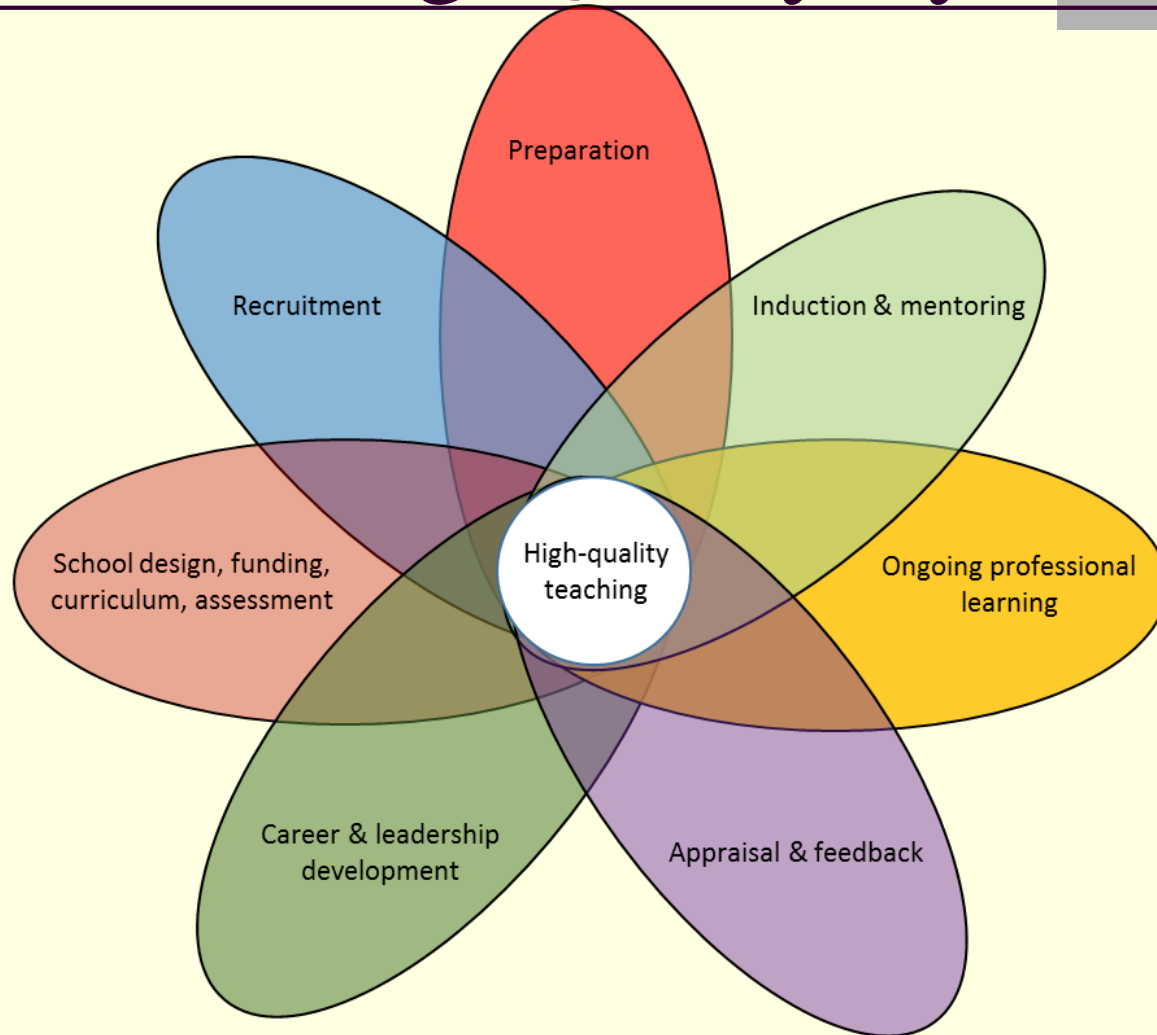


Building Education Systems for Quality and Equity: Lessons from Around the World



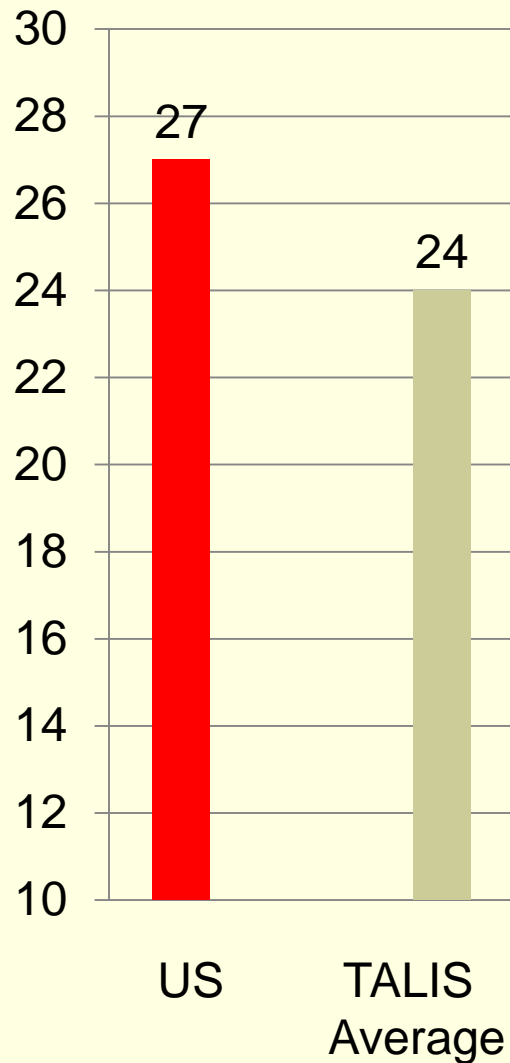
Elements of a Teaching Quality System



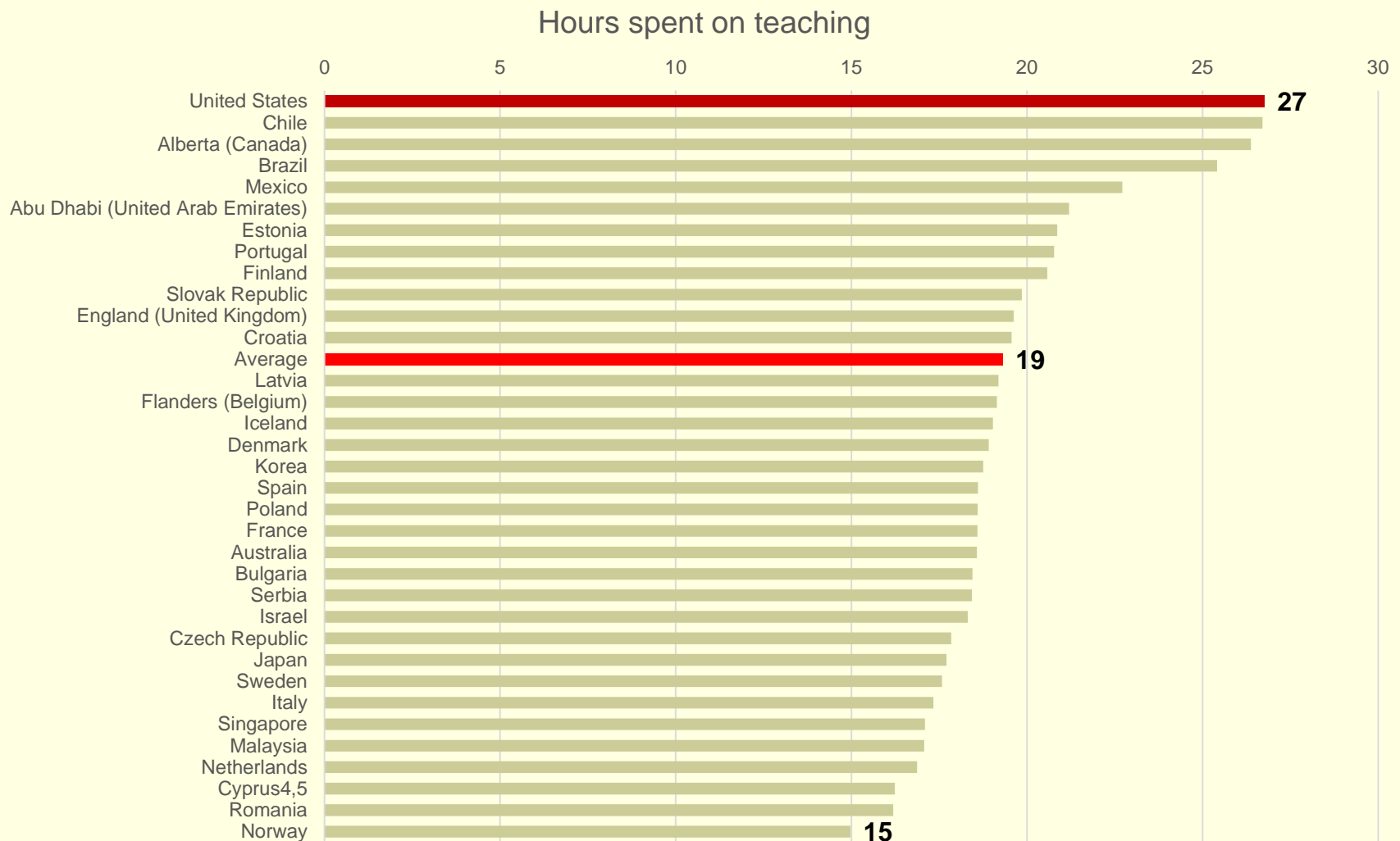
Compared to Those in Top-Performing Countries, US Teachers

- Are less well compensated
- Have less support for their preparation
- Are less likely to receive mentoring
- Have less time for and access to high-quality professional learning
- Are less likely to receive feedback from peers
- Are unlikely to experience expanded career responsibilities or chances to share expertise
- Are less likely to be involved in collaborative planning around curriculum & assessment

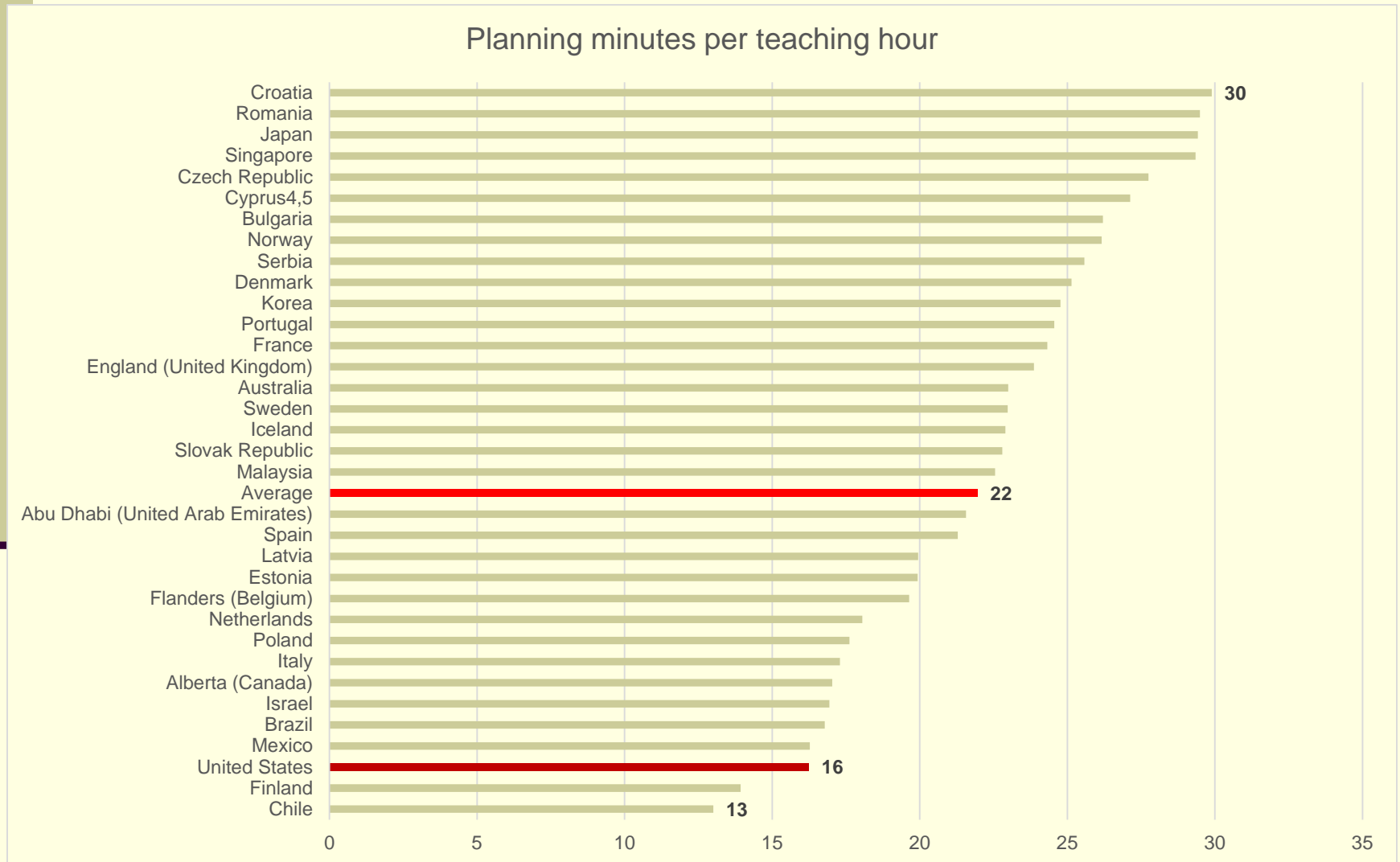
US teachers teach larger classes on average



U.S. Teachers Teach the Most Instructional Hours



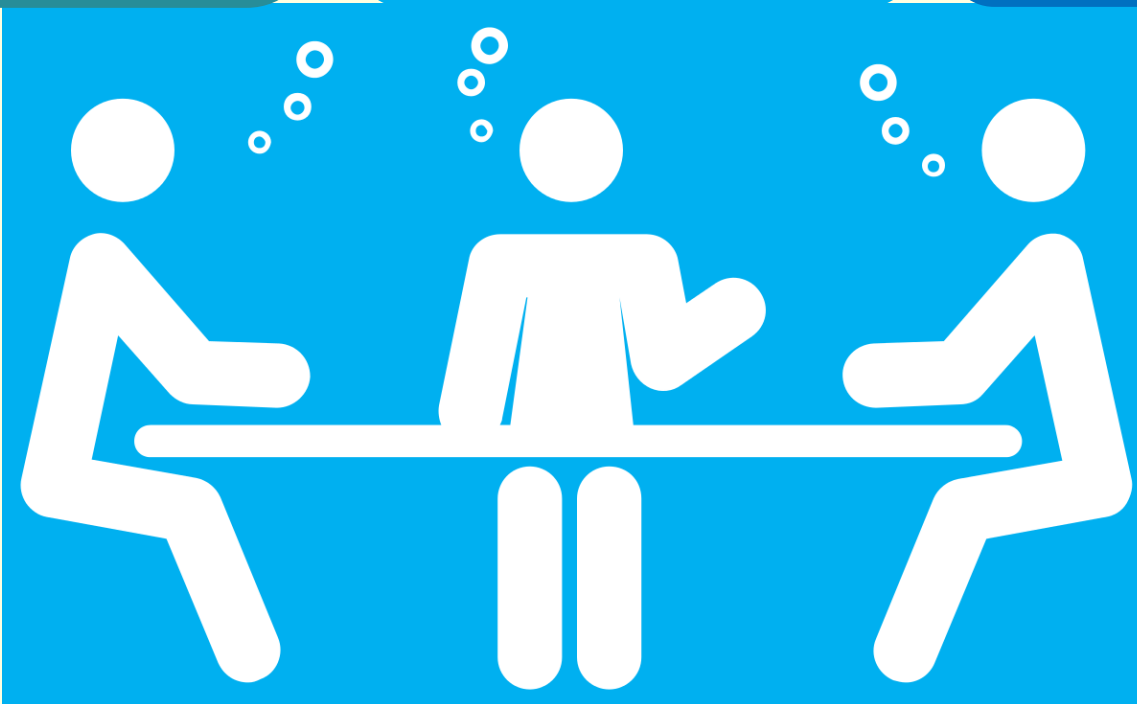
US Teachers Have Far Less Planning & Collaboration Time



The more frequently
teachers participate in
collaborative practices
with their colleagues,

the higher their level of
*self-efficacy and job
satisfaction.*

And the more likely
they are to use
innovative practices.



Assembly line vs. Quality work circle



Compensation

- U.S. teachers make about 20% less than other college graduates; 30% by mid-career.
- Salaries have lost ground since the 1990s
- Average starting salaries in 2013 ranged from \$27,000 (MT) to \$44,000 (AK)
- In more than 30 states, a mid-career teacher heading a family of 4 is eligible for several forms of government assistance

Preparation and Mentoring

- Preparation and early mentoring strongly influence teacher effectiveness and retention:
 - Teachers who are unprepared leave within a year at 2-3 times the rates of those who are well-prepared.
 - Those who receive high-quality mentoring and induction stay at twice the rate of those who receive little.
- Funding for both has declined:
 - The debt load for preparation has increased.
 - Only about 2/3 of teachers receive comprehensive preparation before entering.
 - Fewer teachers receive mentoring + principal support (down from 75% in 2008 to 59% by 2012).

Teaching Conditions

- U.S. teachers have more teaching hours and less planning time than others in the world
- Only 15% of teachers report collaborative work environments, down from 30% in 2000
- Resources for teaching declined during the recession; most states are still spending less in constant dollars than in 2007
- Growth in child poverty, homelessness, and trauma makes teaching more challenging

National Headlines, 2016

Teacher shortage keeps area schools scrambling

Washington not alone in hunt for teachers, new report says

Oklahoma school districts look to fill 500 teacher vacancies

Teacher shortage at public schools

Fewer qualified applicants for certified teaching positions

Florida facing teacher shortages in many districts as new school year begins

Help Wanted: Teacher-Shortage Hot Spots

In Utah, schools can now hire teachers with no training whatsoever

RPS dealing with teacher shortage as first day of school looms

Teacher, staff shortage looms as school begins



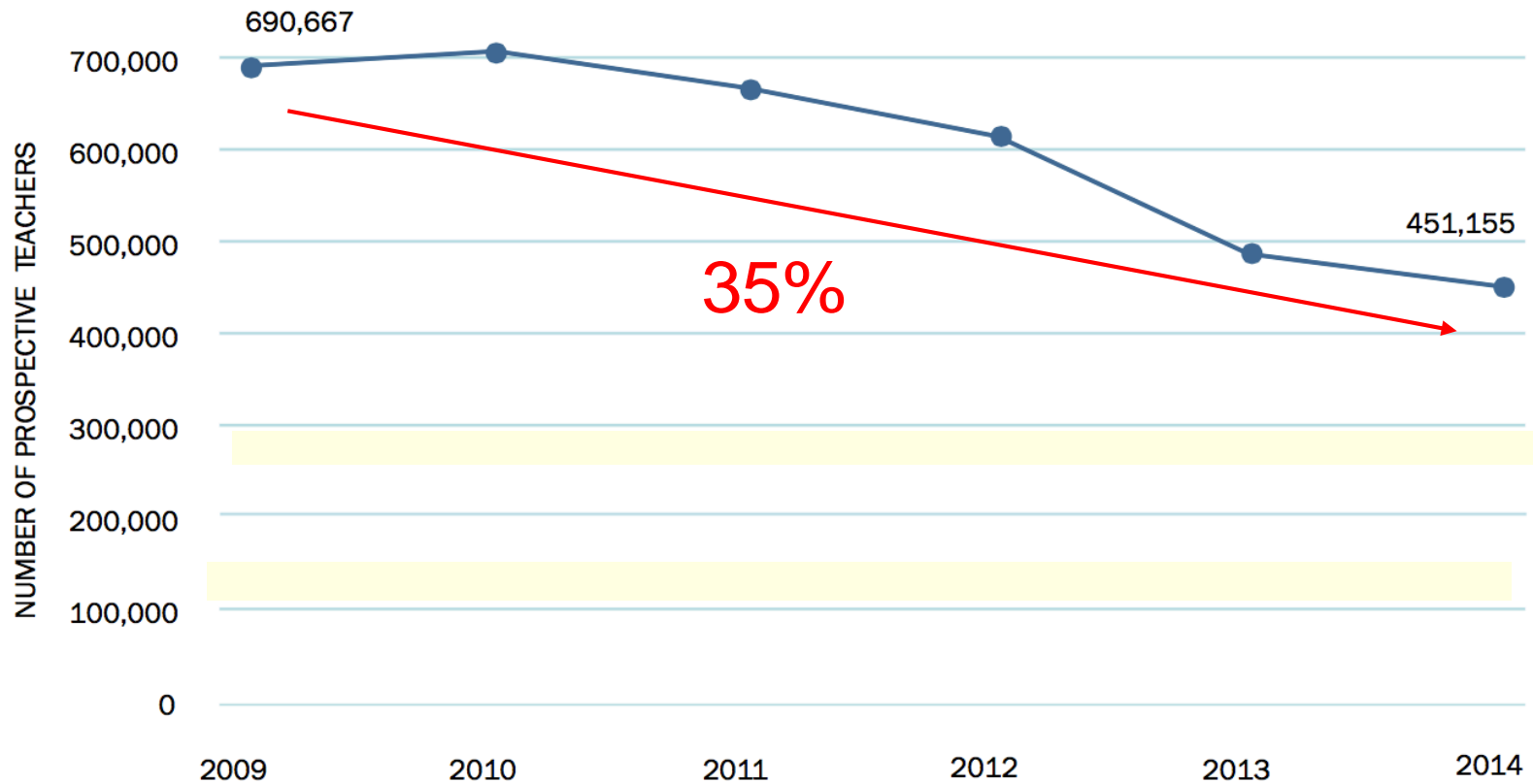
“Maryland tries to find solution for teacher shortage”

Updated: 5:50 PM EDT Oct 25, 2016

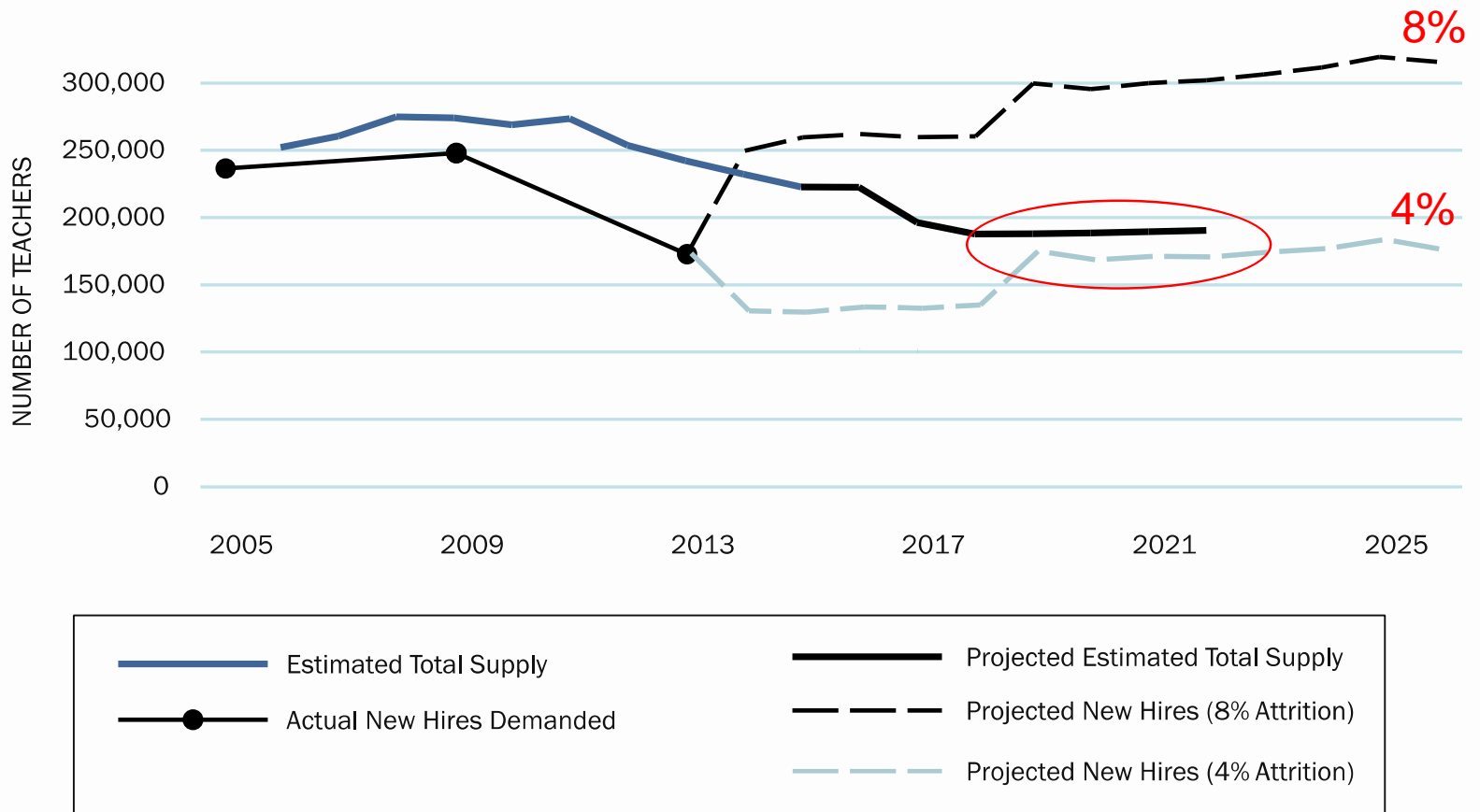
“A new Maryland teacher staffing report just released Tuesday shows every district in the state is dealing with a shortage.

“The results from the teacher staffing report comes just a couple of months into the new school year. What it shows, in part, is a snapshot of frustration. The Maryland State Board of Education admits certified teachers are just hard to come by and even harder to keep on the payroll.”

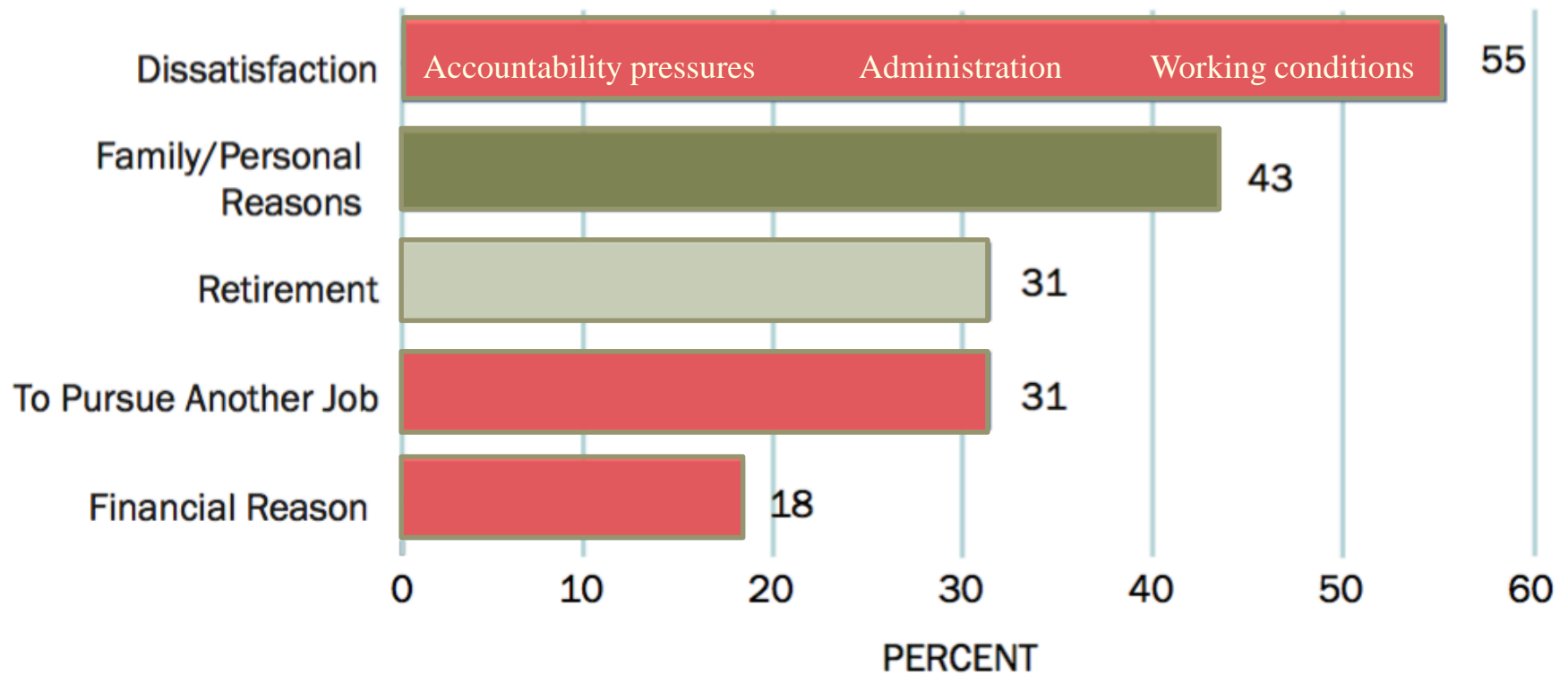
Teacher Preparation Enrollments Down Nationally



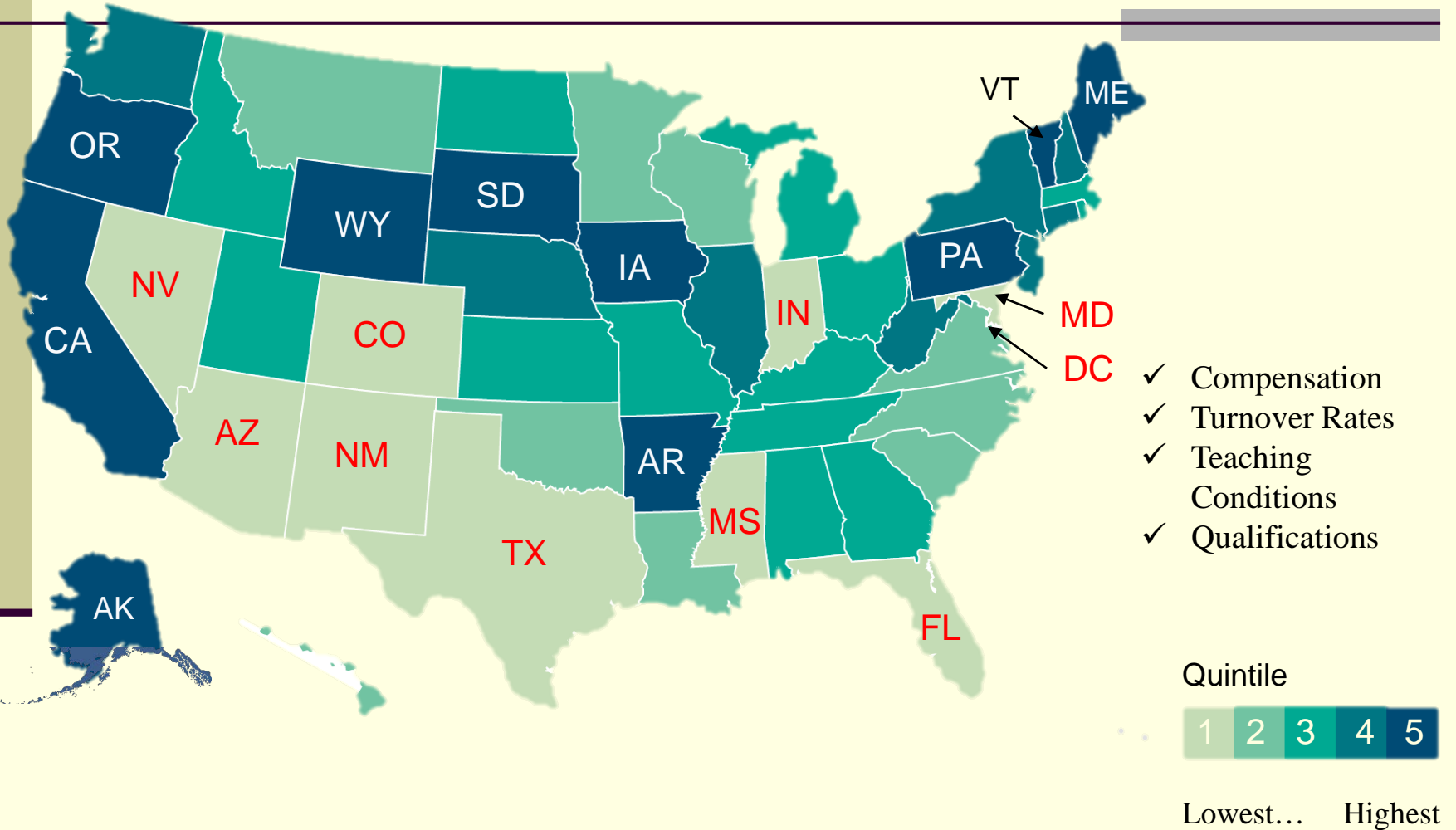
Attrition Drives Shortages



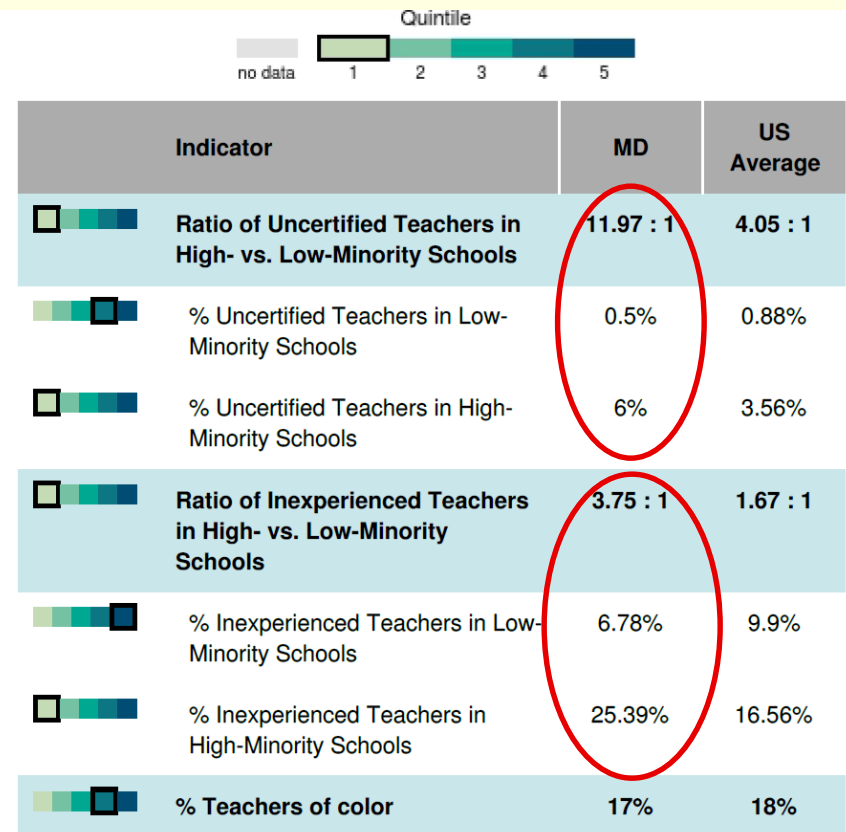
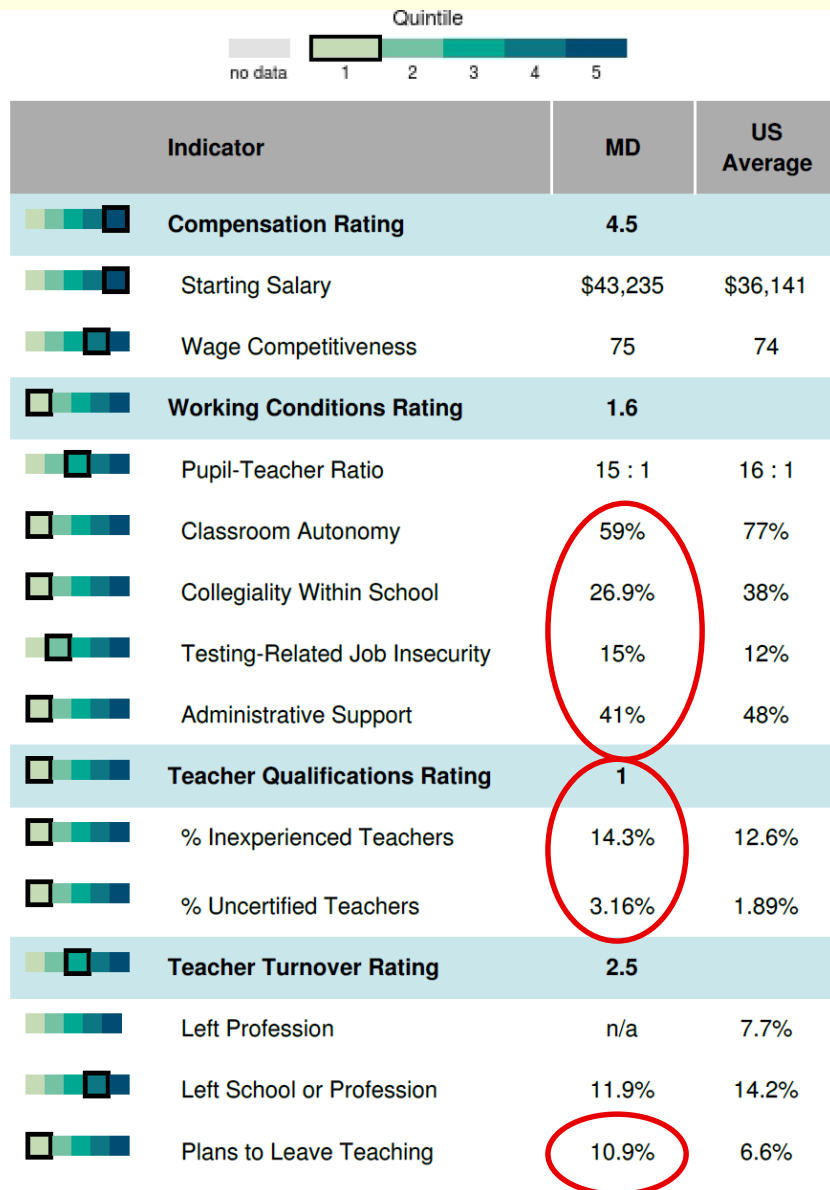
Reasons Given by Teachers for Leaving the Profession



Teaching Attractiveness Varies Across States

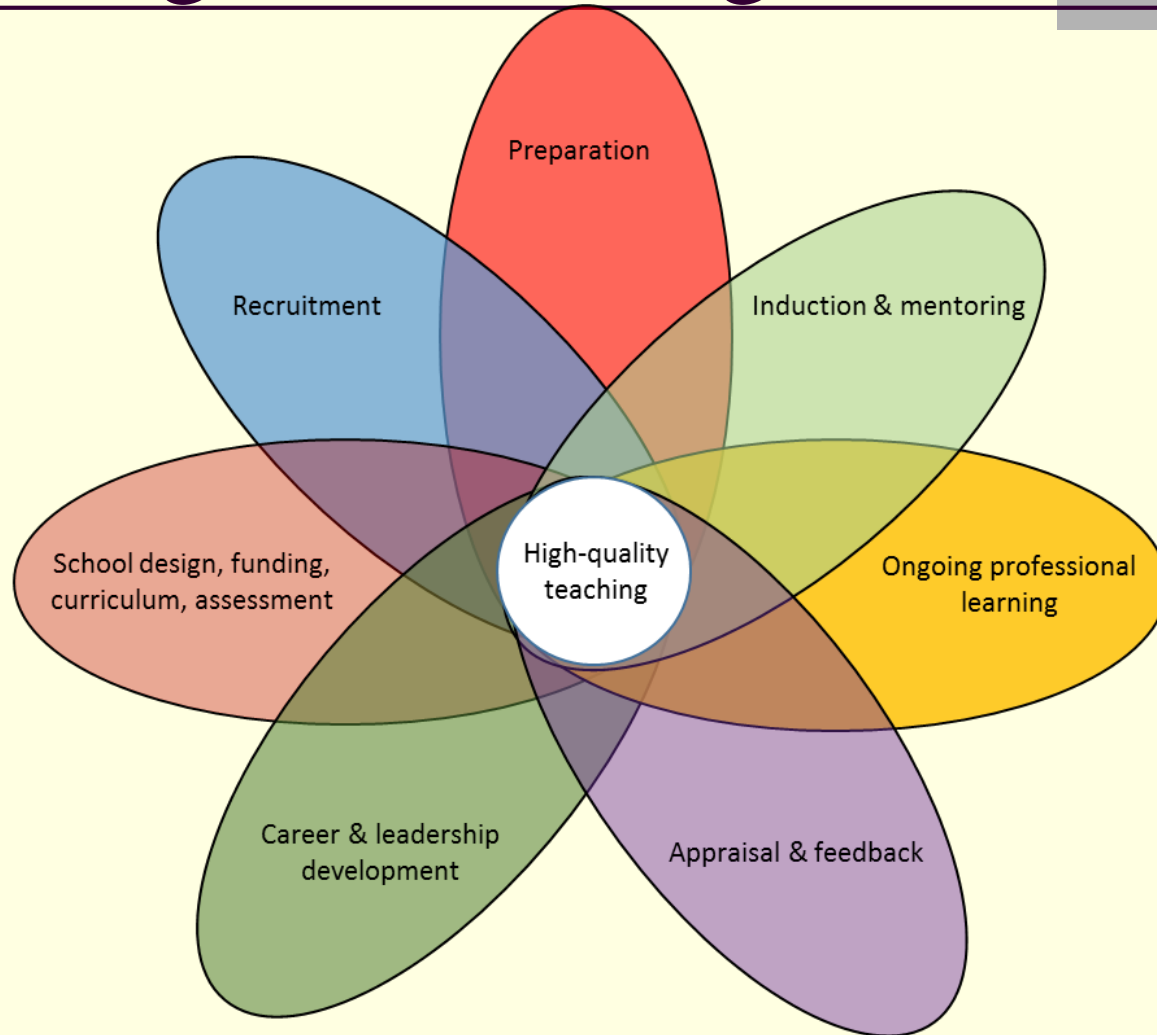


Teaching Attractiveness and Equity in MD



Data are from 2012, 2013, 2014

What Can We Learn from High-Achieving Nations?



Recruitment

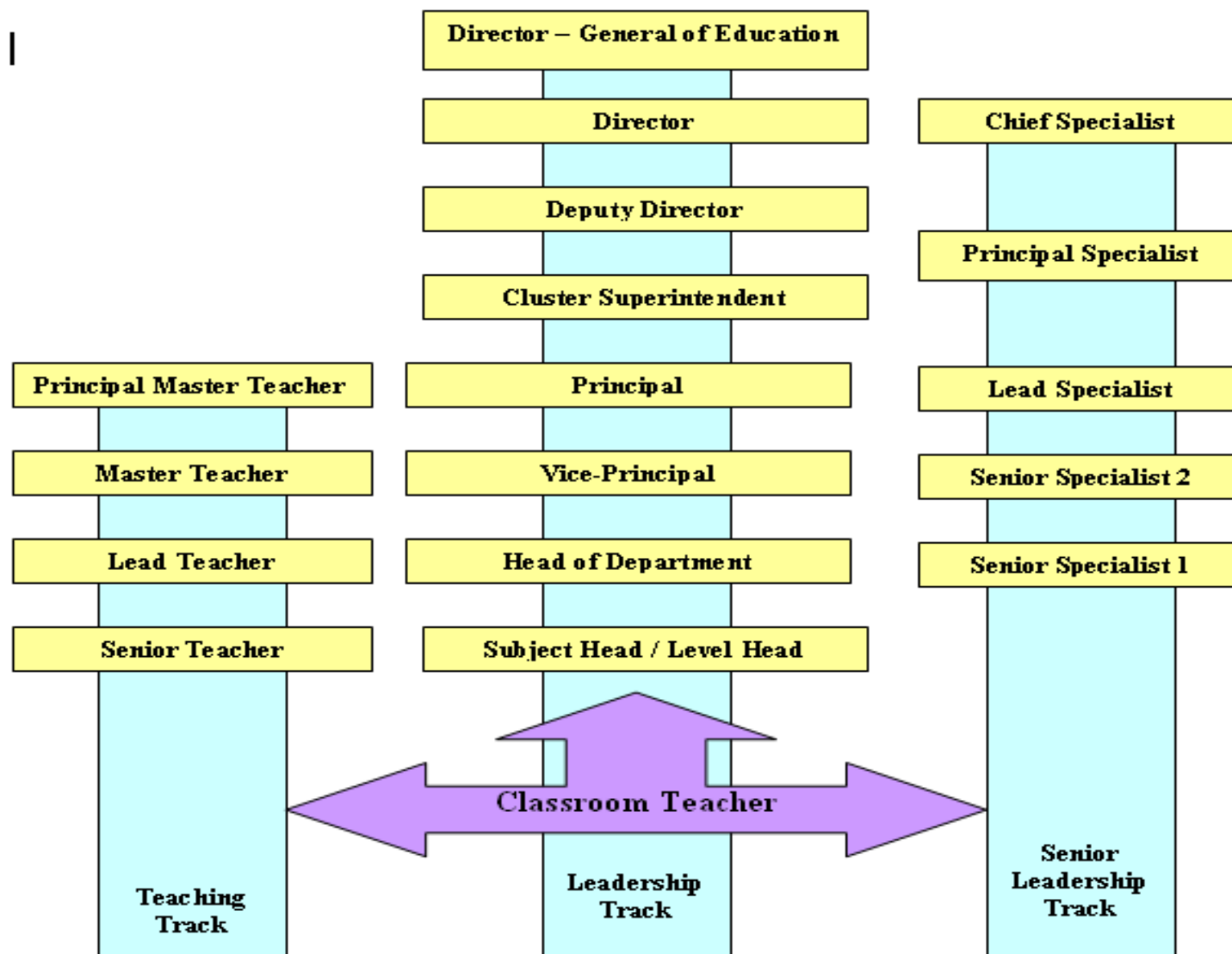
- Competitive recruitment based on academics and dispositions associated with teaching
 - ✓ Research orientation
 - ✓ Commitment to all children & the profession
 - ✓ Interpersonal / verbal skills
- Into a small number of programs of comparable quality and rigor
- Preparation largely or completely paid for
- Some countries also pay stipends/ salaries

Compensation / Career Development

- Salaries comparable to other professions requiring college degree
- Equitable across schools / districts
- Enhanced for teachers taking on additional responsibilities
- Career ladders in Singapore, Shanghai, and Australia / Career lattice in Ontario
- Multiple opportunities for leadership and sharing of expertise



Career Tracks in Education



Fostering Teacher Growth & Development

SUPPORTS FOR GROWTH

- Teacher Learning and Leadership Program (TLLP)
- Annual Learning Plan (ALP)
- Teacher Performance Appraisal (TPA)
- New Teacher Induction Program (NTIP)
- Initial Teacher Education (ITE)
- Building Futures (BF)



OPPORTUNITIES FOR LEADERSHIP

- TLLP Project Leader / Team Member
- Department Head / Chair
- Board Consultant / Coach
- NTIP Mentor
- Associate Teacher
- Community of Practice Member (face to face or online)

AUTHENTIC LEARNING

- Inside-Out Transformation
- Student-Centered
- Collegial Involvement in Planning
- Teacher-determined learning goals
- Collaborative construction of knowledge

Preparation

- Guided by Professional Standards of Practice
- Research-Based and Research-Oriented
- Strong Preparation in
 - ✓ Content-Specific Pedagogy focused on 21st Century Skills
 - ✓ Learning and Development
 - ✓ Curriculum and Assessment
- Learning in Practice with Expert Mentors

Professional Teaching Schools

- As in medicine and other professions, teaching schools allow teachers to see and enact best practices linked to research and theory
- Professional teaching schools support learning from expert veterans while candidates are taking tightly linked coursework. They model state-of-the art education for students and teachers as well as opportunities for developing curriculum, new practices, and research.

“Model” Schools in Finland

3 master's
degrees and
PhD

Mentor
Teachers

3 current research
projects; Recently
published a book



Finishing
PhD



Induction for Beginners

- Regularly available to all
- Guided by trained Senior / Mentor Teachers
 - ✓ In-classroom coaching
 - ✓ Curriculum and lesson planning
 - ✓ Seminars on key topics
- Reduced teaching load
- Typically 2 years // 4 years in Toronto

Professional Learning Cycle (Australia)



Professional Learning Opportunities

- Rich array of institutes, workshops, conferences “by teachers for teachers”
- Teacher and school networks
- Research grants and collaborative R&D opportunities (+publication and adoption)
- Sustained learning opportunities embedded in practice:
 - Teachers have 15-25 hours a week for planning and collaboration + paid time for professional learning
 - Teachers engage regularly in Lesson Study, Action Research, and Peer Observation and Coaching to evaluate and improve practice.

Professional Learning Opportunities that Impact Practice are:

- ✓ Focused on learning specific curriculum content
- ✓ Organized around real problems of practice
- ✓ Connected to teachers' work with children
- ✓ Linked to analysis of teaching and student learning
- ✓ Intensive, sustained and continuous over time
 - ✓ Supported by coaching, modeling, observation, and feedback
 - ✓ Connected to teachers' collaborative work in professional learning communities
 - ✓ Integrated into school and classroom planning around curriculum, instruction, and assessment



USING ASSESSMENT FOR STUDENT & TEACHER LEARNING



Assessment of, as, and for Learning

Assessment measures are structured to continuously improve teaching and learning.



Around the World, Teachers Collaborate in Assessment Design, Scoring, and Evaluation



Assessments

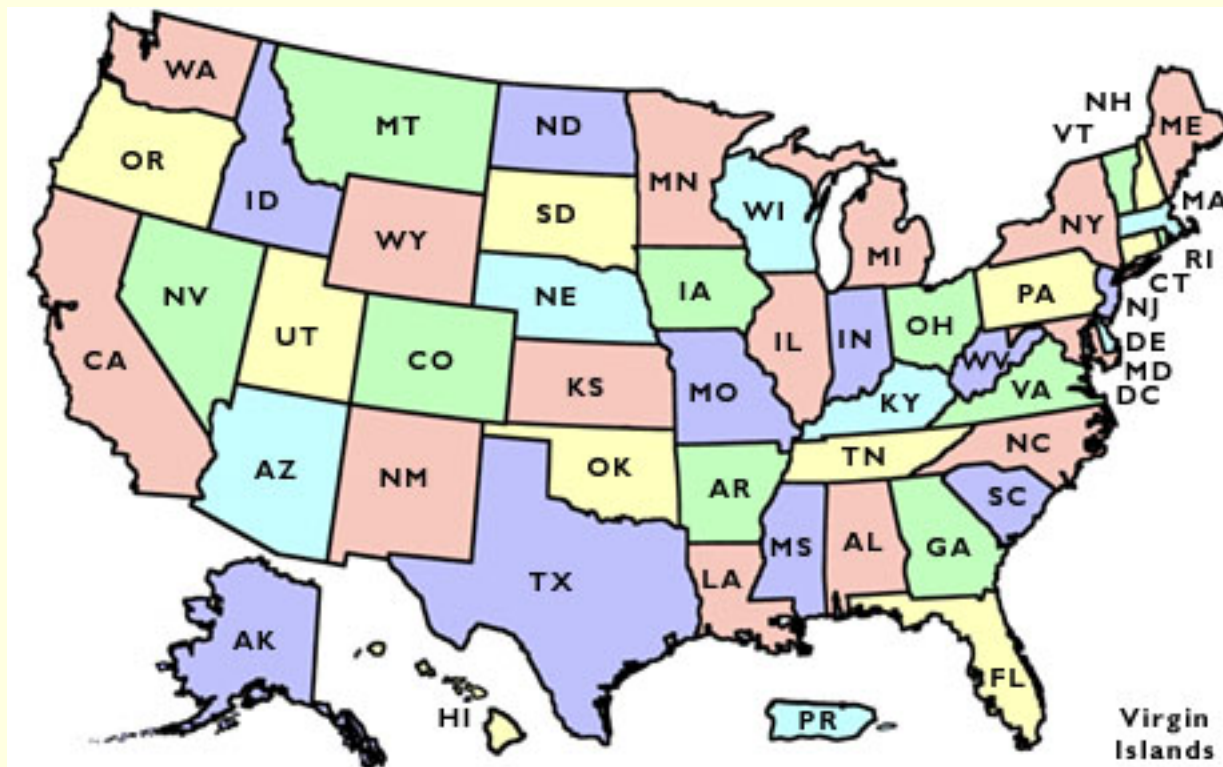
Support Teacher Learning

- As models of good instruction
- As exemplars of quality work and standards
- As diagnostic information regarding learning
 - especially when feedback shows actual performances, not just scores
- As a focus for professional conversation about standards, curriculum, and instruction
- As information to guide investments in professional development



The Challenge Ahead

- All of these best practices exist somewhere in the US
- Nowhere are they yet assembled together into a teaching and learning system



Bureaucratic vs. Professional Approaches to Education

Bureaucratic ➡ Doing School

- Expertise rests at the top of system
- Teachers have minimal skills
- Research, tests, and texts are aimed at controlling practice
- Decisions are made hierarchically
- Emphasis is on procedures: “Doing things right”
- Practice is standardized
- Schools function as assembly lines

Professional ➡ Enabling Learning

- Expertise rests in the classroom
- Teachers have extensive knowledge and skill
- Research is aimed at informing practice
- **Decisions are made with colleagues based on standards of practice**
- Emphasis is on what works: “Doing the right things”
- Schools function as communities of learning

This Problem Has Been Solved Before

In the 1990s, CT and NC both eliminated shortages and increased achievement by:

- Increasing and equalizing salaries
- Offering service scholarships and loans
- Raising standards for teacher preparation
- Introducing strong mentoring systems
- Offering high-quality professional development
- Training principals to support teaching

Better compensation packages:

- Competitive, equitable salaries
- Financial incentives
 - ✓ Housing
 - ✓ Child care

Build lasting teacher supply:

- Forgivable loans, scholarships
- High-retention preparation pathways
 - ✓ Strong clinical teacher education
 - ✓ Grow Your Own programs
 - ✓ Teacher Residencies

Policy recommendations

Improve retention:

- High-quality mentoring
- Collegial work environments
- Administrator training

Enhance mobility:

- License reciprocity
- Pension portability