. Missouri should also ensure that candidates teaching the elementary grades on the early childhood certification have the ability to address the use of informational texts as well as incorporate complex informational texts into classroom instruction.

Moderate Middle/Secondary Multi-Content test. Teachers must "understand reading comprehension, vocabulary, and analysis and interpretation of literary and informational texts." The state then lists in-depth examples pertaining to informational texts.

Missouri also offers a K-12 Specific Content Middle/Secondary Option. Candidates must pass a single-subject content test at either the middle or secondary level. (See discussion of middle and secondary requirements.)

Missouri's elementary test addresses literacy within its science competencies by requiring teachers to "apply literacy skills to the interpretation, synthesis, and analysis of information from scientific and technical sources (e.g., explaining central ideas, interpreting domain-specific terminology, recognizing how texts structure information into categories and hierarchies)." The state's framework also requires historical, geographic, and political science and economic literacy.

The middle/secondary test for special education requires historical, geographical and political science and economic literacy, "including identifying purpose and main ideas, distinguishing between fact and opinion, interpreting information represented in diverse visual formats, and recognizing assumptions in [related] texts."

Missouri has no requirements for the preparation of elementary or secondary special education teachers that address struggling readers. The early childhood test framework requires that teachers "understand how to promote the development of emergent concepts and skills in various areas of the curriculum in young children with disabilities," which is followed by the example: "demonstrate knowledge of strategies for promoting early literacy development in young children with disabilities, including young children who are English language learners."

#### Supporting Research

#### Proposed Rules

http://dese.mo.gov/sites/default/files/am/documents/EQ-13-004rev_001.pdf

Missouri Educator Gateway Assessments

www.mo.nesinc.com

Special Education Requirements

http://dese.mo.gov/schoollaw/rulesregs/EducCertManual/Index.htm Test Frameworks http://www.mo.nesinc.com/PageView.aspx?f=GEN_Tests.html

#### MISSOURI RESPONSE TO ANALYSIS

Missouri was helpful in providing NCTQ with facts that enhanced this analysis. The state added that all special education teachers must complete five semester hours of reading instruction, including a Methods of Teaching Reading in the Content Fields course. New certification rules expand the requirement to nine semester hours in Literacy, which must include reading/writing in the content area, as well as instructional interventions for students with reading deficits.

#### **RECOMMENDATIONS CONTINUED**

# *Incorporate literacy skills as an integral part of every subject.*

To ensure that special education students are capable of accessing varied information about the world around them, Missouri should—either through testing frameworks or teacher standards— specifically include literacy skills and using text to build content knowledge in history/social studies, science, technical subjects and the arts.

#### Support struggling readers.

Missouri should articulate requirements ensuring that all special education teachers are prepared to intervene and support students who are struggling with reading. With reading difficulties generally representing the primary reason for special education placements, it is essential that all special education teachers have the knowledge and skills to diagnose and support students with literacy needs.

# Ensure that secondary special education teachers possess adequate content knowledge.

Secondary special education teachers are frequently generalists who teach many core subject areas. While Missouri is on the right track in requiring content testing with separately scored subtests, the state should monitor the rigor of this new test to ensure that it guarantees requisite knowledge needed in the secondary classroom. Missouri may also want to consider a customized HOUSSE route for new secondary special education teachers and look to the flexibility offered by the Individuals with Disabilities Education Act (IDEA), which allows for a combination of testing and coursework to demonstrate requisite content knowledge in the classroom.

Missouri is further encouraged to clarify its special education policy by making distinct grade level licenses. The fact that the licenses are labeled as "K-12" elementary or middle/ secondary makes one wonder whether these are really discrete grade level licenses or that a teacher with a K-12 elementary license can also able to teach at the secondary level without additional content testing.

Figure 18	USE OF INFORMATION.	SUITE	BUPPORTING STRUGGING
Are states ensuring that new special	1 Pr		S TH
education teachers are prepared for the	ð	82	
instructional shifts associated with college	- <del>4</del>	and and a second	Le Co
and career-readiness standards?	- स्र		ELD.
	2 /	· ~ /	~~
Alabama			
Alaska Arizona			
Arkansas			
California			
Colorado			
Connecticut			
Delaware			
District of Columbia			
Florida			
Georgia			
Hawaii			
Idaho			
Illinois			
Indiana			
lowa			
Kansas			
Kentucky			
Louisiana			
Maine			
Maryland			
Massachusetts			
Michigan			
Minnesota			
Mississippi			
MISSOURI			
Montana			
Nebraska			
Nevada			
New Hampshire			
New Jersey			
New Mexico			
New York			
North Carolina North Dakota			
Ohio			
Ohio Oklahoma			
Oregon			
Pennsylvania			
Rhode Island			
South Carolina			
South Dakota			
Tennessee			
Texas			
Utah			
Vermont			
Virginia			
Washington			
West Virginia			
Wisconsin			
Wyoming			
Fully addresses instructional component.			

📕 Fully addresses instructional component 🛛 🖌 Partially addresses instructional component

#### SUMMARY OF SPECIAL EDUCATION **TEACHER PREP FIGURES**

#### Figure 18

Requirements for instructional shifts associated with college- and career-readiness standards

#### Figure 19

Distinctions in licenses between elementary and secondary teachers

Figure 20

Content test requirements

Figure 21

Science of reading requirements

Figure 22

Teacher Prep Review findings about special education teacher prep

### **EXAMPLES OF BEST PRACTICE**

Although all states have weaknesses when it comes to special education teachers' preparedness to meet the instructional requirements of college- and careerreadiness standards for students, both Indiana and New York are notable for addressing the instructional shifts toward building content knowledge and vocabulary through increasingly complex informational texts and careful reading of informational and literary texts associated with these standards.

Unfortunately, states are also weak in other areas of special education teacher preparation. However, three states-Missouri, New York and Rhode Island-are worthy of mention for taking steps in the right direction in ensuring that all special education teachers know the subject matter they are required to teach. These three states require that elementary special education candidates pass the same elementary content tests, which are comprised of individual subtests, as general education elementary teachers.

Secondary special education teachers in New York must pass a multi-subject content test for special education teachers comprised of three separately scored sections. Rhode Island requires its secondary special education teachers to hold certification in another secondary area. Secondary special education teachers in Missouri can either take a multi-subject test comprised of four separately scored sections or a single-subject secondary assessment.

Figure 19	, A	Offers K. 12 and Bradespecificand	tification(s) 12
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between elementary	VOT RTEN	د از مربع	tion
and secondary special	2 G	ters,	fers
education teachers?		Q &	ర్ శ్ర్
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Alaska			
Arizona			
Arkansas			
California			
Colorado			
Connecticut Delaware			
District of Columbia			
Florida			
Georgia			
Hawaii			
Idaho			
Illinois			
Indiana			
lowa			
Kansas			
Kentucky Louisiana			
Maine			
Maryland			
Massachusetts			
Michigan			
Minnesota			
Mississippi			
MISSOURI	<b>1</b>		
Montana			
Nebraska			
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New Mexico			
New York			
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Vermont	1		
Virginia			
Washington			
West Virginia			
Wisconsin			
Wyoming			
	17	12	22

#### Figure 20

Which states require subject-matter testing for special education teachers?

Elementary Subject-Matter Test					
Required for an elementary special education license	Alabama, Iowa, Louisiana, Massachusetts, MISSOURI ¹ , New Jersey, New York, Pennsylvania ² , Rhode Island, Texas, West Virginia ³ , Wisconsin				
Required for a K-12 special education license	Colorado, Idaho, North Carolina				
Secondary Subject-Matter Test(s)					
Tests in all core subjects required for secondary special education license	MISSOURI ¹ , New York ⁴ , Wisconsin ⁵				
Test in at least one subject required for secondary special education license	Louisiana, New Jersey, Pennsylvania², Rhode Island, West Virginia³				
Required for a K-12 special education license	None				

1. Missouri offers a K-12 certification but candidates must pass either the elementary multi-content assessment or the middle/secondary multi-content assessment.

2. In Pennsylvania, a candidate who opts for dual certification in elementary or secondary special education and as a reading specialist does not have to take a content test.

3. West Virginia also allows elementary special education candidates to earn dual certification in early childhood, which would not require a content test. Secondary special education candidates earning a dual certification as a reading specialist are similarly exempted.

4. New York requires a multi-subject content test specifically geared to secondary special education candidates. It is divided into three subtests.

5. Wisconsin requires a middle school level content area test which does not report subscores for each area.

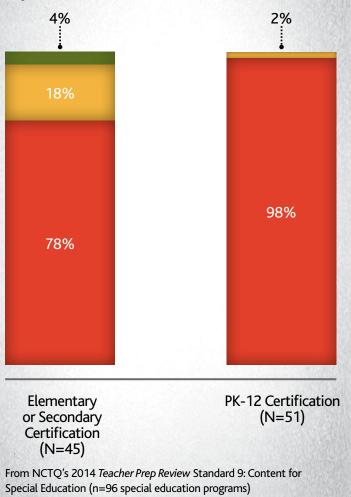
Figure 19

1. Missouri, New Jersey, Oregon and Vermont issue a K-12 certificate, but candidates must meet discrete elementary and/or secondary requirements.



#### Figure 22 TEACHER PREP REVIEW FINDINGS

Less than 5 percent of preparation programs ensure that special education teachers are well prepared in the subjects they will teach.



 These states do not offer a standalone early childhood certification that includes elementary grades or the state's early childhood certification is the de facto license to teach elementary grades.

# **Admission into Teacher Preparation**

#### **Key Components**

(The factors considered in determining the states' ratings for this topic.)

- 1. The state should limit admission to teacher preparation programs to candidates in the top half of the college-going population.
- 2. The state should require teacher candidates to pass a test of academic proficiency that assesses reading, writing and mathematics skills as a criterion for admission to teacher preparation programs. Alternatively, academic proficiency could be demonstrated by grade point average.

How well are states ensuring that teacher prep programs have rigorous admission standards? Alaska, Arizona, California, Colorado, 18 Idaho, Kansas, Maine, Maryland, Massachusetts, Minnesota, Montana, Nevada, New Mexico, North Dakota, Ohio, South Dakota, Vermont, Wyoming Alabama, Arkansas, Florida, Illinois, Iowa, 8 MISSOURI, Nebraska, Oregon Connecticut, Indiana, Kentucky, New Hampshire, Oklahoma, 10 Pennsylvania, Tennessee, Washington, West Virginia, Wisconsin Georgia, Mississippi Delaware, District of Columbia, Hawaii, Louisiana, Michigan, New Jersey, New York, North Carolina, Rhode Island, South Carolina, Texas, Utah, Virginia

# RAISING THE BAR FOR TEACHER PREP THROUGH HIGHER ADMISSION STANDARDS

NCTQ has repeatedly found that too many teacher preparation programs are in need of major improvement, graduating first-year teachers lacking skills and content knowledge adequate to thrive in the classroom. One important way states can raise the bar for teacher preparation programs is to set more ambitious admission requirements for new elementary, secondary and special education teachers. This is even more relevant and important as the increasing expectations of collegeand career-readiness standards demand more from teachers academically. A key criterion for admissions is evidence of a strong academic background, and states should require programs to select candidates from the top half of the college-going population. Countries like Singapore and Finland are even more restrictive in admissions; the top half goal is realistic and achievable while representing a significantly higher standard for programs throughout the United States. Until recently, few states had rigorous academic standards for admission, but with states like Rhode Island and Delaware significantly raising the bar by taking the lead in establishing higher standards and new accreditation requirements from CAEP, this is beginning to change.

### MISSOURI

#### **DMISSION INTO TEACHER PREP SNAPSHOT**

State requires a minimum GPA of 3.0 for admission into teacher prep.

State requires a test normed to college-bound population prior to admission to prep program.

Yes 🗡 No

Approved undergraduate teacher preparation programs are required to accept only teacher candidates who have passed a basic skills test, the Missouri General Education Assessment. This test replaces the College Basic Academic Subject Examination (CBASE). Although the state sets the minimum score for this test, it is normed primarily to the prospective teacher population. Missouri does not allow teacher preparation programs to exempt candidates who demonstrate equivalent performance on a college entrance exam.

#### Supporting Research

Missouri Educator Gateway Assessments http://dese.mo.gov/eq/ep/

#### **MISSOURI RESPONSE TO ANALYSIS**

While not asked to respond to the full analysis for this section, Missouri did not indicate any policy updates related to admission to teacher preparation.

#### RECOMMENDATIONS

Require preparation programs to use a common test normed to the general college-bound population.

Missouri should require an assessment demonstrating that candidates are academically competitive with all peers, regardless of their intended profession. Requiring a common test normed to the general college population would allow for the selection of applicants in the top half of their class, as well as facilitate program comparison.

#### Exempt candidates with comparable SAT or ACT scores.

Missouri should waive its current basic skills test requirement for candidates whose SAT or ACT scores demonstrate that they are in the top half of their class.

#### Consider requiring candidates to pass subject-matter tests as a condition of admission into teacher programs.

In addition to ensuring that programs require a measure of academic performance for admission, Missouri might also want to consider requiring content testing prior to program admission as opposed to at the point of program completion. Program candidates are likely to have completed coursework that covers related test content in the prerequisite classes required for program admission. Thus, it would be sensible to have candidates take content tests while this knowledge is fresh rather than wait two years to fulfill the requirement, and candidates lacking sufficient expertise would be able to remedy deficits prior to entering formal preparation.

		22		No test required	
Figure 23	4		e e Tam	er aff	
Do states measure the	Ò	PRO A		28 B	
academic proficiency of			to the	ed by	
teacher candidates?	a de la	V10			
		tidat tidat	Ssion the fidate	etio	
	ÊQĂ				
Alabama	· •	ۍ ۳			
Alaska					
Arizona					
Arkansas					
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Colorado					
Connecticut					
Delaware					
District of Columbia	1				
Florida					
Georgia					
Hawaii	1				
Idaho					
Illinois					
Indiana					
lowa					
Kansas					
Kentucky					
Louisiana	1				
Maine					
Maryland					
Massachusetts					
Michigan	1				
Minnesota					
Mississippi					
MISSOURI					
Montana					
Nebraska Nevada					
New Hampshire					
New Jersey	1				
New Mexico					
New York	1				
North Carolina	1				
North Dakota					
Ohio					
Oklahoma		2			
Oregon					
Pennsylvania					
Rhode Island					
South Carolina	1				
South Dakota					
Tennessee					
Texas					
Utah	1				
Vermont					
Virginia	1				
Washington					
West Virginia					
Wisconsin					
Wyoming					
	13	18	13	7	

#### SUMMARY OF ADMISSION INTO TEACHER **PREP FIGURES**

- Figure 23 Test of academic proficiency requirements
- Figure 24
  - **GPA** requirements
- Figure 25

Teacher Prep Review findings about admissions

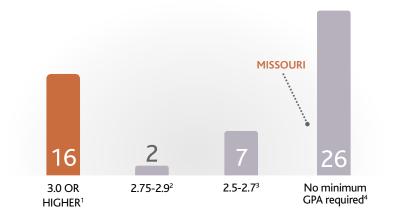
### EXAMPLES OF BEST PRACTICE

While many states now require CAEP accreditation which includes a standard requiring strong admission practices, Rhode Island and Delaware have set requirements independent of the accreditation process, ensuring that the states' expectations are clear. Both states require a test of academic proficiency normed to the general college-bound population rather than a test that is normed just to prospective teachers. Delaware also requires teacher candidates to have a 3.0 GPA or be in the top 50th percentile for general education coursework completed. Rhode Island also requires an average cohort GPA of 3.0, and, beginning in 2016, the cohort mean score on nationally-normed tests such as the ACT, SAT or GRE must be in the top 50th percentile. In 2020, the requirement for the mean test score will increase from the top half to the top third.

1. Requirements for admissions test normed to college-bound population is based on CAEP accreditation standards, not state's own admission policy.

2. Candidates in Oklahoma also have the option of gaining admission with a 3.0 GPA.

Do states require a minimum GPA for admission to teacher prep?



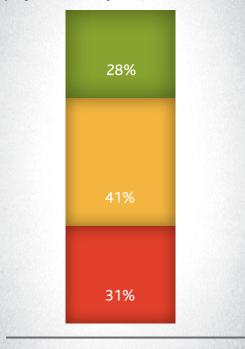
 Strong Practice: Delaware, District of Columbia⁵, Georgia⁶, Hawaii⁵, Louisiana⁵, Michigan⁵, Mississippi⁶, New Jersey⁶, New York⁵, North Carolina⁵, Oklahoma⁷, Pennsylvania⁸, Rhode Island, South Carolina⁵, Utah, Virginia⁵

- 3. Alabama, Arkansas, Connecticut⁹, Florida, Nebraska, South Dakota, Wisconsin¹⁰
- 4. Alaska, Arizona, California, Colorado, Idaho, Illinois, Indiana, Iowa, Kansas, Maine, Maryland, Massachusetts, Minnesota, Missouri, Montana, Nevada, New Hampshire, New Mexico, North Dakota, Ohio, Oregon, Tennessee, Vermont, Washington, West Virginia, Wyoming
- 5. Required minimum GPA of 3.0 is based on CAEP accreditation standards, not state's own admission policy.
- 6. The 3.0 GPA requirement is a cohort average; individual candidates in Mississippi and New Jersey must have a 2.75 GPA. Individual candidates in Georgia must have a 2.5 GPA.
- 7. Candidates in Oklahoma also have the option of gaining admission by passing a basic skills test.
- Students can also be admitted with a combination of a 2.8 GPA and qualifying scores on the basic skills test or SAT/ACT.
- 9. Connecticut requires a B- grade point average for all undergraduate courses.
- 10. The GPA admission requirement is 2.5 for undergraduate and 2.75 for graduate programs.

#### Figure 25

#### TEACHER PREP REVIEW FINDINGS

Only 28 percent of teacher preparation programs have a high bar for admissions.



From NCTQ's 2014 *Teacher Prep Review* Standard 1: Selection Criteria (n=2,396 elementary, secondary and special education programs)

^{2.} Kentucky, Texas

# **Teacher Preparation Program Accountability**

#### **Key Components**

### (The factors considered in determining the states' ratings for this topic.)

- The state should incorporate preparation to teach to college- and career-readiness standards into its accountability requirements for teacher preparation programs.
- 2. The state should collect data that connects student achievement gains to teacher preparation programs. Such data can include value-added or growth analyses conducted specifically for this purpose or evaluation ratings that incorporate objective measures of student learning to a significant extent.
- 3. The state should establish the minimum standard of performance for each category of data. Programs should be held accountable for meeting these standards, with articulated consequences for failing to do so, including loss of program approval.
- 4. The state should produce and publish on its website an annual report card that shows all the data the state collects on individual teacher preparation programs.
- 5. The state should retain full authority over its process for approving teacher preparation programs.

teacher preparation programs are accountable for their performance? Alaska, Connecticut, District of

How well are states ensuring that

Columbia, Hawaii, Idaho, Minnesota, Nebraska, New York, North Dakota, South Dakota, Utah, Wyoming

Arizona, Arkansas, California, Illinois, Iowa, Kansas, Maine, Maryland, Mississippi, **MISSOURI**, Montana, New Hampshire, Oklahoma, Oregon, Pennsylvania, Vermont, Virginia, West Virginia

Alabama, Indiana, Kentucky, Massachusetts, Nevada, New Jersey, New Mexico, South Carolina, Washington, Wisconsin

Colorado, Delaware, Florida, Georgia, Michigan, North Carolina, Ohio, Rhode Island, Tennessee, Texas

Louisiana

18

#### HOLDING PREPARATION PROGRAMS ACCOUNTABLE FOR RESULTS

The ultimate goal of teacher preparation programs should be to produce teachers who are effective in educating their students and ensure that they are ready for college and career. As programs operate by virtue of state approval, it is the state's responsibility to connect approval to accountability measures that ensure high performance. While this goal may have been hard to assess a few years ago, that is no longer the case. Redesigned evaluations of teacher effectiveness in the majority of states offer an opportunity for states to collect meaningful objective data on the performance of program graduates. To date, few states connect their process of approving teacher preparation programs to measurable outcome data about programs' graduates.

### MISSOURI

Yes

#### TEACHER PREP ACCOUNTABILITY SNAPSHOT

X State collects data that connects student achievement gains to teacher preparation programs.

- State collects other meaningful data that reflect program performance.
- State has set minimum standards for program performance.
- State publishes an annual report card on its own website.

State retains full authority over its approval process.

Missouri's approval process for its traditional and alternate route teacher preparation programs does not hold programs accountable for the quality of the teachers they produce.

No

Most importantly, Missouri does not collect or report data that connect student achievement gains to teacher preparation programs. The state does rely on some objective, meaningful data to measure the performance of traditional teacher preparation programs. Missouri collects retention rates of teachers as well as satisfaction ratings by school principals and teacher supervisors of student teachers using a standardized form to permit program comparison. The results are reported to the state board annually.

According to the new Missouri Standards for Professional Educators, the state will rely on an Annual Performance Report for Educator Preparation Programs (APR-EPP) to determine whether programs are meeting the six program standards. Tentative assess-

#### RECOMMENDATIONS

#### Collect data that connect student achievement gains to teacher preparation programs.

As one way to measure whether programs are producing effective classroom teachers, Missouri should consider the academic achievement gains of students taught by programs' graduates, averaged over the first three years of teaching. Data that are aggregated to the institution (e.g., combining elementary and secondary programs) rather than disaggregated to the specific preparation program are not useful for accountability purposes. Such aggregation can mask significant differences in performance among programs.

# Report other meaningful data that reflect program performance.

Although measures of student growth are an important indicator of program effectiveness, they cannot be the sole measure of program quality for several reasons, including the fact that many programs may have graduates whose students do not take standardized tests. The accountability system must therefore include other objective measures that show how well programs are preparing teachers for the classroom, such as:

- Evaluation results from the first and/or second year of teaching;
- Average raw scores of teacher candidates on licensing tests, including academic proficiency, subject matter and professional knowledge tests;
- 3. Number of times, on average, it takes teacher candidates to pass licensing tests
- Establish the minimum standard of performance for each category of data.

Merely collecting the types of data described above is insufficient for accountability purposes. The next and perhaps more critical step is for Missouri to establish precise minimum standards for teacher preparation program performance for each category of data. Programs should then be held accountable for meeting these standards, and there should be ments include connections to student growth, teacher and school leader surveys, retention and the state's model evaluation system. The state must still approve the assessment to be used in the development of the APR-EPP.

Missouri also collects programs' annual summary licensure test pass rates (70 percent of program completers must pass their licensure exams). Regrettably, the 70 percent pass-rate standard sets the bar quite low and is not a meaningful measure of program performance. Missouri does not collect these data for its alternate route programs.

Further, in the past three years, no programs in the state have been identified as low performing—an additional indicator that programs lack accountability. The state's website does not include a report card that allows the public to review and compare program performance; it merely provides a link to the information posted by Title II.

Missouri maintains control over its approval process.

#### **Supporting Research**

Missouri Standards for the Preparation of Educators http://dese.mo.gov/eq/ep/MoSTEP/documents/MoSPEStandards.pdf 5 CSR 20-400.300 Title II State Reports https://title2.ed.gov

#### MISSOURI RESPONSE TO ANALYSIS

While not asked to respond to the full analysis for this section, Missouri did not indicate any policy updates related to teacher prep program accountability.

#### **RECOMMENDATIONS CONTINUED**

consequences for failing to do so, including loss of program approval.

### Publish an annual report card on the state's website.

Missouri should produce an annual report card that shows all the data the state collects on individual teacher preparation programs, which should be published on the state's website at the program level for the sake of public transparency. Data should be presented in a manner that clearly conveys whether programs have met performance standards.



# SUMMARY OF TEACHER PREP PROGRAM ACCOUNTABILITY FIGURES

Figure 26

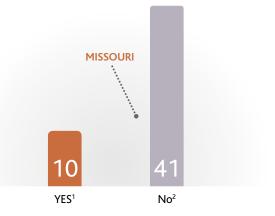
Accountability requirements

Figure 27 Use of student achievement data

### EXAMPLES OF BEST PRACTICE

No state has yet implemented a full accountability system for teacher preparation that features data, including student achievement gains, connected to teacher preparation programs (not just the institution level); has clear minimum standards of performance for those data; and publishes the results for use by prospective teachers, hiring school districts and the general public. Some states are well on their way. **Georgia** and **Louisiana** collect student achievement gains and set minimum standards of performance, while **Ohio** and **Tennessee** have published report cards that include connections to student achievement gains.

#### Figure 27



Do states connect student achievement data to teacher preparation programs?

1. Strong Practice: Colorado, Delaware, Florida, Georgia, Louisiana, North Carolina, Ohio, Rhode Island, Tennessee, Texas

2. Alabama, Alaska, Arizona, Arkansas, California, Connecticut, District of Columbia³, Hawaii³, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland³, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York³, North Dakota, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming

3. Included in state's Race to the Top plan, but not in policy or yet implemented.

#### Figure 26

1. For traditional preparation programs only.

2. State does not distinguish between alternate route programs and traditional preparation

programs in public reporting. 3. For alternate routes only.

### Teacher Preparation Policy Priorities for Missouri

# Prepare all teachers to meet the instructional shifts of college- and career-readiness standards for students.

- Strengthen preparation requirements to ensure teacher candidates have the ability to address the use of informational texts as well as incorporate complex informational texts into classroom instruction. *Priority for elementary, middle, secondary and special education teacher preparation.*
- Through testing frameworks or teacher standards, include literacy skills and using text to build content knowledge in history/social studies, science, technical subjects and the arts.
   Priority for elementary, middle, secondary and special education teacher preparation.
- Ensure teachers are prepared to intervene and support students who are struggling with reading. Priority for elementary, middle, secondary and special education teacher preparation.

#### Additional priorities for elementary teacher preparation:

- Require a rigorous assessment in the science of reading instruction.
- Require early childhood education teachers who teach at the elementary level to pass a content test with separate passing scores for each of the core subject areas.
- Require a content specialization in an academic subject area.

#### Additional priorities for special education teacher preparation:

- Require elementary special education candidates to pass a rigorous assessment in the science of reading instruction.
- Ensure secondary special education teachers possess adequate content knowledge for the grades and subjects they teach.

#### Raise admission requirements:

• Limit admission to teacher preparation programs to candidates in the top half of the college-going population, measured by a test normed to the general college-bound population or minimum GPA.

#### Hold preparation programs accountable:

- Collect performance data to monitor programs, including student achievement gains.
- Set minimum standards for program performance with consequences for failure to meet those standards.
- Publicly report performance data.

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NCTQ is available to work with individual states to improve teacher policies. For more information, please contact:

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