

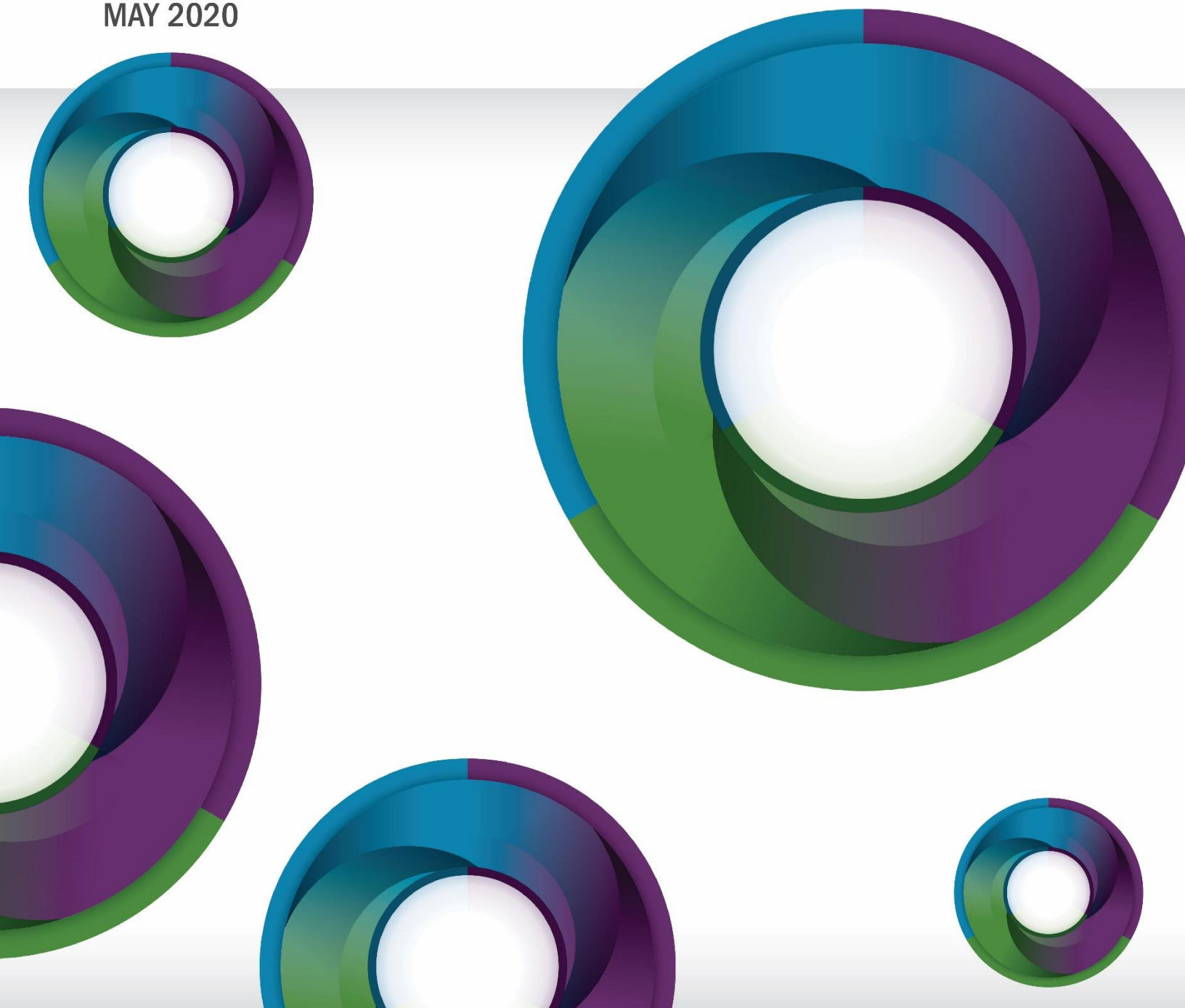
Center on
GREAT TEACHERS & LEADERS

at the American Institutes for Research[®] ■

TALENT DEVELOPMENT FRAMEWORK

Improving Access to Excellent Educators
for All Students

MAY 2020



Talent Development Framework: Improving Access to Excellent Educators for All Students

MAY 2020

Center on
GREAT TEACHERS & LEADERS
at the American Institutes for Research® ■

1000 Thomas Jefferson Street NW
Washington, DC 20007-3835
877-322-8700
www.gtlcenter.org

Copyright © 2020 American Institutes for Research. All rights reserved.

Sections of this work were originally produced by the Center on Great Teachers and Leaders (GTL Center). The GTL Center was administered by the American Institutes for Research and its partners, the Council of Chief State School Officers and Public Impact, from 2012 through 2019. The original module was developed in partnership with the New Teacher Center in 2014.

This module includes original content as well as new content and is being offered by the American Institutes for Research as part of the GTL Center.

Copyright © 2020 American Institutes for Research®. All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, website display, or other electronic or mechanical methods, without the prior written permission of the American Institutes for Research. For permission requests, please use the Contact Us form on www.air.org.



www.air.org

11912_06/20

Contents

	Page
Introduction	1
The Challenge: Moving Past Piecemeal Policies	2
The Talent Development Framework: Charting a Path Toward Integrated Policy Coherence	2
Unpacking the Talent Development Framework.....	7
Works Cited.....	13
Research Base Informing the Talent Development Framework.....	14

Introduction

Highly effective teachers and school leaders are of utmost importance to improve student achievement and ensure the success of the education system. Unfortunately, students in underserved schools are not provided equitable access to effective teachers and leaders. For this reason, many states and districts have implemented evidence-based talent management strategies at various points across the full educator career continuum to strengthen the quality of the educator workforce.

With so many separate educator talent management initiatives—from preservice training to professional development and compensation—and with district, state, and federal involvement in teacher policies, policymakers often have adopted a piecemeal approach to dealing with this system-level issue. In response, the Center on Great Teachers and Leaders (GTL Center) at the American Institutes for Research (AIR) has developed the *Talent Development Framework*, which provides an opportunity and a roadmap for state- and district-level policymakers to systemically address and improve educator quality.

Beyond promoting a comprehensive, systemic approach to improving educator quality, the *Talent Development Framework* aids state and district leaders in proactively and purposefully addressing talent challenges per local context. Current practice in education often takes a passive approach to securing human capital (Maxwell, 2008). According to Rice, Roellke, Sparks, and Kolbe (2009), “the multiple aspects of the problem [of teacher staffing] suggest that a multidimensional policy response is required” to improve educator talent management (p. 513). We argue that only by making talent management a priority can states, districts, and schools ensure a highly effective, diverse workforce that can provide an equitable education to our students. The *Talent Development Framework* helps policymakers make sense of talent challenges across the educator career continuum by illustrating and systematizing the complexity of developing human talent in education.

The evidence base on teacher and principal quality is large and varied. The existing evidence is clear, however, that there is no silver bullet for ensuring the quality of teachers and principals. Rather, multiple, coordinated evidence-based reform efforts across the educator career continuum are required. The *Talent Development Framework* can be used to facilitate a more proactive and strategic approach to securing the teachers and school leaders needed to create a strong, equitable education system.

The Challenge: Moving Past Piecemeal Policies

What will it take to ensure that every student in your state has access to effective teachers and school leaders? The dominant approach to promoting educator quality and educational equity is decidedly piecemeal and not necessarily sensitive to local contexts: states often adopt new policies in response to federal requirements or incentives, state legislative action, or the latest private sector reform agendas. The result is a patchwork of policies that treat each stage of the educator career continuum—such as recruitment, preservice training, certification, evaluation, and retention—as separate efforts with insufficient attention to relationships and interdependencies across policies.

Piecemeal policymaking creates different, sometimes contrary, expectations for educators; overburdens and confuses educators; and can drive talented teachers and school leaders out of the profession rather than proactively working to retain and develop a top-quality education workforce.

Moving past piecemeal policies requires your state to chart a different course: one that begins with treating each policy area as part of a coherent, aligned system with clear, consistent expectations for teachers and school leaders across the career continuum.

The Talent Development Framework: Charting a Path Toward Integrated Policy Coherence

What Is Talent Development?

Leading industries in the public and private sectors compete to recruit and retain talented, committed professionals to both advance their field and provide employers with a competitive edge. In this “war for talent,” the education field has historically been a nonparticipant (Auguste, Kihn, & Miller, 2010). Through the policies and practices they implement, state education agencies (SEAs) play a crucial role in determining whether the education field will remain on the sidelines or join the marketplace and enact better policies that attract, prepare, develop, support, and retain talented educators.

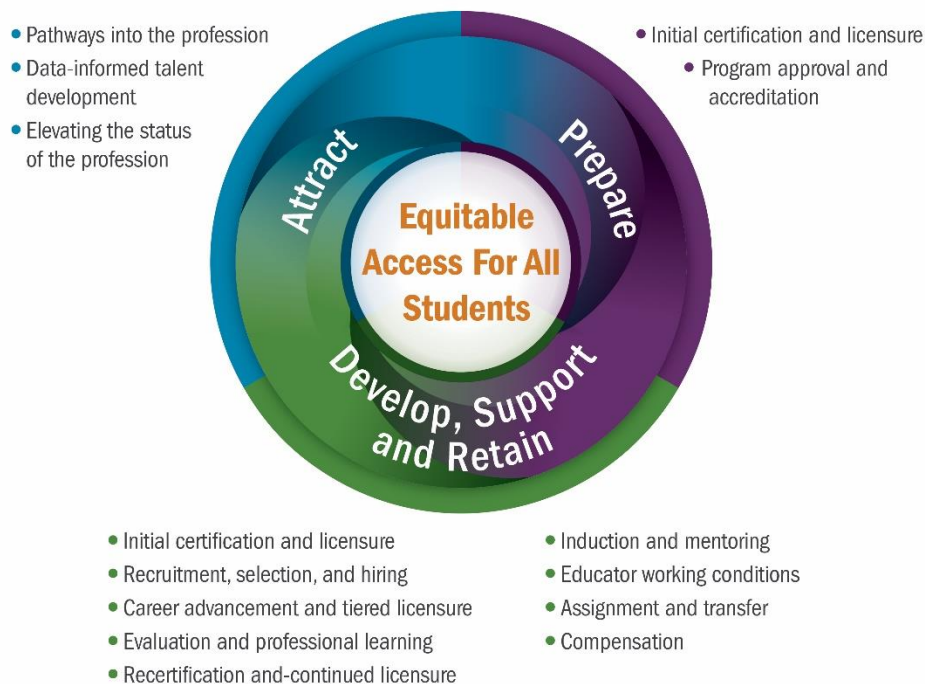
Consider the following questions:

- Does your state prepare and attract the right proportion of teachers and school leaders in various subject areas, grades, and specializations to meet the needs of your entire student population?
- Do your state’s requirements for preparation, licensure, and performance evaluation encourage a shared or common set of standards and expectations?

- Are your strongest teachers and leaders serving students in underserved communities?
- Are your human capital data systems, such as teacher certification, qualifications, experience, working conditions, effectiveness, and professional development, connected and ready to be used in identifying strengths and challenges?
- Are policies in place in your state to help develop, support, and retain teachers and leaders who demonstrate highly effective practices and improve student outcomes?
- Are policies in place in your state that are sensitive to local context and needs?
- Do teachers and school leaders have access to induction, mentoring, and ongoing professional learning that actually supports them in meeting all students' needs?

If you answered “no” or “maybe” to any of these questions, your state should consider changes to the state-level policies and practices that are currently shaping your educator talent development system. The Talent Development Framework (Figure 1) offers a comprehensive model of the state policy and practice areas found in a strong talent development system.

Figure 1. Talent Development Framework



As Figure 1 illustrates, the framework groups state policy and practice into three key interdependent policy and practice sections:

- Attract the right talent into the profession to meet your students' needs.

- Prepare future teachers and school leaders to meet your students' needs.
- Develop, support, and retain educators in the field to ensure that they can continue to meet your students' needs.

How Is Each Policy and Practice Section Interdependent and Why Does It Matter?

The sections are interdependent because each policy and practice topic (and the subtopics within each section) impacts the efficacy of the other sections, if expectations are consistent, rigorous, and supported. Poor planning in one area increases the challenges and puts stress on the other areas. An aligned, coherent system instead creates a mutually reinforcing system that supports and strengthens educators as professionals across the career continuum as illustrated in the following examples:

- **Learning experiences:** Preparation should transition seamlessly to a comprehensive induction and mentoring program, which is aligned with ongoing professional growth opportunities and informed by regular evaluations. What is taught in ongoing professional learning activities must be aligned with, and not contradictory to, what is taught during the preparation phase.
- **Standards and expectations:** The same teacher and leader standards that are used to assess teacher and principal effectiveness should be applied during recruitment and hiring. This consistency can aid selection decisions and signal to candidates who do not think they will be able to meet those standards to self-select out of the district (Milanowski, Prince, & Koppich, 2007). The same standards should be incorporated into preparation programs' systems for selecting and eventually graduating candidates.
- **Working conditions:** Working conditions affect teacher and school leader retention; however, during recruitment, candidates gain some sense of the school's environment and culture; this perception may affect their decision to apply or accept a job offer. Working conditions, such as time schedules and trust among colleagues, further affect whether evaluation and professional growth activities that require collaboration are effective; whether mentors are able to successfully integrate new teachers into a collegial community during induction; and whether resigning teachers will provide early notification to administrators so that early recruitment and hiring timelines can be implemented.

Recognizing the interdependencies among the key components increases the effectiveness of policy implementation by creating coherence and consistency in the goals of each policy and in the strategies developed to achieve them. In addition, taking into account these interdependencies creates efficiencies. Financial and other resources can be leveraged to avoid overlap in effort and to divide costs among reforms working toward common purposes.

Strategies for improving policy and practice for each of these components are addressed at the state, district, and school levels. Neither states nor districts and schools can achieve success on their own.

State education agencies influence each of the components, although their role in supporting some components—such as recruitment and hiring as well as educator working conditions—is more limited compared to the influence of more local decision makers. In

As states and districts work to identify the most effective and cost-effective ways for states to support districts, one thing is clear: There must be a shared responsibility for developing effective policies for recruiting and retaining effective teachers and school leaders.

particular, low-income districts working to improve educator recruitment and retention are influenced by resource allocation decisions made by state decision makers. Likewise, districts have significant influence on most components, although their influence on some areas—especially preparation—is more limited. Meanwhile, state and district initiatives affect one another and should be developed in a coordinated, collaborative fashion.

Achieving success in attracting highly effective teachers and school leaders to the profession and to specific schools and districts is possible—and necessary. The immense attention paid to this important topic during the past several decades by scholars in sociology, political science, history, and economics and by action-oriented policy and research organizations has produced a large body of research, which consistently points to several crucial elements of policy and practice.

Taken together, the interdependent policy and practice sections form a talent development *system*. In their study of federal teacher policies, Sykes and Dibner (2009) noted that in spite of the larger number of reform initiatives, “most states also have not advanced strategies for human capital development that assist in cultivating a state-wide teacher workforce” (p. 53). Thoughtful attention to how each policy and practice section is connected is the first step to ensuring that your state has a coherent and effective talent development system.

Challenges to Implementing a Coherent Talent Development System

Undertaking this work is not a simple endeavor. Four common challenges arise:

- Strengthening your state’s educator talent development system requires examining multiple policy areas, involving staff from numerous departments within the agency, and asking staff to step outside existing organizational structures to create new relationships with shared responsibilities and to work across existing departments.

- Data systems for certification data, professional development completion data, and educator effectiveness data are often disconnected. Building a unified talent data system consistent with this framework can generate insights critical for prioritizing strategies and focusing resources where they are most needed.
- Talent development system implementation is heavily influenced by state context. For example, the recruitment needs of a state with a mostly rural population or a growing economic base are likely very different from a state where most people reside in large urban centers or that is experiencing economic contraction.
- Many talent development functions are implemented at the local district level. Although some functions are required by state policy, many are driven by policies that are established by the local district. The relationship of SEAs with local education agencies (LEAs) is a major factor in operating talent development systems, and those relationships differ according to state context.

The Talent Development Framework and support from the Center on Great Teachers and Leaders can help your state address these challenges and chart a path to

- Inventory your state’s educator talent development strengths and needs in three key policy areas—attracting; preparing; and developing, supporting, and retaining teachers and leaders;
- Identify opportunities to build a strategic data inventory of these connections;
- Prioritize policy areas based on state and local context;
- Analyze the depth of implementation of existing policies to align educator quality policy efforts and create consistency across expectations, accountability, and supports for educators; and
- Prioritize next steps to address timing, needs, and resources.

The Talent Development Framework was designed with all three policy and practice sections in mind. Although the conceptual features of the framework (e.g., Figure 1) show the three sections that define a comprehensive educator talent development system in any context, the components and subcomponents that make up these sections are described in more detail below.

Unpacking the Talent Development Framework

The following three policy and practice sections are listed with their related components and subcomponents. These components were identified based on the research summarized in the Educator Talent Management Framework (Meyer, Nelson, & Mann, 2019), based on other resources (like Carver-Thomas, 2018), and created in collaboration with content experts. The subcomponents describe practices used by states and districts.

Talent Development Framework Data Tool.

The GTL Center offers an accompanying Excel-based TDF data tool. Users can insert their own human capital data and the tool generates user-friendly charts that visualize shortages and gaps across the entire educator career continuum. The tool is a powerful way to ensure your state or district is examining data across each TDF policy area and helps create a concrete path for redrawing educator shortages picture in your context.

State Policies and Practices to Attract Teachers and Leaders

1. Pathways Into the Profession

- 1a. Create a program approval process that reflects the standards and criteria for educator preparation program accreditation and review.
- 1b. Support program recruitment and selection processes for educator preparation programs (traditional and alternative).
- 1c. Support grow-your-own programs.
- 1d. Support school districts and educator preparation programs to create and support high-quality university-district partnerships responsive to district and state needs.
- 1e. Implement reciprocity requirements with neighboring states to ensure that teachers and leaders can transfer licenses easily and without penalty.

2. Data-Informed Talent Development

- 2a. Collect high-quality statewide data on teacher and principal shortages, including by subject, geographic area, school characteristics, grade, and effectiveness levels.
- 2b. Collect or encourage districts to collect high-quality data on teacher and leader assignment, qualifications, tenure, and dismissal.
- 2c. Collect high-quality data on equitable access to effective teachers and leaders and use them to support state-level policies and initiatives to ensure that all students have access to effective teachers and leaders.
- 2d. Examine trends in the data on teacher and leader recruitment, retention, hiring, placement, and equitable access and report data to all responsible parties and governing entities.

- 2e. Support districts in using the data to develop policies that will ensure all students have effective teachers and leaders.
- 2f. Implement policies and initiatives that will facilitate district access to data (e.g., timely information about funding so districts can implement hiring timelines to fill their vacancies). Implementation should include regional district sharing of staffing data.
- 2g. Support educator preparation programs in using the data to inform their communications with and selection of teacher candidates.

3. Elevating the Status of the Profession

- 3a. Lead efforts or partner with organizations to increase the prestige of the education profession.
- 3b. Form partnerships among various education-related associations and organizations to engage teachers in dialogue about priority reforms.
- 3c. Serve as a convener of accomplished teachers and diverse stakeholders to consider strategies to increase teacher engagement in decision making and communication of state initiatives.
- 3d. Provide information about ways to use monetary and nonmonetary incentives to address shortage areas and for performance.
- 3e. Develop a career path approach that recognizes teachers' professionalism and accomplishments and provides policies to establish teacher leadership roles including those that allow teachers to stay in the classroom.
- 3f. Implement policies to promote, recognize, or reward National Board Certification.
- 3g. Create a tiered licensure system, teacher leadership certificate or license endorsements, or work with credentialing institutions to create a teacher leadership program so teachers can earn credentials to be better prepared for leadership work.

State Policies and Practices to Prepare Teachers and Leaders

4. Initial Certification and Licensure

- 4a. Establish teacher and leader standards for certification and licensure that ensure high-quality and well-trained candidates and that are applied to both traditional and alternative programs.
- 4b. Ensure that assessments used for certification and licensure require educators to demonstrate knowledge and skills that are reflective of content knowledge and pedagogical skills essential for new educators and that are aligned with teacher and leader standards.
- 4c. Align certification and licensure standards with state professional practice standards.

- 4d. Have stakeholders regularly review and update certification and licensure standards to ensure that they reflect the knowledge and skills, evidence-based practices, and high-leverage practices needed to teach all of today's learners.

5. Program Approval and Accreditation

- 5a. Support stakeholders to (i) review the entry criteria of the educator preparation programs to ensure that they are based on supply and demand needs and (ii) identify potential barriers that prevent high-quality candidates from entering the profession.
- 5b. Support educator preparation programs to demonstrate use of experiential and authentic learning in coursework and clinical experiences that prepare educators to educate all students.
- 5c. Require educator preparation program curricula to be aligned with standards for teacher and leader performance and standards as well as standards for Grades K–12 student learning.
- 5d. Collect data on educator effectiveness, link it to preparation program effectiveness, share relevant information with preparation programs, and provide support and resources for continuous improvement.

State Policies and Practices to Develop, Support, and Retain Teachers and Leaders

6. Recruitment, Selection, and Hiring

- 6a. Support school districts in identifying strategic marketing opportunities.
- 6b. Support districts by investing state resources in attracting high-caliber candidates to the teaching profession, with a specific focus on hard-to-staff schools and subjects.
- 6c. Support school districts in aligning recruitment targets and timelines to district goals.
- 6d. Support school districts in establishing clear criteria, rubrics, and training to screen teacher and leader candidates and in developing systematic hiring procedures that create a strong fit between the teacher and district.
- 6e. Support school districts in using technology to streamline the recruitment, hiring, and selection processes.
- 6f. Establish policy that clearly defines accountability for monitoring quality and timeliness of selection processes (see Education Commission of the States [n.d.]).
- 6g. Encourage districts to consider how recruitment efforts may be affected by other elements of the system (e.g., professional growth, leadership, teacher evaluation systems).

7. Assignment and Transfer

- 7a. Encourage districts to consider educator quality and school-educator fit when making transfer decisions.

- 7b. Encourage districts to require early notification of transfers.
- 7c. Support districts in sharing educator evaluation results when teachers transfer between districts.
- 7d. Create policies that encourage within- and across-district transfers that support equitable access to effective teachers and leaders.

8. Induction and Mentoring

- 8a. Support school districts to provide comprehensive induction programs for new teachers and new leaders that include a strong mentoring component focused on the improvement of instruction.
- 8b. Require school districts to assign new teachers a manageable courseload and appropriate placement of students.
- 8c. Support school districts to ensure that mentors are selected using high-quality criteria and matched with the appropriate teacher.
- 8d. Support school districts to ensure that mentors receive high-quality training in coaching skills and ensure that mentors are prepared to help mentees learn about district priorities in curriculum, instruction, and assessment.
- 8e. Support mentors and mentees to meet for a minimum or specified number of times per week or per month.

9. Evaluation and Professional Learning

- 9a. Require school districts to implement a high-quality educator evaluation system that includes multiple, valid, and reliable measures of educator effectiveness aligned with state educator standards.
- 9b. Provide school districts with support and resources to identify and train evaluators on the evaluation measures, conducting evaluations, and delivering effective feedback.
- 9c. Collect summative educator evaluation data to understand the distribution of educator effectiveness to better allocate resources that ensure equity.
- 9d. Establish state standards for professional learning.
- 9e. Establish requirements for high-quality, ongoing, job-embedded professional learning opportunities at the district level.
- 9f. Encourage school districts to align professional learning opportunities with feedback from evaluation systems and with formative and summative data pertaining to professional development learning goals.
- 9g. Require districts to ensure that teachers and leaders participate in a goal-setting process that aligns performance with professional learning opportunities.

- 9h. Ensure districts provide teachers and leaders time for coaching, peer observation, collaboration, and reflection that supports shared responsibility and team-based problem solving to support every student's learning.
- 9i. Identify possible structures for job-embedded professional learning and provide technical assistance or information to inform districts of these models.
- 9j. Ensure that professional development policies address equity by improving the learning of all students and prepare educators to understand and appreciate all students; creating safe, orderly, and supportive learning environments; and holding high expectations for their academic achievement.

10. Recertification and Continuing Licensure

- 10a. Require teachers and leaders to demonstrate effective practice through multiple measures in order to renew their license or certificate.
- 10b. Establish multi-tiered licensing systems that promote development along a continuum aligned with the teachers and leader standards.
- 10c. Ensure continuing licensure or recertification requirements align with the research based on professional learning, including the requirement that professional learning be sustained and job-embedded.

11. Compensation

- 11a. Establish long-term teacher and leader salary policies that are competitive, sustainable, and designed to recognize and reward effective educators.
- 11b. Provide opportunities to school districts to offer competitive performance-based salary structures and nonfinancial incentives (e.g., release time for peer observation, professional learning, and collaboration opportunities).
- 11c. Provide resources to school districts to support revising teacher and leader salary structures.
- 11d. Support districts in providing short-term incentives to address teacher and leader recruitment issues (e.g., relocation bonuses and one-time signing bonuses with a focus on hard-to-staff schools and subjects).
- 11e. Engage key stakeholders, including unions and teacher associations, in developing compensation and incentive policies at the state level.
- 11f. Establish sufficient capacity of the state data infrastructure and assessment system to implement and evaluate performance-based compensation plans.
- 11g. Provide ongoing evaluation of the implementation of new compensation systems to assess whether the key goals of the reforms are being achieved.

11h. Support districts in creating well-paid roles that enable teachers to advance in their careers while continuing to teach.

11i. Utilize salary data to measure and address any pay gaps between schools and districts.

12. Career Advancement and Tiered Licensure

12a. Establish a tiered licensure structure for teachers and leaders that highlights differentiated roles for career advancement.

12b. Establish standards and competencies to recognize when an educator is ready to move from one stage to another.

12c. Provide resources and support for school districts developing and piloting tiered systems for teachers and leaders that highlight differentiated roles for career advancement.

12d. Provide resources to districts for professional development to support teachers who take on additional leadership responsibilities.

13. Educator Working Conditions

13a. Provide resources and support to school districts to ensure that school buildings are safe, clean, and appropriately equipped for learning and teaching.

13b. Include school climate and teaching conditions policies within state education policies that address positive approaches to school discipline, development of supportive teaching and learning environments, and bullying.

13c. Provide resources and supports to school districts to promote effective school leaders and teacher leaders.

13d. Provide resources, technology, and support to school districts to ensure that teachers have sufficient resources that are aligned with college- and career-readiness standards.

13e. Establish criteria for school districts to ensure manageable teacher workloads, including protecting teachers' time to collaborate with colleagues, attending professional learning events, and decreasing administrative paperwork in order to increase instructional time.

13f. Facilitate a survey of statewide teaching conditions that can provide districts and schools with information on educator working conditions.

Works Cited

- Auguste, B., Kihn, P., & Miller, M. (2010). *Closing the talent gap: Attracting and retaining top-third graduates to careers in teaching*. New York, NY: McKinsey and Company. Retrieved from http://mckinseysociety.com/downloads/reports/Education/Closing_the_talent_gap.pdf
- Carver-Thomas, D. (2018). *Diversifying the teaching profession: How to recruit and retain teachers of color*. Palo Alto, CA: Learning Policy Institute.
- Maxwell, L. A. (2008, December 1). Human capital key worry for reformers. *Education Week*, 28(14), 1, 13. Retrieved from http://www.edweek.org/ew/articles/2008/12/03/14human_ep.h28.html?tmp=1540450504
- Meyer, C., Nelson, E., & Mann, K. (2019). *Educator talent management framework: A research-based model for district and state policymakers* (Version 4.0). Washington, DC: American Institutes for Research.
- Milanowski, A., Prince, C., & Koppich, J. (2007). *Observations of teachers' classroom performance*. Washington, DC: Center for Educator Compensation Reform. Retrieved from <https://www.wested.org/wp-content/uploads/classroom-practice.pdf>
- Rice, J. K., Roellke, C., Sparks, D., & Kolbe, T. (2009). Piecing together the teacher policy landscape: A policy problem typology. *Teachers College Record*, 111(2), 511–546.
- Sykes, G., & Dibner, K. (2009) *Fifty years of federal teacher policy: An appraisal*. Washington, DC: Center on Education Policy.

Research Base Informing the Talent Development Framework

- Auguste, B., Kihn, P., & Miller, M. (2010). *Closing the talent gap: Attracting and retaining top-third graduates to careers in teaching*. Chicago, IL: McKinsey & Company.
- Bergman, D. A., & Beck, A. (2011). Moving from research to large-scale change in child health care. *Academic Pediatrics*, 11(5), 360–368.
- Bhatt, M. P., & Behrstock-Sherratt, E. (2010). *Managing educator talent: Promising practices and lessons from Midwestern states*. Naperville, IL: Learning Point Associates.
- Bruno, P., & Strunk, K. O. (2019). Making the cut: The effectiveness of teacher screening and hiring in the Los Angeles Unified School District. *Educational Evaluation and Policy Analysis*, 41(4), 426–460.
- Center on Great Teachers and Leaders and the Collaborative for Effective Educator Development, Accountability, and Reform (CEEDAR) Center. (2020). *Shortages in special education toolkit: Attract strategies role guide*. Washington, DC: Author. Retrieved from <https://gtlcenter.org/sites/default/files/AttractRoleGuide508.pdf>
- Center on Great Teachers and Leaders and the Collaborative for Effective Educator Development, Accountability, and Reform (CEEDAR) Center. (2020). *Shortages in special education toolkit: Preparation strategies role guide*. Washington, DC: Author. Retrieved from <https://gtlcenter.org/sites/default/files/PrepStrategiesRoleGuide508.pdf>
- Center on Great Teachers and Leaders and the Collaborative for Effective Educator Development, Accountability, and Reform (CEEDAR) Center. (2020). *Shortages in special education toolkit: Retention strategies role guide*. Washington, DC: Author. Retrieved from <https://gtlcenter.org/sites/default/files/RetentionRoleGuide508.pdf>
- Coburn, C. E. (2013). Rethinking scale: Moving beyond numbers to deep and lasting change. *Educational Researcher*, 32(6), 3–12.
- Ingersoll, R., & May, H. (2011). *Recruitment, retention and the minority teacher shortage*. Chicago.
- Knudson, J. (2013). *You'll never be better than your teachers: The Garden Grove approach to human capital development*. San Mateo, CA: California Collaborative on District Reform.
- McLaughlin, M. W. (1990). The Rand change agent study revisited: Macro perspectives and micro realities. *Educational Researcher*, 19(9), 11–16.

- Mizrav, E. (2019). Decision points: *Defining, calculating, and addressing gaps in access to effective educators. Considerations for states. Special Issues Brief*. Center on Great Teachers and Leaders: Washington, DC.
- Myung, J., Martinez, K., & Nordstrum, L. (2013). *A human capital framework for a stronger teacher workforce*. Stanford, CA: Carnegie Foundation for the Advancement of Teaching.
- Podolsky, A., Kini, T., Bishop, J., & Darling-Hammond, L. (2016). *Solving the teacher shortage: How to attract and retain excellent educators*.
- Reform Support Network. (2013a). *Sustainability rubric: A tool to help state education agencies assess their current efforts to sustain reform strategies to meet student achievement goals*. Washington, DC: Author.
- Reform Support Network. (2013b). *Sustainability rubric summary*. Washington, DC: Author.
- Watt, H. M., Richardson, P. W., Klusmann, U., Kunter, M., Beyer, B., Trautwein, U., & Baumert, J. (2012). Motivations for choosing teaching as a career: An international comparison using the FIT-Choice scale. *Teaching and Teacher Education*, 28(6), 791–805.



Center on
GREAT TEACHERS & LEADERS

at the American Institutes for Research® ■

www.gltcenter.org



1000 Thomas Jefferson Street NW
Washington, DC 20007-3835
202.403.5000

www.air.org