Transforming the State Educator Workforce

SREB Annual Meeting
Richmond, Virginia
June 24, 2019

Joan M. Lord
Vice President
Education Data, Policy Research and Programs
Most of the 50 million workers in the region will be affected by automation in the coming decades.

If state and business leaders do not act, 18 million workers and their children could be unemployable or stuck in low-wage jobs: an endless cycle of poverty.

This multigenerational cycle, combined with rising workforce skill demands, means more workers of all educational attainment levels will be:

- Unemployed or underemployed
- Earning incomes below the poverty level
- Reliant on state services
Our Charge Today

Most of the 50 million workers in the region will be affected by automation in the coming decades.

If state and business leaders do not act...

...to explore how states ensure the teaching workforce is up to the challenge.
A Key Educator Workforce Tension

Teacher Shortage vs. Teacher Quality
Problems in the Pipeline

Interest in the profession

Percent of High School Students Taking ACT Indicating An Interest in a College Major in Education

- 32% in 2002
- 6% in 2011
- 5% in 2018
Problems in the Pipeline

Academic progression

Enrollments and Completions in All* Teacher Preparation Programs

*includes EPPs and Alternative Programs
Problems in the Pipeline

Academic progression

Enrollments and Completions in All* Teacher Preparation Programs

SREB Enrollment

SREB Completion

247,264

100,176

165,129

62,710


*includes EPPs and Alternative Programs
College Participation
2013 to 2017

More traditional-age college students attended.

18 to 24 year olds: up 2 points
25 to 64 year olds: down 1 point
Progression Through College

College progression rates at four-year institutions are rising slowly but substantially. If this continues, it will lead to higher completion rates.

2006-07
73%

2016-17 progression rate for the cohort who entered in fall 2011 as first-time, full-time bachelor’s degree seeking students

SREB
Problems in the Pipeline

Degrees leading to new teachers

Bachelor’s Degrees
2013 to 2017, SREB Region

- Education: -20%
- Science & Technologies: 29%
- Health Sciences: 46%
- Humanities: 6%
- Social Sciences: 2%
- Business: 7%
Teacher Completers, by Program Type

2012-13
- Traditional: 74%
- Alternative, not affiliated with higher ed: 16%
- Alternative, affiliated with higher ed: 10%

2016-17
- Traditional: 64%
- Alternative, not affiliated with higher ed: 25%
- Alternative, affiliated with higher ed: 11%
Problems in the Pipeline

Teacher vacancies

Percentage of Schools Reporting Difficulty Filling Vacancies, by School Percent Under-Represented Minority

Problems in the Pipeline

Diversity

Percent students enrolled in K-12 public schools by race

Source: United Stated Department of Education. 
The State of Racial Diversity in the Educator Workforce, Figure 1.
Problems in the Pipeline

Diversity

Percent of Teachers in Public K-12 Schools
By Race/Ethnicity

Source: United States Department of Education.
*The State of Racial Diversity in the Educator Workforce, Figure 1.*
Problems in the Pipeline

Recap

A. Interest in the Profession
B. Academic Progression
C. Degrees Leading to New Teachers
D. Teacher Vacancies and Shortages
E. Diversity
Teacher Preparation Recommendations

1. Clinical Experiences

*Place all teacher candidates in high-quality clinical experiences.*

2. Licensure

*Hold all new teachers to the same standard, no matter their route into the profession.*
3. Partnerships

*Encourage strong partnerships between teacher preparation programs and local school districts.*

4. Effective Data Systems

*Bring together data from across state and local agencies to inform improvement.*
States Face a Dilemma … numbers or quality??

Agencies within the state could go it alone to find solutions…
States Face a Dilemma…

... or figure it out together....
States Face a Dilemma ...

... *maybe with a facilitator*!
Panelists

Johnny Key
Commissioner of Education
Arkansas

Executive Director
Teach for America
Eastern North Carolina

Andrew Lakis

Director, New Teacher Institute
Career & Technical Education
Kentucky Department of Education

Jodi Adams
Panelists

Executive Director
Teach for America
Eastern North Carolina

Andrew Lakis

The North Carolina Educator Workforce Roundtable
The North Carolina Roundtable Experiment; Balancing Teacher Human Capital Interests:

Andrew Lakis
Executive Director, Teach for America of Eastern North Carolina
Member, North Carolina Professional Educator Preparation and Standards Commission
Roundtable

- Multiple agencies, boards, and commissions represented:
  - Public K-12 instruction
  - Certification board
  - Board of education
  - Public higher education
  - Private higher education
  - Governor’s Office
Roundtable Charge

For key agencies and shareholders to collaborate and take action to increase the quality and quantity of teacher candidates and prepare them to be licensed, hired, supported and retained as highly effective educators in North Carolina schools.
North Carolina Work

• Roundtable is to issue recommendations and release action plan in late summer 2019.

• Members are in the process of developing specific strategies on:
  – State licensure requirements
  – Teacher pathways
  – Preparation program accountability and continuous improvement.
North Carolina Work

- Customized research reports
  - Landscape scan of state teacher education, licensure, and other policies and legislation, K-12 and higher education
  - Review of state teacher licensure strategies
  - Report on education dean’s perspectives on state licensure standards, pathways and accountability, based on interviews
  - Licensure reciprocity regulations in the state and in the region
The Roundtable Process

- Six 5-hour in-person meetings,
- Meeting-prep calls with SREB staff to set meeting agendas and update strategies
- Customized advice and support from SREB at meetings
  - Member check-ins with agency heads and colleagues between meetings
  - Feedback solicited from key constituent groups to inform strategies
  - Check-in and feedback results relayed back to Roundtable colleagues at each meeting
Roundtable Benefits

• Balance the **tactical** and **strategic** by leveraging immediate needs to support potential long-term plans.

• Create strategies that revise state **policy**, strengthen **partnerships**, broaden and deepen **pathways**, and ultimately, improve teacher **practice**.

• Make use of consistent **technical assistance** and **strategic advice** on communicating about the plan and evaluating the impact of initiatives.

• Generate an action plan that all state agencies can **support** and with parts that at least one state agency can **champion**.
Contact

andrew.lakis@teachforamerica.org
Panelists

Johnny Key

Commissioner of Education
Arkansas
High Quality Instruction in Early Literacy and Math in Arkansas

Commissioner Johnny Key
Commissioner of Education

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Legislation in Arkansas: Dyslexia

- Screening and intervention
- Identification and intervention training in EPPs
- Identification and intervention training for current teachers
- Dyslexia specialists and therapists
Legislation in Arkansas: Improving Reading Instruction

2017
Act 1063
Act 416
Act 930

- Scientific reading instruction in state-approved EPPs
- Standalone reading assessment required for K-6 and K-12 SPED license
- Required professional development in scientific reading instruction
- Developmentally appropriate literacy and math assessment in K-2
Legislation in Arkansas: Reading Plans and Curricula

2019
Act 83

• School literacy plans
• Reading instruction in graduate & alt cert EPPs
• DOE identifies list of approved reading curricula for district choice
• Annual PD for scientific reading instruction
By 2023, teachers must have “proficient knowledge and skills to teach reading consistent with the best practices of scientific reading instruction”

Detailed teacher competencies for reading and math; recently revised
## Arkansas’s Teacher Competencies for K-6, revised 2018

### English/language arts
- Science of reading
- Concepts of print
- Phonology
- Phonics and word study
- Development of reading comprehension
- Reading assessment/instruction
- Writing
- Speaking and listening

### Math (Based on AMTE)
- Concepts, practices, and curriculum
- Pedagogical knowledge and practices for teaching
- Students as learners of mathematics
- Social contexts of mathematics teaching and learning

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AMTE = Association of Mathematics Teacher Educators
Arkansas’s Requirements for Professional Development for Current K-6 Teachers

• Beginning 2018-19, districts must provide professional development for obtaining a proficiency credential in scientific reading instruction
• By 2021-22, teachers must demonstrate proficiency in knowledge and practices of scientific reading instruction
  • Nearly 20 pathways available for demonstrating proficiency
  • Will cover teachers from traditional and non-traditional backgrounds and those teaching under a waiver
Goals of Arkansas’s K-3 Reading Initiative: R.I.S.E. Arkansas

1. Sharpen the focus and strengthen instruction through professional learning
   • The science of reading
   • Evidence-based instruction
   • Data-based decision-making

2. Create community collaboration

3. Build a culture of reading

R.I.S.E. = Reading Initiative for Student Excellence
AR Math QuEST

Two-year, state-initiated professional development opportunity for mathematics educators

- Launched in 2019 for grades 6-8 and HS teachers; future expansion to K-5
- Builds mathematical identity and growth mindset;
- Develops math practices and skills to build procedural fluency from conceptual understanding

QuEST = Quantitative Essentials for Student and Teachers
Arkansas’s K-2 Assessment Requirements for Students

• Both literacy and math
• **Not for accountability**; data used to improve instruction
• Administered three time per year
• State offers districts three commercially developed options, all state-funded:
  • iStation ISIP
  • NWEA MAP
  • Renaissance STAR
Arkansas Teacher Pipeline – Growth in Teacher Cadet Participation

- **2014-15**: Four higher ed partners, 8 schools, 100 Cadets
- **2016-17**: 38 Schools, 250+ Cadets
- **2018-19**: Seventy-five schools, 500+ Cadets
  - Twenty higher ed partners, including ALL public four-year institutions
- **2019-20**: Eighty-seven schools, 1000 Cadets
Panelists

Jodi Adams

Director, New Teacher Institute
Career & Technical Education
Kentucky Department of Education
Kentucky Department of Education
New Teacher Institute
Program Description
NTI Completion Requirements:

- Participate in face-to-face trainings
  - KACTE Summer Conference (4 days)
  - Fall and Spring Regional Trainings (2 days)
  - Year 1 Wrap Up Session (2 days)

- Participate in Mentor component
  - Observed by Mentor Coach 3 times each year
  - Ongoing discussions and support by Mentor Teacher throughout each year
  - Observed by Administrator 3 times each year

- Complete assigned online work, participate in webinars
New Teacher Institute (NTI)  
YEAR 1

- Job Offer (CA-3 is submitted to OCTE)
- Welcome Email from NTI Director
- Registration for next NTI Start
- Online Learning
- Teacher paired with mentor teacher
- Attend NTI Session 1
- Classroom Observations
- Fall 2-Day Face to Face session
- Online Learning
- Classroom Observation
- Spring 2-Day Face to Face Session
- Online Learning
- Mentor Committee Meeting
- Year 1 Wrap-Up: June 2 day F2F
New Teacher Institute (NTI)

YEAR 2

For teachers needing degree, provisional certificate is renewable 5 times.

If all requirements are met, teacher submits for Professional Certificate.
## Occupation-based Certification List

*New Certifications indicated in RED.*

<table>
<thead>
<tr>
<th>Group</th>
<th>Certifications</th>
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<tbody>
<tr>
<td>Air Conditioning &amp; Heating</td>
<td>Emergency Medical Services</td>
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<tr>
<td>Airframe And Power Plant Mechanics</td>
<td>Engineering Technology</td>
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<td>Allied Health</td>
<td>Fire Service Technology</td>
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<tr>
<td>Auto Body Repairs</td>
<td>Food Science &amp; Dietetics</td>
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<tr>
<td>Auto Technology</td>
<td>Health Science</td>
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<td>Aviation Technology</td>
<td>Heavy Equipment Repair</td>
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<td>Business and Marketing</td>
<td>Industrial Maintenance Technology</td>
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<td>Carpentry</td>
<td>Law Enforcement</td>
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<tr>
<td>Commercial and Recreational Small Engine</td>
<td>Machine Tool Technology</td>
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<td>Technology</td>
<td>Marine Technology</td>
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<td>Computer Aided Drafting</td>
<td>Masonry</td>
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<td>Computer Graphics Technology</td>
<td>Plumbing</td>
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<td>Computer Science</td>
<td>Power Technology</td>
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<td>Computer Systems Technology</td>
<td>Pre-Law</td>
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<td>Cosmetology</td>
<td>Sheet Metal</td>
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<tr>
<td>Culinary and Food Services</td>
<td>Veterinary Assistant</td>
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<td>Diesel Technology</td>
<td>Video Production</td>
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<tr>
<td>Early Childhood Education</td>
<td>Welding</td>
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<tr>
<td>Electricity</td>
<td>Wood Manufacturing Technology</td>
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<td>Electronics</td>
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Two universities offer up to 12 hours of undergrad or graduate college credit, with the possibility of more in the near future.

College credit is not a requirement of NTI, unless teacher candidate does NOT have a degree in his or her content area. However, it is HIGHLY encouraged for all to take advantage of the opportunity to earn college credit.

Tuition waiver is available, per HB592.
Regulatory Changes
Regulatory Changes in October 2017

Occupation-based Teacher Rank

16 KAR 8:040 – INITIAL HIRE RANK CLASSIFICATION

- **Rank III** – one year provisional certification, high school graduation, four years of successful and appropriate occupation experience in the area to be taught, two years must have occurred in the last five years.

- **Rank II** – four years of successful and appropriate occupation experience in the area to be taught, two years must have occurred in the last five years, AND occupation-based **ASSOCIATE** degree within the specific technical field in which certification was issued, or in Career and Technical Education.

- **Rank I** – four years of successful and appropriate occupation experience in the area to be taught, two years must have occurred in the last five years, AND occupation-based **BACHELOR** degree within the specific technical field in which certification was issued, or in Career and Technical Education.

- **Candidate is hired in at corresponding rank. Candidate is required to have an associate degree or higher in occupational area in which certification is sought within six years of initial certification.**
Key Areas of Increased Pedagogical Focus
Areas of Increased Focus

- Social Emotional Learning
- Differentiated Instruction
- Strategies for Providing Accommodations
- Math and Literacy Integration
Math and Literacy Instruction

Module 2: Instructional Strategies

1. Creating a Vision for Career/Technical Education (CTE) Instruction
   1.1 Understanding Actively Engaging Instruction
   1.2 Designing Intellectually Challenging CTE Work
   1.3 Asking Questions to Foster Learning
   1.4 Presenting Information Effectively
   1.5 Incorporating Work-Based Learning Experiences

2. Using Project-Based Learning (PBL)
   2.1 Developing a Rational for PBL and Qualitites of a Good Project
   2.2 Designing High-Quality Projects
   2.3 Managing PBL

3. Using Cooperative Learning
   3.1 Defining Cooperative Learning and Its Importance
   3.2 Choosing Effective Cooperative Learning Strategies
   3.3 Managing Cooperative Learning Activites

4. Integrating Academics in CTE
   4.1 Embedding Literacy in Everyday CTE Lessons
   4.2 Developing Students' Reading Skills
   4.3 Embedding Numeracy in Everyday CTE Lessons
   4.4 Working With Other Teachers to Integrate Academics and CTE
Embedded in Instructional Planning

Module 1: Instructional Planning

1. Introduction to Teaching in Career/Technical Education (CTE)
   1.1 Introductions, Program Overview and Opening Activities
   1.2 The Mission of CTE
   1.3 The Role of CTE in Public Schools

2. The Instructional Planning Process
   2.1 The Big Picture of Instructional Planning
   2.2 Course Syllabus
   2.3 Curriculum Mapping
   2.4 Unit Plans
   2.5 Lesson Plans

3. Knowledge of Content
   3.1 A Framework for What to Teach in CTE
   3.2 Industry-Specific Knowledge and Skills
   3.3 Academic Knowledge and Skills
   3.4 21st Century Skills
   3.5 Program of Study

4. Knowledge of Students
   4.1 Developmental Characteristics of Students
   4.2 Strategies for Meeting Diverse Instructional Needs of Students
   4.3 Students with Special Learning Needs

5. Reflective Practice
   5.1 The Process of Reflection
   5.2 Professional Portfolios
   5.3 Reflective Collaboration with Other Teachers
   5.4 Professional Responsibilities
Embedded in Classroom Assessment

Module 3: Classroom Assessment

1. Understanding Assessment and Its Importance to High-Quality Career Technical Education (CTE) Instruction
   - 1.1 Defining the Role of the Teacher in Assessing the Student
   - 1.2 Using Formative and Summative Assessment
   - 1.3 Understanding the Characteristics of High-Quality Assessment
   - 1.4 Providing Effective Feedback Through Formative Assessment

2. Designing and Using Assessment Tools
   - 2.1 Using Rubrics to Assess Performance
   - 2.2 Developing Paper-and-Pencil Tests
   - 2.3 Embedding Reading and Writing in CTE Assessment
   - 2.4 Embedding Mathematics in CTE Assessment
   - 2.5 Using Portfolios to Measure Student Progress Over Time

3. Implementing Effective Grading Practices
   - 3.1 Establishing the Purpose of Grading in the CTE Classroom
   - 3.2 Using Standards-Based Grading
   - 3.3 Organizing and Maintaining a Grade Book

4. Using Assessment Data
   - 4.1 Analyzing Types of Assessment Data Used by Schools, Employers, and Postsecondary Institutions
   - 4.2 Using Data to Improve Instruction
Initial Results
Retention Rate for Occupation-based Teachers

- 2012-2016: 64.8%
- 2017-2019: 91.9%
Questions?

Contact Jodi Adams, NTI Director, with additional questions – Jodi.Adams@education.ky.gov
Phone: 502-564-4286 ext.4209
Discussion
Table 1

Table 2

Table 3

Table 4

Table 5

Table 6
Contacts

www.SREB.org

Joan.Lord@sreb.org