Group Session III: Hot Topics

2:30 PM – 3:15 PM
Leveraging Technology to Help Solve Human Capital Challenges

Sam Tankersley, Policy Analyst, Education Division, NGA Center
Human Capital Challenges:

(1) Answering the demand for high-quality practical experiences.

(2) Provide teaching candidates with cultural sensitivity and diversity training in low-risk environments.

(3) Strategically utilize employee absence and substitute management data to drive improvement.

(4) Increase access to quality professional development experiences.
Simulated Classrooms: TeachLivE

• Mixed-reality, avatar-based simulation environment that provides users the opportunity to practice a targeted skill.

• Students who went through four 10-minute sessions with the simulator outperformed those using traditional training methods.

Solving State Policy Challenges:
• Answering the demand for high-quality practical experiences.
• Provide teaching candidates with cultural sensitivity and diversity training in low-risk environments.
Online Video Coaching: CoPilot

• The CEA partnered with Edthena to embed video observation and feedback into courses offered on CoPilot.

• Educators across the state experience video feedback as part of their professional development.

• Educators take these courses as part of a district initiative or to fulfill their yearly professional development requirements.

Solving State Policy Challenges:
• Increase access to quality professional development experiences.
Teacher Absences: Frontline Education

Districts use Frontline Absence & Time to:

• Manage absence requests and employee leave, find substitutes and monitor the status of absences in real-time.

• Benchmark district’s performance against data from the Frontline Research & Learning Institute

• Stay compliant with state and federal labor laws, ACA, FLSA and collective bargaining agreements.

Solving State Policy Challenges:

• Strategically utilize employee absence and substitute management data to drive improvement.
State Levers

(1) Connect with EPP’s and districts on current work and elevate best practices.

(2) Convene stakeholders to explore options for adoption, implementation, and scaling.

(3) Leverage state innovation funds or ESSA Title II, Part A funds to pilot or scale.
Advancing School Leadership

Danny Carlson, Policy Analyst, Education Division, NGA Center
Session Outcomes

• Understand the influence that school leadership has on teaching, learning and school turnaround.

• Discuss policy levers governors can use to elevate school leadership and create conditions for success to boost principal pipelines.
Theory of Action

• Principals are second only to teachers among school-related factors in improving student achievement.

• Effective principals have a multiplier effect on high-quality teaching and thus is a critical factor in boosting student outcomes, especially in high-need schools.

• Strong school leadership an important determinant of whether a school can attract and keep the high-quality teachers necessary to turn around schools.
Why Do Effective Principals Matter?

Create strong learning environments
Cultivate a culture of continuous improvement, empower staff to share in school decision making, make data-informed decisions.

Foster teacher quality
Attract and retain quality teachers, support teacher growth, create collaborative environments.

Organize schools to support the whole child
Foster social and emotional learning, structure schedules to support collaboration and deep learning, promote success for all students.

Lead and support instruction
Offer meaningful feedback and learning opportunities to teachers, analyze student data, set high expectations.

Source: Learning Policy Institute
How To Embed School Leadership in Other Policy Priorities?

**Problem:** State struggling to recruit and retain high-quality teachers.

**Piecemeal Approach**
- Focus only on teacher recruitment

**Systems Approach**
- Improve pathways into teaching
- Boost teacher leadership opportunities
- Strengthen principal quality
Addressing STEM Teaching Shortages

Stephanie Hull, Acting President, Woodrow Wilson National Fellowship Foundation
Changing STEM Teacher Prep:
More Teachers, More Experience, Better Retention

WW

THE WOODROW WILSON
National Fellowshiphip Foundation

October 2017
Why STEM?

• Workforce needs, civic needs, economic opportunity
• International rankings: US 40th in math, 25th in science
• Teacher shortages nationwide
Why STEM?
About the Woodrow Wilson National Fellowship Foundation

• 1945:
  • Supporting Ph.D. study for returning WWII veterans
  • The G.I. Bill: recruiting professors

• Today:
  • Identifying and developing leaders and institutions to meet critical challenges
  • Nearly 23,000 Fellows
    • 15 Nobel Laureates
    • 38 MacArthur “Genius Grant” Fellows
    • 27 Presidential/national medalists
WW Today: STEM-Focused Programs

• The Woodrow Wilson Teaching Fellowships (state-based)
  • GA, IN, MI, NJ, OH (partner campuses)
  • High-need urban and rural schools
  • 1000+ teachers
  • Goal: *repairing STEM teacher preparation*

• The Woodrow Wilson Academy of Teaching and Learning
  • Collaboration with MIT (design year)
  • All kinds of districts
  • Competency-based, personalized learning
  • Goal: *transforming STEM teacher preparation*
The WW Teaching Fellowship

• Admission to M.A.T./M.Ed. program at partner university
• Full classroom year in a high-need urban/rural school
• Apx $30,000 stipend, with varying tuition arrangements
• Support and mentoring throughout the three-year teaching commitment
The WW Academy of Teaching and Learning

• New teacher preparation for new kinds of learning
  • Personalized
  • Tech-intensive
  • In and out of classrooms

• Focus on STEM teaching—inspiring lifelong learning

• Mastery-based program

• Initial teacher licensure
  • Secondary level (6–12)
  • Fields: biology, chemistry, math
Profile of Fellows (2017)

- 3.4 GPA
- ACT 93rd percentile; SAT Math 82nd percentile
- 98% STEM major
- 23% advanced degrees

Career changer: 66%
Recent graduate: 34%
Profile of Fellows (2017)

• In recent years, roughly 40 percent have identified as teachers of color, versus 18 percent in the overall U.S. educator workforce.

• In recent years, approximately 40 percent of the Fellows are male—note-worthy in a profession where are many as three-quarters of practitioners are female.

<table>
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<th>Year</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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<tbody>
<tr>
<td>Total Fellows</td>
<td>150</td>
<td>164</td>
<td>79</td>
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<tr>
<td>% Male</td>
<td>39</td>
<td>32</td>
<td>44</td>
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<tr>
<td>% Minorities</td>
<td>43</td>
<td>42</td>
<td>37</td>
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</table>
2016 Survey—Program Completers

• Of respondents:
  – 80% are still teaching
  – 84% are teaching in high-need schools

• Of those still teaching:
  – 67.5% plan to continue teaching
  – 28% are undecided
  – 4.5% plan to leave the profession soon
Assessment of the WW Teaching Fellowships

Outcomes revisited: (Evaluation 2.0)

- Persistence in teaching/persistence in high-need schools
- VAM
- Program sustainability/diffusion
- Formative assessment protocol
- Teacher survey protocol (Seidel)
Teacher Preparation Policy

• Sustained integration of program components in university curricula
• Deeper implementation of clinical and mentoring components
• Expansion to other teacher preparation disciplines
• Inclusion of Fellowship in state higher education budget
• Revision of state teacher preparation regulations, based on WW model
• Expansion of aspiring teacher pipeline