



NEW MEXICO
Education Speaker Series

Connecting Challenges with Ideas & Strategies

– NOTES –

Session VI: Building a World Class Education Profession

November 15, 2018, Thornburg Campus

This is the sixth of a nine-month lunch series bringing together education and business leaders from around the state to learn from national and local experts about promising and best practices in education in high-performing systems. Participants will engage with each other on possible education reform in New Mexico. The group is using the report titled *No Time to Lose: How to Build a World-Class Education System State by State* created by the National Conference of State Legislatures as a guide.

Speakers:

Keynote: Linda Darling-Hammond, President, Learning Policy Institute and Charles E. Ducommun Professor of Education Emeritus at Stanford University

NM Context: Dr. Karen Trujillo, Interim Associate Dean of Research for the College of Education at New Mexico State University

Moderator: Dr. Wanda Bulger-Tamez, Co-Project Investigator and Director of the Mathematically Connected Communities (MC²) Project New Mexico State University STEM Outreach Center

Darling-Hammond:

Empowered Educators: How High Performing Systems Shape Teaching Quality

Her presentation was based on an international study of high-performing education systems in China, Canada, Singapore, Finland, and Australia designed to answer the question: How do you have strong support for, and investments in, teachers so that you have an equitable outcome for students? Most of the areas in the study had diverse student populations, which is pertinent to New Mexico. Also pertinent is the fact that the five countries studied have learned from innovations and research in the US, including practices used in New Mexico. However, in the US we don't have the political structure to knit together the good work and ideas into an effective system to align activities across all elements.

In the countries studied, teachers are more rigorously screened, prepared, and inducted into the teaching profession. There are higher expectations and support for professional learning, collaboration, and research to improve practice, as well as higher levels of compensation comparable to other professions. In the US, teacher compensation on

average is 20% less than other college-degreed professionals and 30% less by mid-career. Costs of teacher preparation are largely or completely covered, while Finland and Singapore provide stipends for teacher training. Clinical master's degree programs are becoming the norm with at least one year of clinical practice. In Toronto, the teacher induction program is four years. Turnover rates are less than 4% (2% in Toronto) compared to 8% in the US. The cost to replace a teacher in the US is \$10,000 to \$20,000.

Teachers are provided much more time and opportunities for professional learning, planning, and collaboration. They are expected to solve problems, conduct action research, receive and provide peer feedback, and improve their practice. There are career ladders for teachers and administrators. A master teacher may earn as much as a school principal.

Many of these practices already exist in pockets of New Mexico. The question becomes how to pull these good practices together into a whole system so all students, teachers, and administrators have access to the support they need.

Trujillo:

Picture in New Mexico Teacher Pipeline and Continued Professional Learning Highlighting Educators Rising and Mathematically Connected Communities

New Mexico has a severe shortage in educators. This may worsen as the number of people entering the State education preparation programs is declining. Since most teachers teach near where they graduated from high school, communities need to develop a grow-your-model. Experience shows that cultivation of students for teaching needs to start no later than high school.

The national Educators Rising program has been nurtured in New Mexico since 2015. There are now 42 chapters across the State, with over 700 students of whom 58% are Hispanic and 10% are Native American, reflecting our demographics. The program provides passionate young people with authentic opportunities to experience teaching, sustain their interest in the profession, and help them cultivate the skills they need to be successful educators.

What New Mexico can do:

- Characterize the teacher shortage.
- Identify practices in the state that model those in high-performing systems around the world, e.g., the use of National Board Certification as a standard for high-quality teaching.
- Initiate an inclusive process to develop a vision for a world-class education profession using lessons learned from across New Mexico and from international benchmarks.
- Cultivate programs like Educators Rising to grow-our-own teachers starting in high school.
- Take action on the aspects of teaching in New Mexico that underpin negative messaging, such as you can make a living teaching, teaching is too hard, or teaching isn't worth it.
- Support continued professional learning for teachers.
- Fund research-based professional learning models that work.

Methodology tips:

- International benchmarks demonstrate the need for a systems-based approach that aligns all of the key elements needed to support a world-class education profession.

“In Singapore, teachers are viewed as nation builders as all other professions depend on them,” Darling-Hammond.

“In Finland, teachers are screened for their research orientation,” Darling-Hammond.

“As of October 1, 2018 there are 1,173 education vacancies in New Mexico, including 740 teacher vacancies after everyone was hired,” Trujillo.

“60% of teachers teach within 20 miles of where they graduated high school, so starting early and growing our own is a must for every community,” Trujillo.



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Appendix: Detailed Notes

Linda Darling-Hammond, President, Learning Policy Institute and Charles E. Ducommun Professor of Education Emeritus at Stanford University

- My presentation is based on an international study of high-performing education systems in China, Canada, Singapore, Finland, and Australia
 - It is pertinent to New Mexico that most of the areas in the study had diverse student populations with growing numbers of immigrants
- The key question was: How do you have strong support for and investments in teachers so that you have an equitable outcome for students?
 - This work is related to the international benchmark studies done by the National Conference of State Legislatures in their *No Time to Lose Report* and by the National Center for Education and the Economy in their *Nine Building Blocks for a World-Class State Education System*
- The five countries studied have learned from innovations and research in the US, but we don't have the political structure to knit together the good work and ideas into an effective system to align activities across all elements

What did we find?

- Recruitment, selection, & compensation
 - They pay teachers comparably to other professionals, while in the US we tend to pay teachers 20% less than other college graduates and 30% less by mid-career
 - They have high expectations for teachers
 - In Finland primary teachers have to be able to play the piano since music is considered a very important part of the curriculum
 - Teachers are viewed as career-long researchers – so they look for research orientation among aspiring teachers (ability to collaborate & solve problems)
 - Teachers are screened for commitment to children and passion for teaching as well as academic record
 - Teachers are not just implementing a scripted curriculum, which fails because students don't fit the script, so teachers are always problem solving
 - In Singapore teachers are viewed as nation builders – all other professions depend on teachers
- Preparation
 - Teacher education is largely paid for: Singapore and Finland pay stipends during teacher training
 - Finland has a rigorous admissions process to schools of education
 - Singapore – experienced school leaders conduct interview as part of admissions process and have tests
 - In Shanghai have competitions for good teaching and get rewards for both teaching and collaborations
 - Career ladders becoming more common (NM 3 tier licensure could be used so all schools have senior teachers who are given release-time to support new teachers)
 - Clinical master's degree programs are becoming the norm
 - Finland led the way transforming their education system starting in the 1970s: equally funded schools, common curriculum, developed master's degree program, teachers given lots of autonomy
 - When PISA scores came out in 2000, Scandinavia, in particular, was surprised as Finland came out number one: investment in teachers was

critical with focus on 21st century skills, learning and development, curriculum and assessment, and teaching students with disabilities, (if you can succeed with them, you can succeed with all students.)

- Teachers do lots of research, close collaboration with universities → building a profession
- Similar actions occurring in Australia (at least a full year of clinical practice)
- Induction and retention
 - In Toronto typically 4 years of induction for teachers (98% retention)
 - Attrition rates of less than 4% in the five countries compared to 8% in US (higher in NM)
 - With higher retention of teachers, one can build continuity and capacity
 - Singapore has well-designed 3 year program for new teachers
- Effective professional learning
 - Lots of professional learning opportunities – lots of research – clinical journals for education
 - Teachers have 15-25 hours a week for collaboration plus additional paid time for professional learning
 - Singapore and Shanghai strongly support research; teachers may have 9 published papers
 - Lots of peer observation
 - Teachers are driving the knowledge system
 - Australia has a simple clear framework for the learning cycle: enable them to continually develop their practice; evaluation and appraisal is about feedback and improvement
- Showed video from Singapore about the key role of professional learning communities (PLCs): student teachers have to do action research projects; have forums for teachers to share their research and give awards to the best research; get to explore different teaching approaches; teachers find it fun
 - Singapore moving away from rote instruction to involving students and high-order thinking based on what they learned in the US
 - Kids are much more engaged and excited → 21st century skills
 - Showed teacher schedule with over 50% of time for professional learning & planning – professional learning is collaborative
 - How can they afford this time outside the classroom? Over 70% are classroom teachers vs. 50% in US which helps them give teachers more time
 - It costs \$10,000 to \$20,000 in the US to replace a teacher; our high turnover rates waste funding; we also waste funding from inequality in US
- The model that is working is professional learning → teacher self-efficacy → teacher effectiveness
 - Teachers often have shared classrooms that promote collaboration
 - Competitions and learning processes to promote teaching
 - Often have parallel career tracks depending on your interests: master teachers are paid as much as principals
- Australia applied what they learned from the US on national board certified teachers
- Many of these practices exist in NM – how do we pull them together into a whole system so all students, teachers, administrators have access to the support they need
- Lessons from well-developed systems
 - Standards (US National Board Certification is a global gold standard for teaching)
 - Preparation (universal, research-oriented, clinically based)
 - Professional Learning (collegial, job-embedded, often senior teacher led, ongoing)

- Time (work with and learn from colleagues, conduct research, share practices)
- Feedback (available from teachers & leaders to improve practice)
- Teacher leadership (cultivated and developed for school leadership)
- Networks (including PLCs to share practices across schools)
- Many implications for NM

Dr. Karen Trujillo, Interim Associate Dean of Research for the College of Education at New Mexico State University

- We focus on research-based practices at NMSU
- The problem: 2018 education vacancies in NM: 1173 as of October 1: 740 teacher vacancies after everyone was hired
 - 53,000 students with long term subs
 - 843 students graduation in 2017-2018 certified to teach – not all stay in NM
 - Need special ed, elementary, math, and science teachers
 - Only 1141 admitted in 2017-2018 to education preparation programs
 - Down to 23 student teachers at NMSU (used to have hundreds)
- 300,000 positions open nationwide
- 60% of teachers teach within 20 miles of where they graduated high school – start early and growing our own is a must for every community
- What messages are out students hearing? Can't make a living, teaching is too hard, isn't worth it;
 - Need to change the message to you can have a profound impact on others; it's hard but worth it
- Educators Rising is the national student teacher organization, but didn't have a structure in NM – provide young people with authentic opportunities to experience teaching
 - In 2015 developed a 5-year plan; have to start recruiting in high school, college is too late
 - Video highlighted a program at Eldorado High School – class and Educators Rising club – get experience on what it's like to be a teacher
- Build a grow-your-own model: regional hubs that are networked, dual credit offerings,
 - Need a director now as the program has grown
 - Have a State conference so students can meet one-another; clubs at universities – helped sustain interest through first two years of college
 - 42 active chapters across NM with over 700 students: 82% female 17% male; 58% Hispanic, 10% Native American, 20% White
 - Getting clinical experience at 16 and 17
 - Collaborations on in-service professional learning: Mathematically Connected Communities (MC²) and Scientifically Connected Communities (SC²) out of NMSU, Math & Science Academy (LANL)
 - NMSU as a land grant college is statewide for MC² and SC²,
 - MC² works with math teachers, mathematicians, researchers – develop curriculum – we know it works but there's no money with the focus on science
 - Showed video on MC² professional learning
 - Teacher leaders meet monthly at NMSU
- Need to really characterize the teacher shortage in NM and develop a pipeline starting in high school and change the narrative of being a teacher while supporting continued professional learning and fund research-based professional learning models in NM that work

Discussion

- Mary-Charlotte Domandi – If we rebuild our system from ground up, how do you work the transition as you raise the level of the teaching profession? When you have a strong public education system, what will be the impact on private education?
 - Linda – Transition is always in the context of evolving systems. Provide professional learning opportunities for current teachers will help smooth the transition. We in the US tend to make professional learning scarce. We need to provide collegial opportunities for existing and new teachers. Create an infrastructure as Canada, Australia, and Finland did by training teachers on new materials with institutes to help them on implementing new math and language standards. Provide access to deep and important learning opportunities that teachers do not pay for out of their own pocket.
 - Linda – There are many reasons for private education: religion, educational approach, e.g., Waldorf and Montessori. In California there are some that Waldorf- or Montessori-based schools of choice. There's always going to be a role for private education. In the US private education has decreased from 11% to 9%.
- Connor Browne – What about Teach For America and alternative licensure? I hear good things about those teachers. Where should we spend our money in NM?
 - Linda – Pay for the education of those 700+ students in Educators Rising. It's especially important to attract first generation students. You could fund a scholarship program for teachers with a service requirement 4-5 years, with one year apprenticeships. I have seen cities fix teachers shortages in 2-3 years.
 - Linda – There are many pathways to licensure. I came through one, which was not adequate. The key is to provide what is needed. I admire those who stay in the profession. We need to make professional learning more readily available for all pathways. In California we are trying to strengthen and cultivate all of the pathways including Teach For America, by providing bilingual education up front. Programs need to be well supported, supervised, and mentored to encourage retention.
- Amanda Aragon – What can we do about the number of students interested in teaching?
 - Karen – A few years ago, we instituted higher testing requirements but didn't prepare for it. Students need to pass the NES, which is an English, writing, and math test. In NM we have to teach to the test which we don't want to do. We lose 40% of students from standardized testing. We need to look for well-rounded teachers and not just shuffle them out of the profession based on standardized tests, which can be biased against certain populations.
 - Karen - In last January with NES tests and content and pedagogy tests after students completed preparation we raised the cut off score from 220 to 234 in NM, so teachers moved to Arizona.
 - Linda – In most professions you take one assessment to measure the skills you use on the job, e.g., writing briefs, diagnosing patients. In the 1980s there was so little trust of teachers that we introduced pencil & paper tests, instead of watching them teach based on their lesson plans and how they respond to what students are learning over 3-5 days. That would be more equitable. Using that approach in California. Research shows that the pencil & paper tests are not as effective in demonstrating competency. A program of study in a content area is a better predictor than a single test (which can be discriminatory and doesn't capture the curriculum and competency fully). A mix of licensure assessment and competency. Focus on what they will need to do in their jobs. There are some creative strategies out there, e.g., 18 states use performance assessments.

- Kathy Keith – Over the next 5 years LANL in partnership with NMHU is investing in a professional development school at Pojoaque, which has an Educators Rising chapter. What's your advice?
 - Linda – In a professional development school you want it to function as a whole school not just for teachers that will take a student teacher. Building collaboration with a university to develop equitable practices in both the classroom and the preparation at the university. The program should include all teachers. The schools we work with at Stanford – teachers helped to develop a handbook – involved all teachers. We tapped their different skills. It's a great gift, more shared learning and practices
- Jennifer Sallee – I'm interested in research on whole schools – the entire picture from budgets, staffing, timing, engaging special education, ...
 - Linda – We've looked at whole school models. It differ for schools based on community need; time for teachers; practices for administrators to support teachers. I'd be glad to come back to do another talk on that!