Helping all students to meet cognitively challenging standards requires major instructional shifts from what most educators have experienced and were prepared to do by their preservice training. These shifts entail not just new techniques, but also some fundamentally different ways of thinking about the goals and processes of teaching. Hence, the question before the state is how to promote systems of professional learning and educator feedback that support teachers in making changes in their practice that, in turn, help more students become college- and career-ready. Underlying this question are a number of research-informed assumptions:

- **Continuous improvement at scale requires a systematic approach.** Practitioners and researchers know of instructional improvement practices that they think are effective based on the success of some programs (teacher collaboration, coaching, etc.). In reality, the results are mixed, and there are few clear examples in the United States of sustained effective professional learning at scale, at least beyond a teacher’s first few years on the job.

- **How people work needs to change.** Change at scale is not a matter of implementing individual programs but of fundamentally changing the way professionals think about and go about their work. Examinations of high-performing school systems around the world describe a constellation of policies and practices that together organize educators’ jobs around the work of improving effectiveness.

- **Professional learning must support subject-based student-learning goals.** Useful professional learning is focused on important things that teachers need to teach their students. Although effectiveness also must depend on format and mode of delivery, professional learning is of little use if, as the University of Michigan’s David K. Cohen has posed, teachers are “learning to teach nothing in particular.” Effective professional learning at scale may require development and dissemination of more subject-based curricular guidance. It also will likely require tapping deeper expertise in subject-specific pedagogy (e.g., the ways students respond when grappling with a domain-specific concept.)

- **Conditions are a key factor in effectiveness.** Whether or not professional learning improves outcomes has a lot to do with the context in which it takes place. Success may require changing conditions (e.g., changing schedules to give teachers more time for collaborative professional learning; or pushing leadership mindsets from one of “meeting compliance” to “developing competency.”) The field needs to learn what conditions lead to successful professional learning so it can better foster them.

- **Contextual differences call for a flexible approach.** If conditions are both key to success and they differ across the state, then any state approach needs to be adaptable to different contexts. Moving toward an effective system of professional learning in small rural districts will require a different approach than doing so in large metro areas. The state can set some “guardrails” for how local systems operate, but they need to allow for customization. The previously mentioned reviews of high-performing systems in other countries generally describe a “tight-loose” approach, in which accountability and supports set general expectations, but the specifics of what happens in professional learning is locally determined.

- **Informal professional learning plays an important role.** Teachers engage in professional learning informally every day, and many see these informal activities as more beneficial to their practice than formal experiences. Teachers also value feedback and collaboration, but feel they don’t get enough of either. Understanding more about the role that informal learning plays, and how to best leverage and enhance that role, is important to envisioning an overall system of professional learning.

While these assumptions may represent current thinking, they need testing, and some may need to be refined or even discarded. To that end the Tennessee Education Research Alliance plans, in the coming months and years, to build a growing body of knowledge about what works in professional learning, and why it works, so that policymakers and practitioners can make better informed decisions about how to support educators in their professional growth.
TENNESSEE’S PROFESSIONAL LEARNING CHALLENGE: THE VIEW FROM THE STATE

STUDENT LEARNING FOR COLLEGE & CAREER READINESS
• Foundational Literacies: In ELA, math, science, civics, etc.
• Competencies: Critical thinking, collaboration, problem solving, communication
• Character Qualities: Curiosity, initiative, persistence, adaptability, etc.

In TN: Average ACT scores have improved, but about half of seniors still do not score at a level required by most colleges and universities.

TEACHING FOR COLLEGE & CAREER READY STUDENT LEARNING
• Equitable & Ambitious: Engages all learners in higher-order learning activities while at the same time developing their foundational literacies and procedural fluencies.
• Emphasis on Depth & Content: Focused on deep understanding of a few key concepts, on connections within & across grades, and on students’ effective use of evidence.

In TN: Ratings of teacher practice are lowest on use of questioning, critical thinking, and problem-solving.

EFFECTIVE PROFESSIONAL LEARNING
Content-based, collaborative, extended duration, opportunities for practice & feedback

In TN: Teachers value collaboration the most, but only 32 percent say it’s given enough time.

CONducive PROFESSIONAL ENVIRONMENTS
Supportive leadership, safe & orderly, mutual trust, evaluation for improvement

In TN: Teachers who get feedback say they use it, but only 58 percent say they get such feedback.

STATE LEVERS
• State-Provided Training (e.g., for Read to Be Ready coaches)
• Optional programs (e.g., pairing teachers through the Instructional Partnership Initiative)
• Guidelines (e.g., Response to Intervention manual)
• Requirements (e.g., for educator prep programs, PD credits, teacher & leader evaluation)
• Facilitating Networks (e.g., districts collaborating in the Tennessee Early Literacy Network)
• Incentives (e.g., retention bonuses for effective educators)

DISTRICT LEVERS
• Personnel Decisions [e.g., valuation, observation, recruitment, retention, and promotion of teachers and leaders, etc.]
• Training [e.g., new teacher induction, curriculum training, etc.]
• Scheduling [e.g., time for teacher collaboration, etc.]
• Facilitating networks [e.g., across schools, among teachers and school leaders]
• District-wide initiatives [e.g., continuous improvement models]

FOCUS OF NEEDED RESEARCH

Notes and Additional Resources
1 For a summary of college- and career-ready knowledge and skills for the 21st Century, see “What are the 21st century skills every student needs?” on the website of the World Economic Forum.
2 Data for the “in TN” statements in Figure 1 come from Tennessee Department of Education’s: “Tennessee Succeeds”; Annual Tennessee Educator Survey, 2016; and statewide teacher evaluation results.
3 For a summary of characteristics of effective PD, see page 10 of this snapshot’s companion practice brief, of the same title, from the Tennessee Education Research Alliance.
4 For a description of practices and policies for professional learning in Hong Kong, Singapore, Shanghai, and British Columbia, see “Beyond PD: Teacher Professional Learning in High-Performing Systems” by Ben Jenson and colleagues, from Learning First. 2016.
6 For more on school conditions that may predict professional growth, see “The Myth of the Performance Plateau” by John Papay and Matthew Kraft, in the May 2016 Educational Leadership.
7 For more on the types of professional learning that teachers value, see TNTP’s “The Mirage: Confronting the Hard Truth about Our Question for Teacher Development”. 2015.