Developing High-Priority Learning Standards:
Rationale, Theory of Action, and Proposed Design Principles

Recommendations from the Texas High Performance Schools Consortium

Rationale

Learning standards matter. "Standards drive the critical elements of the American educational system—the curricula that schools follow, the textbooks students read, and the tests they take. Similarly, standards establish the levels of performance that students, teachers, and schools are expected to meet." (Partnership for 21st Century Skills, 2009). Beginning in 1984, with the adoption of the *Essential Elements*, Texas education policymakers have been at the forefront of the standards-based reform movement. This ongoing leadership was evidenced with the adoption of more rigorous standards, the *Texas Essential Knowledge and Skills* (TEKS) in 1998, and through subsequent revisions of the TEKS. This work continues today as evidenced by the State Board of Education's leadership related to the review and revision of the TEKS to ensure that "the standards are appropriate in scope and rigor, streamlined, clear, relevant, assessable where appropriate, and aligned across subjects and grade levels." (Texas Education Agency, RFQ #701-14-025, 2014)

This process of TEKS review comes at a critical period in public education in Texas. In today's world of global competition for college acceptance and entry-level jobs in their chosen careers, our students require in-depth knowledge and skills to be fully prepared to compete and succeed. National and international student achievement comparisons (TIMSS, PISA, NAEP, SAT, ACT, etc.) tell us that our students—while showing progress in some areas—are not at the level of achievement that ensures they are fully prepared to succeed in the 21st century world they will encounter. To succeed, our students must have a solid foundation in core academic subject mastery, but this alone is insufficient. Students must also develop the cognitive and social skills that enable them to deal with the complex problems of a rapidly changing world. (Pellegrino and Hilton, 2012)

High-priority learning standards provide a clear and coherent description of the content, depth of knowledge, and skills students are expected to master to be prepared for success in college and careers. Critical questions in the development or refinement of college/career-ready learning standards at any policy level—national, state, local—include:

- What specific knowledge should students know as a result of mastering the learning standards? ***(Content)***
- What level of cognitive demand, or academic rigor, is appropriate to the content and grade level of the learner? ***(Thinking)***
- With what transferable skills will students leave high school upon graduation, and at each grade level leading up to graduation? ***(Skills)***

High-priority learning standards provide a strong foundation for students to apply and master the skills they need, and as they apply their skills, students have more opportunities to build deep understanding of the content of the learning standards.

In other words…content, thinking, and skills go "hand in hand" and work together in concert as key components of a rigorous K-12 educational program for Texas students.

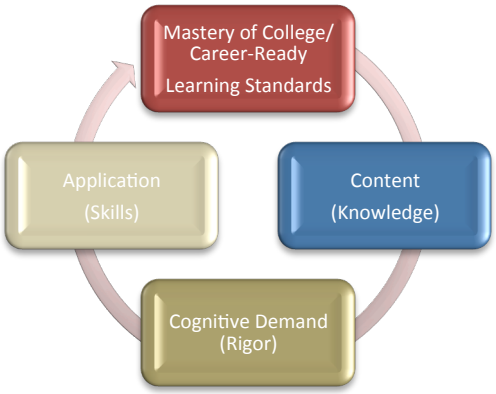

Figure 1. High-priority learning standards components

So, learning standards matter. As the Texas State Board of Education directs and the TEA engages in the process of review and revision of the state curriculum standards, this core concept—the interrelationship of content, thinking, and skills—is fundamental to the stated goal of ensuring that "the standards are appropriate in scope and rigor, streamlined, clear, relevant, assessable where appropriate, and aligned across subjects and grade levels." (Texas Education Agency, RFQ #701-14-025, 2014)

Theory of Action

To prepare students for college, the workforce, and success in life, high-priority learning standards should be specified at the "profound" level in recognition that content, thinking, and skills go together "hand in hand" so that students are able to apply their learning to new situations, to synthesize, solve problems, and create knowledge. The Texas High Performance Schools Consortium proposes the following theory of action as a strategy for reviewing and revising the Texas Essential Knowledge and Skills.

If the TEKS revision process results in the development of high-priority learning standards, then revised state curriculum standards will be fewer in number and more rigorous in content—connecting the core concepts of the discipline with the skills and habits of thinking necessary to apply learning—and focus teaching and learning on deep mastery of important concepts at each grade level.

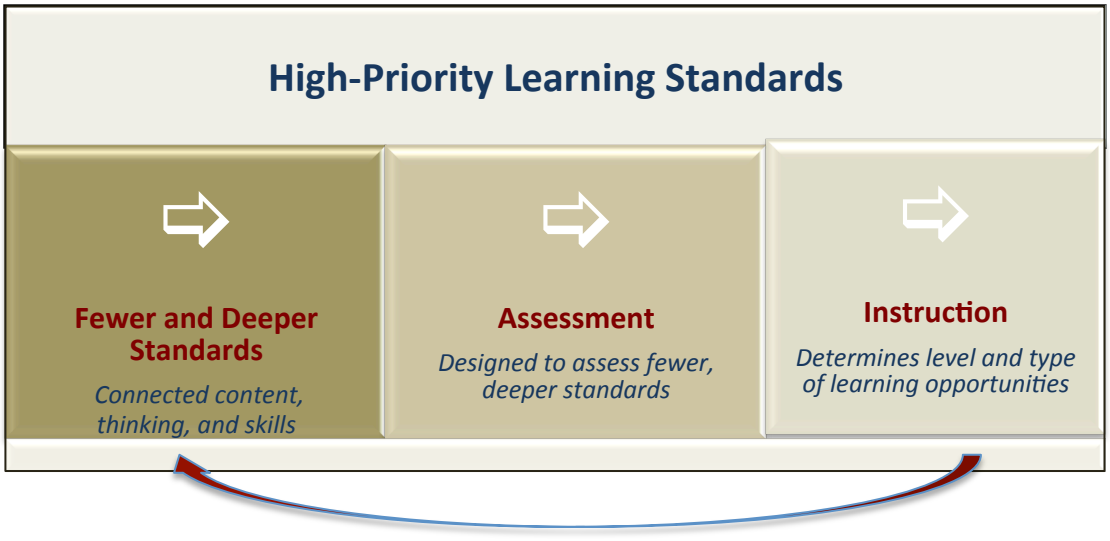

Figure 2. High-Priority Learning Standards Teaching and Learning Cycle

Proposed Design Principles

1. **Prioritize and focus on what matters most.**
   Students learn more when we teach what is most important and we teach it well. (Dempster, 1993) High-priority learning standards are *fewer and deeper* as opposed to *a mile wide and an inch deep*. Typical state standards attempt to cover a content area so comprehensively, the essential concepts that produce deep mastery can become lost. (Partnership for 21st Century Skills, 2009) The chief problem is that there is simply too much to teach—arguably two to three times too much—and too many options for what can be taught. (Schmidt, McKnight, & Raizen, 1996; Rosenholtz, 1991) Rather than presenting a long list of facts, standards should communicate the essential understandings and habits of practice within each subject area.

2. **Content, thinking, and skills all matter when it comes to standards design.**
   To succeed in today's workplace, young people need more than basic reading and math skills. "They need substantial content knowledge and information technology skills, advanced thinking skills, flexibility to adapt to change, and interpersonal skills to succeed in multi-cultural, cross-functional teams." (Casner-Lotto and Barrington, 2006; American Management Association, 2012)

3. **Align standards with best evidence on college and career readiness.**
   U.S. executives say they need a workforce equipped with skills beyond the traditional "three Rs" of reading, writing, and arithmetic if they are to grow their businesses in the 21st century. Today's employees need to think critically, solve problems, innovate, collaborate, and communicate more effectively. (American Management Association, 2012)

4. **Recognize that standards design influences assessment design, assessment design influences instruction, and instructional decisions determine the level and type of learning opportunities provided to students.**
   "Standards-based assessments influence both the content and pedagogy of classroom instruction. To avoid curricular chaos, educators must be judicious about the standards they assess." (Schmoker and Marzano, 1999) "Depending on the assessment, teachers may broaden or narrow their content coverage…and emphasize more or less test preparation in their instruction." (Marzano and Haystead, 2008) "State education administrators should judge the quality of standards-based assessments in terms of their potential to induce teachers to make favorable curricular and pedagogical decisions." (Lauer, et al., 2005).

Proposed Strategy

As a strategy for moving forward with the development of high-priority learning standards, the consortium districts recommend consideration of short- and long-term strategies.

Short-term solutions:

- Test readiness standards only*
- Include more test items per standard

Long-term solutions:

- Develop/prioritize/coalesce high-quality, fewer, deeper learning standards**
- Establish assessment expectations that rely less on multiple-choice items and more on rigorous, performance tasks
- Reduce the number of tested grade levels and/or standards
- Allow for stratified random sampling of students to accommodate the complexity and cost of administering and scoring performance tasks

Implications for the future of accountability:

- High-priority learning standards and new assessment designs could build the foundation for a new vision of accountability in Texas that aligns with the research on future-ready learning in today's context and reflects a more balanced local and state partnership***

**Cannot be applied as a long-term strategy due to the progressive, interconnected nature of learning standards from PK to 12.*
***Learning standards designed in accord with future-ready learning, college/ career readiness, and expectations of the global workplace.*
****As described in the TASA vision document, "Creating a New Vision for Public Education in Texas."*

Benefits

To succeed in today's workplace, young people need more than basic reading and math skills. Students need advanced content knowledge, technology skills, thinking skills, and the ability to apply their knowledge and skills to solve problems. *(Casner-Lotto and Barrington, 2006)* High-priority learning standards provide a clear and coherent description of the content, depth of knowledge, and skills students are expected to master to be prepared for success in college and careers.

Designing, implementing and supporting high-priority learning standards as the next step in our state's leadership of standards-based instruction would:

- Further the state's goals for college & career readiness
- Provide a forum for student, parent, & community input in CCR (college & career readiness)
- Bring needed focus to instruction & assessment
- Promote in-depth teaching for the deeper learning needed for success
  - Design next steps in instruction
  - Give detailed, descriptive feedback to students
  - Have students self-assess or set goals likely to help them learn more

Students learn most effectively when they are provided with complex, authentic opportunities to explain, interpret, apply, shift perspective, empathize, and self-assess. (Wiggins and McTighe, 2005) The development of high-priority learning standards as described herein would provide the clarity and direction that teachers, principals, and district leaders need to provide this type of instruction for the students in Texas public schools.

Pledge of Support

The Texas High Performance School Consortium stands ready and willing to support the State Board of Education and the Texas Education Agency in this important work.

"It not only requires some curricular acumen to coalesce the excessive numbers of curricular targets embodied in most states' aspirations for their students, but it also takes real courage to prioritize the most important curricular aims and, then, leave less important aims up to local districts because they will not be state-assessed." (Popham, 2012)

Reference Citations

- American Management Association. (2012). Critical skills survey. Retrieved from www.amanet.org.
- Casner-Lotto, J. and Barrington, L. (2006). *Are they really ready to work?: Employers' perspectives on the basic knowledge and applied skills of new entrants to the 21st century U.S. workforce.* Conference Board, Partnership for 21st Century Skills, Corporate Voices for Working Families, Society for Human Resource Management.
- Dempster, F. N. (1993). *Exposing our students to less should help them learn*. *Phi Delta Kappan, 74*(6), 432–437.
- Lauer, P.A., Snow, D., Martin-Glenn, M., Van Buhler, R.J., Stoutemeyer, K., and Snow-Renner, R. (2005). *The influence of standards on K-12 teaching and student learning: A research synthesis.* Retrieved from http://www.mcrel.org/~/media/Files/McREL/Homepage/Products/01_99/prod33_influestandsynth.ashx
- Marzano, R. J. and Haystead, Mark W. (2008). *Making standards useful in the classroom.* Association for Supervision and Curriculum Development. Alexandria, VA.
- Marzano, R. J., Kendall, J.S., and Gaddy, B. B. (1999). Essential knowledge: The debate over what American students should know. McREL Publishing.
- Partnership for 21st Century Skills. (2009). *Standards: A 21st Century Skills Implementation Guide.* Retrieved from http://www.p21.org.
- Popham, W. J. (2010). *A defensible state student testing program*. Paper commissioned by four Texas school districts: Highland Park Independent School District, Birdville Independent School District, Coppell Independent School District, and Wylie Independent School District.
- Rosenholtz, S. J. (1991). *Teacher's workplace: The social organization of schools.* New York: Teachers College Press. McREL Regional Education Laboratory.
- Schmidt, W. H., McKnight, C. C., & Raizen, S. A. (1996). *Splintered vision: An investigation of U.S. science and mathematics education: Executive summary.* Lansing, MI: U.S. National Research Center for the Third International Mathematics and Science Study, Michigan State University.
- Schmoker, M. and Marzano, R.J. (1999). *Realizing the promise of standards-based education*. Education Leadership. 56:6, p. 17-21.
- Wiggins, G. and McTighe, J. (2005). *Understanding by design, 2nd edition*. Texas Association for Supervision and Curriculum Development.