

# NCTQ Standards and Indicators for *Teacher Prep Review 2014*

## Standard 1: Selection Criteria.

The program screens for academic caliber when selecting teacher candidates.

Standard applies to: **Elementary**, **Secondary** and **Special Education** programs.

### Indicators that the program meets the standard:

**1.1** The undergraduate program is sufficiently selective, as evidenced by meeting at least one of the following four criteria:

**1.1a** It is housed in an institution of higher education that is sufficiently selective (as indicated by a mean combined SAT mathematics and verbal score of 1120 or above, or a mean ACT composite score of 24 or above), assuring that applicants are likely to be in the top half of the college-going population.

OR

**1.1b** It utilizes for admission a requirement of a GPA of 3.0 or higher either for college preparatory coursework in high school (in cases of admission for preparation in the first several years of college) or for coursework in the first two years of college.

OR

**1.1c** It utilizes for admission a standardized test of academic proficiency that allows comparison of applicants to the general college-going population, and establishes a cut-score that is sufficiently high (as indicated in 1.1a above) to allow selection of applicants in the top half of that population.

OR

**1.1d** It can certify through a registrar (or comparable institutional leader) that the average GPA for the most recent incoming class of teacher candidates is 3.3 or higher, either in college preparatory coursework that was completed in high school (in cases of admission for preparation in the first several years of college) or in general education coursework.

**1.2** A graduate program must satisfy one of the following:

**1.2a** The graduate program utilizes for admission a requirement of an undergraduate GPA of 3.0 or higher (overall or in upper division coursework).

OR

**1.2b** The graduate program certifies through a registrar (or comparable institutional leader) that the average GPA for the most recent incoming class of program candidates is 3.3 or higher, based solely on overall or upper division coursework at the undergraduate level.

AND, in addition, a graduate program must also satisfy one of the following:

**1.2c** The graduate program requires that candidates submit scores on one of the standardized tests of academic proficiency used commonly in higher education for graduate admissions (e.g., the GRE).

OR

**1.2d** The graduate program utilizes for admission an audition process that includes, but need not be limited to, tasks that assess the applicant's 1) classroom presence, 2) problem-solving and interpersonal skills, and 3) capacity to persevere in the pursuit of improved student outcomes.



### Strong design:

- 1.3** An undergraduate program will receive a “strong design” designation in either of the following cases:
- The program meets the selectivity standard based on 1.1b or 1.1d above, and also satisfies indicator 1.1a or 1.1c.
- OR
- The program meets the selectivity standard based on 1.1 above AND the racial diversity of the program, in combination with all other undergraduate teacher preparation programs at its institution, is greater than the racial diversity of the institution itself.
- 1.4** A graduate program will receive a “strong design” designation if it meets the selectivity standard based on 1.2 above AND the racial diversity of the program in combination with all other graduate teacher preparation programs at its institution is greater than the racial diversity of the state’s teachers.

## Standards 2: Early Reading.

The program trains teacher candidates to teach reading as prescribed by increasingly rigorous state student learning standards.

Standard applies to: **Elementary** and **Special Education** programs.

### Indicators that the program meets the standard:

- 2.1** Coursework lectures and practice adequately cover the five essential components of effective reading instruction: phonemic awareness, phonics, fluency, vocabulary and comprehension strategies.
- We will also analyze how instruction in using screening, diagnostic and progress monitoring assessments is aligned with coursework content, but individual programs will not be rated in this analysis.
- 2.2** Textbooks used in reading courses support effective reading instruction.

### Strong design:

- 2.4** A program that satisfies indicators 2.1-2.2 will receive a designation of “strong design” if every relevant required course: 1) achieves the highest or second highest score on each of the five essential components of effective reading instruction, and 2) without exception, supports effective reading instruction with required textbooks that are rated “acceptable” in the textbook evaluation process.

## Standard 3: English Language Learners.

The program prepares elementary teacher candidates to teach reading to English language learners.

Standard applies to: **Elementary** programs.

### Indicator that the program meets the standard:

- 3.1** Reading courses deliver the instructional strategies necessary for teaching English language learners and require candidates to practice such strategies.



## Standard 4: Struggling Readers.

The program prepares elementary teacher candidates to teach reading skills to students at risk of reading failure. Standard applies to: **Elementary** programs.

### Indicator that the program meets the standard:

- 4.1 Reading courses deliver the instructional strategies necessary for teaching struggling readers and require candidates to practice such strategies.

## Standard 5: Elementary Mathematics.

The program prepares teacher candidates to successfully teach to increasingly rigorous state student learning standards for elementary math.

Standard applies to: **Elementary** and **Special Education** programs.

### Indicators that the program meets the standard:

- 5.1 Programs require candidates to take a course sequence that thoroughly covers essential elementary mathematics topics in numbers and operations, algebra, geometry, and data analysis.
- 5.2 Appropriate textbooks are used in these courses and support instruction on essential topics of elementary mathematics.
- 5.3 The program requires an adequate elementary mathematics methods course.

### Strong design:

- 5.4 A program will earn a “strong design” designation if adequate elementary mathematics content is combined with elementary mathematics methods instruction in a coordinated set or sequence of courses that satisfies indicators 5.1-5.3.

## Standard 6: Elementary Content.

The program ensures that teacher candidates have the broad content preparation necessary to successfully teach to increasingly rigorous state student learning standards.

Standard applies to: **Elementary** programs.

### Indicators that the program meets the standard:

In order to be effective, elementary school teachers have always needed to have solid, wide-ranging knowledge on many subjects. With the advent of more rigorous state standards, the bar on elementary teachers’ content preparation has only been raised higher. Traditional state “English Language Arts” standards, which in a number of states were agnostic about content knowledge, are being replaced by far more rigorous standards which demand that students (and hence their teachers) have background knowledge across all subject areas, including topics in history, social science, and science.

Given the content deficiencies with which many high school graduates, including teacher candidates, enter college, preparing teachers for these demands will be challenging. It is with this backdrop that we approached the articulation of this standard and its indicators, which we recognize places a substantial, though justifiable, burden of coursework.

Institutions could reduce this burden if their states demanded that all elementary teacher candidates take rigorous content licensing exams with *cut-scores broken out by subject* upon admission to the preparation program. But since no state at the present time does this, institutions need to ensure that elementary teacher candidates have the preparation that readies them to teach their students through coursework and test-out options available through the Praxis II (specifically



the new Elementary Education: Multiple Subjects test), Advanced Placement, College Level Examination Program (CLEP) and SAT II exams.

**6.1** At the undergraduate level, the institution:

- Requires candidates take at least one course in each topic from each of the subject areas listed below.
  - All coursework except children's literature should only be taught in liberal arts departments and be designed for general college audiences.
  - Course content must be broad enough to give candidates the knowledge base to teach the elementary curriculum.
- Exempts candidates from specific course requirements on the basis of standardized assessments commonly recognized as demonstrating content mastery at the level provided by post-secondary or rigorous secondary instruction (e.g., AP, CLEP, SAT II).

Subject A: Literature and composition

Topic (1): World literature

Topic (2): American literature

Topic (3): Writing, grammar and composition

Topic (4): Children's literature

Subject B: History and geography

Topic (1): Early American history

Topic (2): Modern American history/Government

Topic (3): World history—ancient

Topic (4): World history—modern

Topic (5): Geography

Subject C: Science (at least one course with lab)

Topic (1): Biology

Topic (2): Chemistry

Topic (3): Physics/physical science/earth science

Elementary mathematics (see Standard 5)

Three courses (or two courses in highly selective institutions) designed for the teacher candidate and imparting content in numbers and operations, algebra, geometry, and data analysis.

**6.2** For undergraduate programs, the teacher candidate completes an 18-semester credit hour concentration in a subject relevant to the elementary curriculum. (For purposes of concentration credit hour calculations, general education coursework may be counted regardless of whether an institution would allow it to count towards a major.)

**6.3** At the graduate level, the burden posed by a stringent credit count does not relieve the program of its responsibility to ensure that elementary teacher candidates have adequate content knowledge preparation. Graduate elementary candidates must have both sufficient breadth of knowledge (as indicated by completion of undergraduate courses in the topic areas as delineated in indicator 6.1, or by passing rigorous tests of knowledge in those areas), as well as sufficient depth of knowledge in a single subject as shown by completing an 18-semester credit hour concentration in a single subject relevant to the elementary curriculum. If a candidate has significant weaknesses in content knowledge, the program works with the candidate to remedy them.

- When applications to the program, catalogs or other public documents do not describe such a process,



the presumption will be made that no content preparation requirements are imposed on graduate teacher candidates.

### **Strong design:**

- 6.4** A program will earn a “strong design” designation if coursework: 1) fulfills two to four topic requirements in Literature and Composition, three to five in History and Geography, two to three (with at least one lab) in Science, and one to two in Fine Arts (Music history and/or Art history), or 2) fulfills topics requirements in all subject areas with somewhat lesser coverage than specified in (1), but with credit also awarded for a concentration.

## **Standard 7: Middle School Content.**

The program ensures that teacher candidates have the content preparation necessary to successfully teach to increasingly rigorous state student learning standards.

Standard applies to: **Secondary** programs.

### **Indicators that the program meets the standard:**

Institutions of higher education have traditionally articulated their vision of teacher preparedness in a subject area by defining a prescribed course of study completed via a major or minor. For middle school teachers charged with teaching many different subjects, a credit count system is particularly challenging, especially for teacher candidates entering graduate programs of study.

- 7.1** Using an outcomes-based approach, in every subject a teacher will be qualified to teach, each pathway to middle school certification listed below requires either:
- Rigorous stand-alone tests.
- OR
- A rigorous test of multiple subject areas that provides cut-score for each specific subject on the test, or a series of rigorous stand-alone tests.

Absent such licensing tests used to verify competency, we look for programs to require or certify courses of study as follows:

### **At the undergraduate level:**

- 7.2** A middle school teacher candidate seeking certification in mathematics must have a major consisting of at least 30 semester credit hours, including at least 24 credit hours of general audience<sup>1</sup> mathematics coursework.
- 7.3** A middle school teacher candidate seeking certification in English/language arts must have a major consisting of at least 30 semester credit hours, including at least 24 credit hours of general audience English coursework.
- 7.4** A middle school teacher candidate seeking certification in the sciences must have either:
- A major in a single teachable science discipline (biology, chemistry, physics or earth science) of at least 30 semester credit hours, including at least 24 credit hours, of general audience coursework.
- OR
- A major in general science that consists of at least 15 credit hours (the equivalent of one minor) in one teachable science discipline (biology, chemistry, physics or earth science).

<sup>1</sup> Courses which are intended for any student on campus, not just prospective teachers.



- 7.5** A middle school teacher candidate seeking certification in the social sciences must have either:
- A major in a single teachable social science discipline (history, government/political science or economics) of at least 30 semester credit hours, including at least 24 credit hours of general audience coursework.

OR

- A major in general social science that consists of at least 15 credit hours (the equivalent of one minor) in history.

- 7.6** If certification in multiple subjects is offered, a middle school teacher candidate seeking certification in multiple subjects must have at least 15 semester credit hours (the equivalent of a minor) in a single discipline relevant to each of the subject areas. (For example, dual certification in mathematics and science must consist of the equivalent of a minor in mathematics and a minor in biology, not the equivalent of a minor in mathematics and a minor in general science.)

### At the graduate level:

- 7.7** The burden posed by a stringent credit count does not relieve the program of its responsibility to ensure that middle school teacher candidates in each pathway to certification (mathematics, English, the sciences, the social sciences, multiple subjects) meet requirements for content knowledge preparation. If candidates have significant weaknesses in content knowledge, the program works with the candidate to remedy them.

- When applications to the program, catalogs or other public documents do not describe such a process, the presumption will be made that no content preparation requirements are imposed on graduate teacher candidates.

## Standard 8: High School Content.

The program ensures that teacher candidates have the content preparation necessary to successfully teach to increasingly rigorous state standards for college and career readiness.

Standard applies to: **Secondary** programs.

### Indicators that the program meets the standard:

Institutions of higher education have traditionally articulated their vision of teacher preparedness in a subject area by defining a prescribed course of study through a major or minor. For high school teachers charged with teaching many different subjects subsumed under one certification, pursuing multiple majors is impractical. A credit count system is also particularly challenging to impose on teacher candidates entering graduate programs of study.

- 8.1** Using an outcomes-based approach, in every subject a teacher will be qualified to teach, each pathway to high school certification listed below requires either:

- Rigorous standalone tests.

OR

- A rigorous test of multiple subject areas that provides cut-scores for each separate subject-specific test section, or a series of rigorous stand-alone tests.

Absent such licensing tests used to verify competency, we look for programs to require or verify courses of study as follows:

### At the undergraduate level:

- 8.2** A high school teacher candidate seeking certification in mathematics must have a major consisting of at least 30 semester credit hours, including at least 24 credit hours of general audience<sup>2</sup> mathematics coursework.

2 Courses which are intended for any student on campus, not just prospective teachers.



- 8.3** A high school teacher candidate seeking certification in English must have a major consisting of at least 30 semester credit hours, including at least 24 credit hours of general audience English coursework.
- 8.4** A high school teacher candidate seeking science certification in a state that requires single-subject certification must have a major in the single teachable science discipline for which certification will be awarded of at least 30 semester credit hours, including at least 24 credit hours of general audience coursework. A high school teacher candidate seeking science certification in a state that offers general science certification must have coursework preparation that consists of at least 15 credit hours (the equivalent of one minor) in at least two teachable science disciplines (biology, chemistry, physics or earth science).
- 8.5** A high school teacher candidate seeking social science certification in a state that requires single-subject certification must have a major in the single teachable social science discipline for which certification will be awarded of at least 30 semester credit hours, including at least 24 credit hours of general audience coursework. A high school teacher candidate seeking social science certification in a state that offers general social science certification must have a major in history, or coursework preparation that consists of at least 15 credit hours (the equivalent of one minor) in history and in at least one other teachable social science (government/political science, economics or psychology).

#### **At the graduate level:**

- 8.6** The burden posed by a stringent credit count does not relieve the program of its responsibility to ensure that high school teacher candidates in each pathway to certification (mathematics, English, the sciences, the social sciences) meet requirements for content knowledge preparation. If candidates have significant weaknesses in content knowledge, the program works with the candidate to remedy them.
- When applications to the program, catalogs or other public documents do not describe such a process, the presumption will be made that no content preparation requirements are imposed on graduate teacher candidates.

### **Standard 9: Content for Special Education.**

The program ensures that teacher candidates' content preparation aligns with increasingly rigorous state student learning standards in the grades they are certified to teach.

Standard applies to: **Special Education** programs.

#### **Indicators that the program meets the standard:**

- 9.1** Programs training special education teacher candidates for an elementary setting must require the same content preparation as specified in elementary content preparation Indicators 6.1 and 6.3.
- 9.2** Undergraduate programs training special education teachers for secondary settings require candidates to earn subject-area minors (equivalent to at least 15 semester credit hours) in at least two of the following disciplines: English; mathematics; history; biology; chemistry or physics. Graduate programs address content preparation along the lines specified in secondary content preparation indicator 7.7, with appropriate modification to accommodate preparation in two disciplines.
- 9.3** Programs residing in a state where discrete elementary and secondary special education licenses are available should require content preparation for candidates that sufficiently focuses either on elementary or secondary preparation (as described above).



## Standard 10: Classroom Management.

The program ensures that teacher candidates practice specific techniques for managing the classroom.

Standard applies to: **Elementary**, **Secondary** and **Special Education** programs.

### Indicators that the program meets the standard:

At least one of the typical student teacher observation or evaluation instruments used by the student teacher's university supervisor, cooperating teacher or both specifically addresses the student teacher's:

- 10.1** Ability to establish and/or reinforce expectations regarding appropriate behavior.
- 10.2** Ability to establish a productive learning environment by maintaining student engagement and managing time, materials and the physical classroom environment.
- 10.3** Recognition of appropriate behavior through meaningful praise and other forms of positive reinforcement.
- 10.4** Appropriate use of overall classroom awareness and/or the least intrusive means to prevent or manage minor student misbehavior. (Examples may include but are not limited to: proximity, adjustment of the physical setting, and eye contact.)
- 10.5** Appropriate use of disciplinary action to handle escalating or disruptive misbehavior.

## Standard 11: Lesson Planning.

The program trains teacher candidates how to plan lessons that enhance the academic performance of all students.

Standard applies to: **Elementary** and **Secondary** programs.

### Indicators that the program meets the standard:

Lesson or unit plans completed during student teaching, for a capstone or exit project, or to obtain licensure demonstrate that the program expects the teacher candidate to meet the following challenges of instructional design for the classroom:

- 11.1** Identifying technology applications that will boost instruction and how they will do so.
- 11.2** Anchoring instruction in the state's K-12 learning standards.
- 11.3** Addressing the needs of English language learners.
- 11.4** Accommodating students with special needs.
- 11.5** Extending instruction for students who have demonstrated proficiency in relevant standards.
- 11.6** In addition, none of the program's instructional planning assignments encourage candidates to use pseudo-scientific methods of instruction.
- 11.7** In addition, the program requires that throughout their student teaching experience, teacher candidates develop written instructional plans whose content follows explicit instructional guidelines.



## Standard 12: Assessment and Data.

The program trains teacher candidates how to assess learning and use student performance data to inform instruction. Standard applies to: **Elementary** and **Secondary** programs.

### Indicators that the program meets the standard:

- 12.1** The instructional role of standardized tests, particularly the program state's standardized tests, is reviewed by teacher candidates.
- 12.2** Teacher candidates are required to prepare formative and summative classroom assessments.
- 12.3** Individually and in teams, teacher candidates are taught how to interpret and apply data from both standardized and classroom assessments in order to inform instruction.

### Strong design:

- 12.4** A program will receive a "strong design" designation if instruction satisfying indicators 12.1-12.3 is provided through a combination of 1) a core data literacy course also addressing the use and misuse of assessment data, the issue of bias and the meaning of validity and reliability in the context of testing, and 2) one or more courses addressing subject-specific pedagogical data literacy and including field work assessment assignments closely aligned with that instruction.

## Standard 13: Equity.

The program ensures that teacher candidates experience schools that are successful in serving students who have been traditionally underserved.

Standard applies to: **Elementary** programs.

### Indicator by which the program will be compared:

Programs will not be scored for their performance relative to this standard. As NCTQ has done in an earlier review of teacher preparation programs, data on program performance will be made publicly available in a manner that allows for comparison of institutions in relative geographic proximity.

- 13.1** When evaluated in the context of teacher preparation programs that are in relative geographic proximity, the proportion of a program's student teaching placements that are made in schools that can be classified as "high performing and high poverty" can signal a commitment to ensuring that all teacher candidates experience teaching in such learning environments. For purposes of classification, schools are designated as "high performing and high poverty" if:
  - Average student performance in either reading or mathematics exceeds the district average.AND
  - Forty percent or more of students receive free or reduced-price lunches.

## Standard 14: Student Teaching.

The program ensures that teacher candidates have a strong student teaching experience.

Standard applies to: **Elementary**, **Secondary** and **Special Education** programs.

### Indicators that the program meets the standard:

- 14.1** The student teacher is observed and provided written feedback five times at regular intervals during the placement.



- 14.2** The following criteria for cooperating teachers are either communicated clearly by the program to the school district, or set forth by the district and accepted by the program:
- Be proven capable mentors OR receive mentorship training.
- AND
- Be proven effective instructors (as measured by student performance).
- 14.3** The program plays an active role in selecting cooperating teachers, adhering to the selection criteria noted in 14.2 above, or at least utilizing criteria that bear on some aspect of nominated teachers' capacity to serve as cooperating teachers.

### Standard 15: Secondary Methods.

The program requires teacher candidates to practice instructional techniques specific to their content area. Standard applies to: **Secondary** programs.

#### Indicators that the program meets the standard:

- 15.1** The program requires teacher candidates to take a subject-specific methods course in the area of certification.
- 15.2** Methods courses focus on specific instructional strategies that will improve the delivery of content and include field work or a concurrent practicum that holds teacher candidates individually accountable for mastering instructional skills.

### Standard 16: Instructional Design for Special Education.

The program trains candidates to design instruction for teaching students with special needs. Standard applies to: **Special Education** programs.

#### Indicators that the program meets the standard:

- 16.1** The program requires several courses (or the equivalent) designed for special education candidates with a strong focus on instructional design in a particular content area (e.g., reading, mathematics, science, social studies) or in multiple content areas.
- 16.2** More than half of the grade for coursework described in 16.1 is based on assignments that require teacher candidates to design instruction.
- 16.3** Course assignments requiring design of instruction should explicitly address “specifically designed” instruction that can meet a range of students needs by:
- Development of a curriculum feature, such as developing a new task or lesson that explicitly teaches a new concept or a prerequisite concept.
- OR
- Minor modification of the curriculum.
- OR
- Major adaptations.
- OR
- Major enhancements to the curriculum.



## Standard 17: Outcomes.

The program and institution collect and monitor data on their graduates.

Standard applies to: **Elementary**, **Secondary** and **Special Education** programs.

### Indicators that the institution meets the standard:

- 17.1** The institution surveys its graduates regarding topics relevant to program evaluation.
- 17.2** The institution surveys its graduates' employers about their professional performance.
- 17.3** The institution secures data from teacher performance assessments (e.g., California's PACT) administered to candidates just prior to or at graduation.
- 17.4** Either through state data systems or on its own, the institution secures growth data on its graduates' students, including any teacher evaluations which are based at least partially on such data.
- 17.5** All forms of data noted are collected on an established timetable that supports regular program evaluation.

### Strong design:

- 17.6** An institution that satisfies indicators 17.1-17.5 and is able to secure student-growth data on its graduates (indicator 17.4) from a state data system will receive a "strong design" designation if it demonstrates that it uses the data for program improvements. Documents that may be used for this demonstration include those that pertain to redesigned courses or clinical experiences; changes in student teacher assessment practices; new school partnerships for clinical placements; changes in recruitment and selection practices.
- 17.7** In the absence of analyses conducted by the state, an institution that has secured student-growth data on its graduates (indicator 17.4) through its own devices and has satisfied all other indicators may also receive a "strong design" designation if it demonstrates that it uses the data for program improvements. Documents that may be used for this demonstration include those that pertain to redesigned courses or clinical experiences; changes in student teacher assessment practices; new school partnerships for clinical placements; changes in recruitment and selection practices.
- 17.8** In the absence of analyses conducted by the state and the capacity to gain access to meaningful student-growth data through its own devices, an institution that satisfies all indicators except for 17.4 will receive a "strong design" designation if it demonstrates that it has developed institutional capacity to use outcomes data for continuous improvement. Documents that may be used for demonstration include the following: an evidence plan enabling the institution to collect, analyze, and draw solid conclusions from data about the impact of program graduates on pupil learning; instruments to assess the teaching skills and classroom teaching performance of its candidates; a formal organizational mechanism to use data to improve the preparation program; a plan to measure and report persistence rates for a complete cohort of its graduates.

## Standard 18: Evidence of Effectiveness.

The program's graduates have a positive impact on student learning.

Standard applies to: **Elementary** and **Secondary** programs in institutions in states with adequate data models.

### Indicator that the program meets the standard:

Teacher preparation student performance data models that allow evaluation of teacher preparation programs now exist in only a small number of states. And even in those states, a first generation of models may soon be supplanted by a second generation. This standard and its indicator will develop in parallel with the development of teacher preparation student performance data models nationwide.



The only programs that will be evaluated are those located in states in which teacher preparation student performance data models allow association with graduates in their first year or two years of teaching with either:

- A determination of individual student growth.

OR

- A determination of the teachers' contribution to individual student growth.

Any institution located in a state whose teacher preparation student performance data models do not meet either of these two criteria will receive a rating indicating that the standard is “not applicable.”

NCTQ's own preference would be that only programs whose graduates on average are effective (i.e., at least half of a program's graduates produce student learning gains in their first year) would meet this standard. But the theory and practice of using student growth data to assess teacher preparation quality are still in their infancy, so we cannot at this point impose such a threshold. As more states build adequate models, we will adjust the standard and indicator accordingly.

**18.1** The state's own criteria for evaluating and rating teacher preparation programs and identifying those that meet or exceed state standards will determine a program's rating under this standard.

### Standard 19: Rigor.

The program holds teacher candidates to the same or a higher level of expectations regarding coursework and grading standards as that to which students in the rest of the institution are held.

Standard applies to: **Undergraduate Elementary, Secondary** and **Special Education** programs.

#### Indicator that the program meets the standard:

**19.1** The proportion of teacher candidates achieving exceptional grades is comparable to the proportion of all students in the institution doing so.