Appendix L:

More about *Teacher Prep Review 2016*'s Standard 11: Fundamentals of Instruction

How NCTQ develops standards for the Teacher Prep Review

NCTQ has honed its process for developing its central standards over the course of 15 reports issued over nearly a decade. Our development process for standards begins by studying the topic at hand as thoroughly as possible. We do a literature review and examine teacher preparation materials (most often syllabi and course textbooks, but often student teacher handbooks or other available documents) to develop an understanding of the context, research, and common practices in an area of preparation. Although this exploration sometimes informs us that the data we are seeking are not found in materials available to us, in this case — examination of instruction on and practice with research-supported instructional strategies — we have found a plethora of usable information. We always develop standards by consulting with leading experts in the field. We supplement the advice provided to us by these experts with that of advisors on the *Teacher Prep Review's* Technical Panel, always aiming to have adequate representation of all those points of view *for which there is strong scientific support*.

After taking several different approaches to field tests, ranging from national to state studies, we've honed the most successful method, which is an internal field test that generates a published report. These internal field tests examine about 50 teacher preparation programs, so that we can more readily adjust the standard and its evaluation protocol based on new evidence that emerges from what is usually a great deal of variation across programs. In this case, our internal field test involved 48 undergraduate and graduate, elementary and secondary teacher preparation programs. We are currently conducting two other internal field tests to develop or support standards planned for use in the next three editions of the *Teacher Prep Review*.

The challenge of developing a standard in instructional strategies

The development of an instructional strategies standard started in 2010, when a number of new standards (including one on integrating the state's learning standards into instruction) were field-tested in a study of teacher preparation in Illinois. ¹⁶ In a consolidation of considerations of various elements of instructional design, this standard was folded into a broader standard on "Lesson Planning" in *Teacher Prep Review 2013.* ¹⁷ The Lesson Planning Standard relied on evaluation of lesson and unit planning templates used in student teaching to ascertain the requirements that programs placed on teacher candidates to design instruction so as to "enhance the academic performance of all students."

In an effort to align the standard more closely to the best evidence for instructional strategies, we have revised the standard once again, although we continue to rely on the same sources of data as well as the observation forms used in student teaching. In using these sources of data, we are asserting a common-sense principle: As the defining capstone experience of traditional teacher preparation programs, student teaching *must* include feedback to the candidate on how well he or she enacts research-based instructional strategies. Candidates receiving such feedback will be more likely to be able to continue to use such strategies in their own classrooms, while those who do not will probably think whatever they may have learned in coursework (which this report indicates is quite scant) is merely "theoretical" and therefore of little benefit to them or their students.

- 15 See http://www.nctg.org/reports.do?d=Teacher%20Prep
- 16 Ed School Essentials: A Review of Illinois Teacher Preparation can be found at http://www.nctq.org/dmsStage/Ed_School_Essentials_IL_Teacher_Prep_NCTQ_Report
- 17 More information on this standard and its evaluation is at http://nctq.org/dmsView/Standard Book 11

Teacher Prep Review 2016's Standard 11: Fundamentals of Instruction

In the first edition of its application, the Fundamentals of Instruction Standard will apply only to secondary programs. The standard and its indicators are as follows:

The program ensures that teacher candidates have opportunities to practice fundamental instructional strategies.

Standard applies to: **Secondary programs**.

Indicators that the program meets the standard:

The program ensures that student teachers practice the fundamental instructional strategies found to have the strongest research basis by the Institute of Education Sciences. Requirements for lesson and unit planning and/or observation and evaluation forms should address these strategies:

11.1 Using graphic depictions of content, such as flow charts or diagrams, in combination with verbal representations of the same information.

AND

11.2 Explicitly linking abstract concepts with concrete representations of concepts.

AND

11.3 Posing probing questions that require students to explain their knowledge, such as "why," "how," "what if" and "how do you know."

AND

11.4 Repeatedly alternating problems for which solutions are delineated with problems that students solve independently or in groups.

AND

11.5 Providing multiple opportunities, distributed over weeks and months, for students to practice what they learned previously.

Indicator that the program has strong design:

11.6 A program will earn a "strong design" designation if the indicators above are satisfied and if it also demonstrates that candidates learn how to design assessments that enhance student retention and practice designing assessments that do so.