National Council on Teacher Quality

Ed School Essentials:
A Review of Illinois Teacher Preparation

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SECTION 1: Introduction

Methodology: Data Collection, Analysis and Production of Ratings

Undergraduate and graduate formal teacher preparation programs housed in Illinois higher education institutions account for virtually all of the 9,500 new elementary, secondary and special education teachers prepared each year in the state.[1] This review applied a set of comprehensive standards to those programs that are designed specifically to prepare elementary, secondary and special education teachers, 111 programs[2] in all at 53 institutions. It also examined three "independent providers" (the **Academy for Urban School Leadership**, **Teach For America** (TFA) and the **Chicago Teaching Fellows** program of **The New Teacher Project**), which provide teachers to the Chicago public schools. The standards used for evaluation bear directly on all of these programs' capacity to attract the most talented individuals into the teaching profession and then prepare them to teach effectively.

Over the last six years, the National Council on Teacher Quality (NCTQ) has been reviewing education schools across the country, primarily to look at the design of the elementary reading and mathematics preparation that they provide.[3] The Illinois review is the largest we have undertaken to date and the latest in a long series in preparation for a 2011 national review of all education schools in the country.[4] The work in Illinois has been funded by our local partner, Advance Illinois.

Where NCTQ Stands on Formal Teacher Preparation

Teacher preparation programs, or "education schools" as they are more commonly known, do not now, nor have they ever, enjoyed a positive reputation, either in Illinois or elsewhere. Their reputation has not been improved by research findings showing that pre-service teacher preparation provides no discernable value, though very little of

1 With our numerous requests for production information from alternative certification programs offered by **Concordia University**, **Dominican University**, **National-Louis University** and **Northern Illinois University** not fulfilled, information provided by alternative certification programs at the nine other institutions that offer them indicates total production of only 207 teachers in 2009-10.

2 The listing of programs on NCTQ's website shows 112 programs because it includes an early childhood program at Elmhurst College that was removed from the review.

3 NCTQ has issued two national reports on the reading and mathematics preparation of elementary teachers in representative samples of undergraduate education schools. The first, *What Education Schools Aren't Teaching about Reading and What Elementary Teachers Aren't Learning*, was released in May 2006. The second, *No Common Denominator: The Preparation of Elementary Teachers in Mathematics by America's Education Schools*, followed just over two years later. We have also issued reports that focused on reading and mathematics preparation of undergraduate elementary teacher candidates in five states. In addition to these studies of education schools, each year NCTQ conducts an analysis of state teacher polices, including the obligations that states have to their approved programs. The most recent edition of the *State Teacher Policy Yearbook* 2009 for Illinois can be found at www.nctq.org/stpy.

4 There will be one additional review released in advance of the national review: a national review of approximately 130 education schools and the quality of their student teaching programs.

this research has drilled down to the level of *individual programs* to evaluate whether some programs (even if they are only a small minority) are adding value. Considered in the aggregate, which is all that most of the research has been able to do, the research is fairly conclusive that a teacher with very little training is as apt to be as effective as a teacher with a lot of preparation.

The popularity and clout of the successful **Teach For America** program—a program for elite college graduates with no undergraduate education coursework that are placed in classrooms after a five-week summer training session—reinforces the view that pre-service preparation coursework does not matter. Although **Teach For America** has brought tremendous benefits to public education, this conclusion may not serve the nation well. Other than at the high school level, there is not much evidence that **Teach For America** teachers significantly outperform their peers when it comes to raising student achievement.[5] Yes, inherent talent matters a lot, and education schools would do well to mimic the selectivity of **Teach For America**, but talent alone is not sufficient when it comes to improving student outcomes. High quality preparation *should* be able to add tremendous value to a new teacher's ability to acclimate to the classroom and to become an effective educator.

Because high-quality formal teacher preparation should be well capable of improving student outcomes (particularly reducing or even eliminating the deleterious impact that most first-year teachers have on student achievement), the approach taken here is perhaps unique in the current climate of "anti-ed school" sentiment. Neither a "work around" approach, which looks only to alternative means of teacher preparation, nor continued tolerance of high numbers of weak or non-performing programs is an acceptable solution.

As a basic theory of change, it is simply not a realistic strategy to fuel a profession with three million members nationally by only attracting more elite students. Nor is the proliferation of "alternative certification"—much of it not all that different from traditional certification in the coursework that is required for completion or in the selectivity of admission—a panacea. The nation needs to be much more selective about who gets into the teaching profession, and accordingly NCTQ strenuously advocates for that goal. But teacher preparation still holds potential because even smart people can become better teachers, particularly of younger students, if they are provided with purposeful and systematic preparation.

5 See Section 8 of this of this appendix for a discussion of what coursework may be effective at the elementary level.

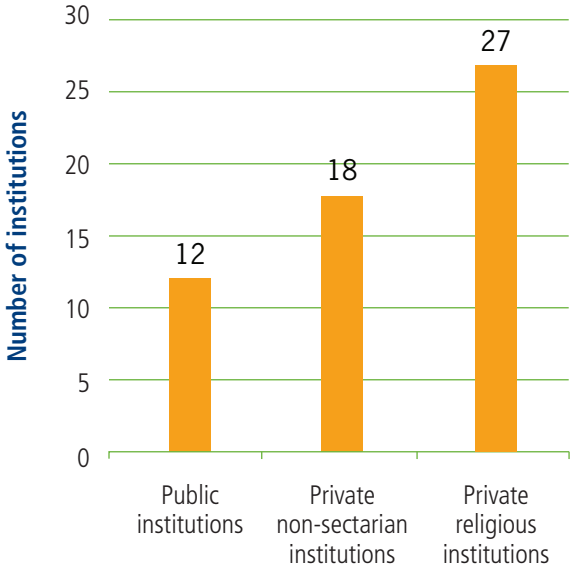
Teach For America results are mixed. To date there have been a number of studies comparing the effectiveness of TFA teachers to that of teachers holding traditional certification. The majority of these studies have found that K-8 TFA teachers have a significantly positive effect on student achievement in math. In reading, the effect has been less consistent, but overall TFA teachers' influence has been found to range from no significant difference to a slightly positive effect when compared with traditionally certified peers (Raymond, M., Fletcher, S., & Luque, J. [2001]. Teach For America: An Evaluation of teacher differences and student outcomes in Houston, Texas, *CREDO*; Glazerman, S., Mayer, D. P., & Decker, P. T. [2004]. The effects of Teach For America on students: Findings from a National Evaluation. *Mathematica Policy Research, Inc.*; Kane, T. J., Rockoff, J. E., & Staiger, D. O. [2006]. What does certification tell us about teacher effectiveness? Evidence from New York City. *NBER Working Paper Series*; Boyd, D., Grossman, P., Lankford, H., Loeb, S., & Wyckoff, J. [2008]. Teacher preparation and student achievement. *NBER Working Paper Series*; Noell, G. H., & Gansle, K. A. [2009]. *Teach For America teachers' contribution to student achievement in Louisiana in Grades 4-9*: 2004-2005 to 2006-2007. Louisiana State University, Baton Rouge, Louisiana.)

TFA high school teachers have been the subject of only one major study to date; however, this study found that the effect size of a TFA teacher was two to three times that of one of their traditionally certified peers, including those considered to be veteran teachers. These effects were particularly strong in math and science but were still significant in English. (Xu, Z., Hannaway, J., & Taylor, C. [2007]. Making a difference? The effects of Teach For America in high school. *National Center for Analysis of Longitudinal Data in Education Research*)

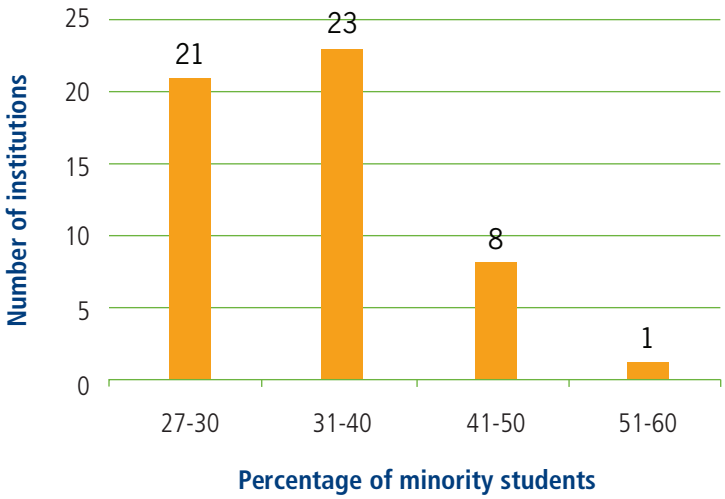
Profile of the Institutions

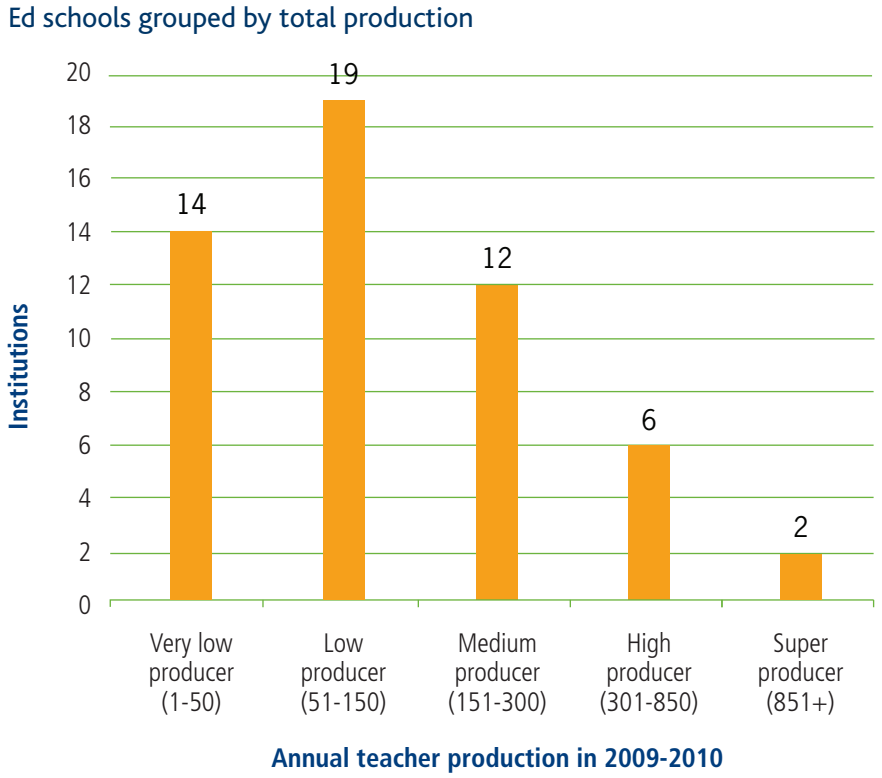
The 53 institutions in this review are categorized here by their type (private vs. public), relative teacher production and proportion of minority enrollment.

Type of institution housing Illinois education schools



Minority enrollment in Illinois education schools





Each institution's cover sheet indicates if its education school has obtained specialized accreditation by the National Council for Accreditation of Teacher Education (NCATE) or the Teacher Education Accreditation Council (TEAC). All 53 education schools in Illinois are accredited by the state.

Program Approval Process in Illinois

The Illinois State Board of Education (ISBE) approves teacher preparation programs, basing its approval on programs' compliance with a combination of state and NCATE standards. Programs are evaluated against these standards in a visit conducted by a team of higher education and public school personnel every seven years. Programs that do poorly on this evaluation may be designated as "at risk." If they then fail to demonstrate appropriate remediation within three years, they are designated as "low performing." Illinois also reports on the quality of its education schools under Title II of the federal Higher Education Act. The most recent information made publicly available indicates that in the last five years only one education school (**Trinity Christian College**) was designated as "at risk," and no education schools were designated as "low performing."[6]

As part of the program-approval process, the Illinois State Board of Education also collects programs' annual summary license test pass rates, with the requirement that 80 percent of program completers must pass. This 80 percent pass-rate standard is common among states, although few programs in the nation prove unable to meet it, and the high-passage rates speaks more to the lack of rigor of most of the tests than to the proficiency of the candidates.

6 https://title2.ed.gov/Title2DR/LowPerforming.asp
Illinois' Title 2 reports up until 2008 are available at this website: https://title2.ed.gov/Title2DR/StateHome.asp

Illinois' regulatory framework provides important context for the focus of this paper and is more fully explored in NCTQ's *State Teacher Policy Yearbook* 2009 (http://www.nctq.org/stpy09/reports/stpy_illinois.pdf). A summary of the *Yearbook* findings relevant to this review can be found in Section 18 of this appendix.

Scope of this Review

To conduct this review, NCTQ evaluated 111 preparation programs using a comprehensive set of standards. Some of these standards are grade specific, that is, standards that pertain only to elementary teacher preparation,[7] secondary teacher preparation or special education teacher preparation. Others are broader, relevant to either undergraduate or graduate programs. Still others are relevant to the education school as a whole. A guide to whether standards are program-specific or apply more broadly is found in Section 11 of this appendix.

These standards are by no means the only way to evaluate teacher preparation. NCTQ does not carry the authority of a government regulator or even that of a private accrediting organization. NCTQ's expertise is teacher quality and how to improve that quality to the highest possible level. Our standards are based on research findings on teacher effectiveness, consultations with expert panels, the best practice of other nations and the states with the highest performing students in the nation. There is nothing that prevents another organization from tackling this issue from its own perspective, including education schools themselves.

Methodology: Data Collection and Analysis[8]

This review did not evaluate all of the undergraduate and graduate teacher preparation programs (255 total) offered at Illinois' 53 education schools. Some offer only one of the eight types of programs we evaluated; others offer all of them. (The programs include undergraduate early childhood, elementary, special education and secondary, and graduate early childhood, elementary, special education and secondary.) At least one but not more than four programs among the eight different types of programs were selected. Our aim was to evaluate programs that we estimated produced greater than one percent of the total of teachers produced in any given program type based on data from the Illinois Board of Higher Education (IBHE).[9]

NCTQ based its evaluation of each program's design on many different sources of data. Each analysis started with an initial review of course catalogs and other program material posted publicly by the institution to identify much of the core data that are required for the review: institutional admissions standards and an education school's own admission policy; general education course requirements; course requirements for secondary teachers in their subject area(s); professional course requirements and descriptions; graduation requirements; course schedules; and, teaching

7 For purposes of evaluation, we used the same standards for review of early childhood programs (birth to grade three) and elementary programs (kindergarten to grade 9).

8 Our data collection window closed at the end of the spring 2010 academic term. Any changes in coursework or coursework requirements that occurred after that term are not necessarily reflected in our analyses.

9 We found subsequent to the selection of programs for evaluation that while there is no single definitive source of data on the production of teachers in Illinois, the IBHE data had limitations that resulted in evaluations of some programs that produce fewer than one percent of teachers in any given program type. However, our evaluation did include the programs producing the greatest number or close to the greatest number of teachers at 48 education schools. Of the five education schools for which this was not the case, in two we evaluated a total of three programs and in the third we evaluated two programs, meaning that we have produced a considerable body of evidence on teacher preparation at the school even if the largest program was not included. In the case of the remaining three education schools (the graduate elementary program at **Aurora College**, the graduate special education program at **Quincy University** and the graduate elementary program at **Northwestern University**), we had only evaluated one program, so we offered each of these schools an opportunity to add an evaluation on its largest program, a program not already included in the review. None accepted the offer.

assignments and faculty listings. Our solicitation of materials from Illinois institutions requested the syllabi for particular courses necessary for evaluation (for specified sections—selected at random—if multiple sections were offered), information on graduate and employer surveys, student teaching handbooks and 10 elementary or secondary schools at which student teachers were placed.

We augmented our analysis of these sources with additional information obtained from surveys of personnel in public school districts: principals of those schools in which a program places its student teachers and superintendents who hire a program's graduates.

NCTQ's analysis of institutions housing education schools was a major undertaking. The entire preliminary rating required approximately 40 hours. This estimate does not include the time dedicated to reviewing material submitted by institutions after they have received reports on their preliminary findings and draft ratings.

A full chronology of the review is found in Section 12 of this appendix.

SEVERAL BASIC PRINCIPLES GOVERNED OUR ANALYSIS IN ILLINOIS

1. If multiple paths to certification were offered, NCTQ analyzed the path-to-program completion that provides a candidate the *least* adequate preparation.
2. If multiple courses were offered for fulfillment of a coursework requirement, NCTQ analyzed the course choice that was the *least* likely to provide good preparation to a teacher candidate.
3. Institutions were *always* given several opportunities to tell NCTQ about inaccuracies or omissions in analysis.
4. Institutions were not provided with ratings methodologies for our standards in advance of our solicitation of materials.

MORE ON THESE PRINCIPLES

1. When institutions offer their candidates multiple choices for completing the program, the pathway that provides the teacher the *least* adequate preparation is always the basis for NCTQ's conclusion. Why the least adequate preparation choice? There will always be teacher candidates who strive to meet only the lowest expectations set by an institution, and therefore as long as those candidates are still considered qualified to graduate and earn a teaching license, the height of the bar set by the institution is critical. In fact, the institutions that set the lowest bar are most apt to provide the teachers to the neediest school districts, making it all the more important to determine the least rigorous pathway to licensure. For example, if an elementary teacher candidate can receive certification with either a Bachelor of Arts (BA) or a Bachelor of Science (BS) degree, we evaluated the course requirements for the BA degree, which often allow a math-phobic teacher candidate to skirt several mathematics courses.
2. It is never assumed that teacher candidates will make the right course selection among a set of electives. For example, an institution may offer three courses in American history to satisfy a core curriculum requirement. Two of these courses address more narrow perspectives, such as westward expansion or the role of technology, and one more broadly addresses the nation's history. The latter choice is the most appropriate course, *unless the teacher candidate has demonstrated mastery of the necessary material through a placement examination*. If the teacher preparation program indicates that the broader survey course is only an option and not required, NCTQ does not assume that the teacher candidate will make the right choice. If, on the other hand, all three courses offered in American history to satisfy a core curriculum requirement broadly address the nation's history, the requirement that the teacher candidate take any one of the choices is presumed to lead to adequate preparation for teaching.

3. Institutions are always invited to provide additional data that they feel is relevant to the analysis, such as course schedules that were not publicly available, syllabi, study guides and assessments. Also, institutions can use the opportunity to review reports on preliminary findings of fact to apprise NCTQ if any data are incomplete, outdated or simply inaccurate.
4. The fact that we did not provide Illinois institutions with our standards' ratings methodologies in advance of our initial solicitation of materials or in the course of communications on preliminary findings of fact caused some consternation. Institutions indicated that they could have been more efficient in providing materials in response to our solicitation of materials if they had known the ratings criteria in advance. Our rationale for not providing ratings methodologies in advance is that for many standards doing so could bias the nature of the materials provided. For example, three of our professional preparation standards (assessment [Standard 17], classroom management [Standard 20], and special education [Standard 21]) have ratings criteria that penalize institutions for addressing the topic in three of more courses. Had institutions been aware of these ratings criteria, they may not have provided full information on the coursework in which these topics are addressed.

Subsequent to the report on preliminary findings, institutions received ratings and a comprehensive guide to the ratings methodologies for their final review. Institutions were strongly encouraged to seek more detailed information about the nature of any deficiencies noted in their ratings. A complete chronology of this review's data collection and review process is found in Section 12 of this appendix. Section 13 describes the nature of communications with education schools.

With the exception of **Olivet Nazarene University**, education schools in Illinois have been enormously cooperative with this review, fully availing themselves of multiple opportunities for review and comment and providing extensive feedback.

Determining the Ratings

For each standard, an institution is awarded a rating reflecting the extent to which it meets the standard. The possible ratings for most standards are: "meets the standard," "nearly meets the standard," "partly meets the standard," "meets a small part of the standard" or "does not meet the standard." In some cases, the only possible rating is either "meets the standard" or "does not meet the standard." All of these ratings are depicted by a familiar and useful graphic: partially filled or filled circles of the kind used to designate the rating for consumer products.

This identification of strong and weak designs of teacher preparation programs serves an important purpose: to alert the public and policy makers that some programs with education schools and some education schools in general, while they may have strengths that were not apparent in this analysis, suffer from serious problems in the fundamental framework of programs.

In addition to these ratings, institutions' rating sheets convey which programs demonstrate "strong design" in a particular standard.

Symbol	Meaning
★	Program design relative to a particular standard is exemplary relative to other programs and the program meets or almost fully meets the standard.

A glossary of terms used to describe teacher preparation coursework and programs is found in Section 19 of this appendix.

Analyses Using Course Requirements and Descriptions

Course descriptions found in course catalogs are admittedly short and cannot convey full information about the scope of a course, but they can be appropriately used in a very circumspect and circumscribed manner.

Course descriptions alone were considered relative to seven standards in this review, most notably for evaluation of the broad liberal arts preparation of elementary and special education teacher candidates. Examining how NCTQ uses course descriptions in the evaluation of this standard will be illustrative of their general use.

Using course descriptions for evaluating the content coursework required of elementary teachers is a relatively easy task. The complete absence of course requirements in a critical area such as American history or biology is often the basis for the rating, meaning that it was not even necessary to look at a course description. For example, it is an easy matter at most Illinois institutions to ascertain that no world history course is required to fulfill either general education or teacher preparation requirements.

If a course that may be relevant to the elementary content standard is in fact offered, course titles can often be used to evaluate whether courses are broad enough to equip an elementary teacher to both contextualize and "add value" to the concepts to which she will be introducing her students through the Illinois K-9 curriculum. For example, a relatively broad course in biology will be more useful for teaching elementary science than a course narrower in focus, such as one on the environment. Consequently, the titles of these two courses alone would allow a rater to easily discern that one indeed touches on a full range of biological science (*Biological World*) and not just a small slice of it (*Humans and the Environment*).

Examples of course descriptions used to evaluate elementary content coursework and how they were assessed are found in Section 15 of this appendix.

It is only when a course relevant to an elementary content area is required that a course description needs to be examined to determine if it satisfies the standard. An example below illustrates how course descriptions enable the rating of an institution for its coverage of world geography. Here, NCTQ was looking for a course that provides general narratives of all major civilizations in either ancient or modern times.

World history:

Sample course description (adequate; full credit):

> **World Civilizations I**. A study of Western and non-Western cultures from antiquity through the Protestant Reformation. Emphasis on the development of the classical and medieval west and an introduction to major world cultures and religions.

Sample course description (less adequate due to focus on Western civilization only, not Western and non-Western civilization; partial full credit):

> **Europe and Western Civilization**. This course examines the history of Europe from the Renaissance to the present. It focuses on the shaping cultural power of classical and Christian traditions, the interaction between the West and the world, and the development of diverse secular ideologies in the modern world.

Sample course description (potentially valuable for some purposes but not to provide a foundation of understanding world history; a deduction of one rating point on a four point scale):

> **Western Civilization**. Team taught by instructors from a variety of disciplines. Emphasis on conceptual approach to intellectual, cultural, political, economic, social, and technological issues that have formed the spirit of the various ages from ancient Greece to the present.

Analysis Using Syllabi and Textbooks

Analyses of syllabi have long been an accepted part of the evaluation of teacher preparation by state agencies, accrediting organizations and multiple research studies. The NCTQ methodology mirrors this practice, with reliance on experts in mathematics and reading to conduct the evaluations of syllabi for courses in elementary mathematics content and reading.

Here's an example that helps illustrate how this methodology works, although a course in American history has been picked only for purposes of illustration; NCTQ does not evaluate the content of American history coursework for any standard:

If a syllabus for an early American history course contains no mention of topics associated with the American Revolution, one might rightfully suspect that the course is deficient, because the Revolution is considered a basic, essential topic. But it would not be nearly so troubling to see that Benedict Arnold was not included on the syllabus. The professor might not have thought to list Arnold, and in any case he or she might end up talking about Arnold in a lecture—not unlike adding a "special" dish to a menu one night. But even if the professor doesn't do that, it would be unfair to reach a negative conclusion about the course as a result of the omission, because Arnold is not a basic, essential topic. NCTQ applies this logic to its interpretation of any syllabus, looking only for topics that are considered so essential that an instructor would not have failed to mention them on the syllabus if she or he intended to teach the topics at all.

NCTQ's evaluations of syllabi are generous in that a program is always given the benefit of the doubt if a syllabus is fairly ambiguous.

We often encounter objections from education schools to the use of syllabi to assess the core of instruction. Most objections seem to be based on the proposition that the most important concepts in a course can be so deeply embedded that they are invisible. In the words of one education school dean, if something is a "natural part" of a course it "need not be explicitly identified." In fact, it is exactly the "natural part" of a course that is routinely expected by student, instructors, college administrators, trustees and accreditors to be described by syllabi that we look for in our analysis.[9]

9 We also encountered objections from education schools that the evidence we look for in many standards (for example, Standard 8 on English language learners and Standard 9 on technology) is too high, since we looked for practice by teacher candidates; these education schools felt that discussion of a topic should be sufficient. This difference in perception may be due to the nature of evidence provided in the process of the education school accreditation that some institutions choose to undergo. For example, the education school at the **University of St. Francis** is accredited by NCATE (one of two education school accrediting organizations). The school provided us with a study of ELL curriculum alignment that illuminates how a very general mention that ELL issues are discussed in a class is sufficient for a course to be noted as addressing the topic for accreditation processes, contributing to the perception that mention should be sufficient for our standards as well.

In evaluations of elementary mathematics content and reading preparation, required textbooks are also carefully reviewed, as well as any "reading packets" put together by the instructor. Assuming that instructors pick these required readings with care (and the selection of textbooks especially is unlikely to be a casual decision but rather one that is quite revealing of an instructor's orientation), the evaluations probably provide a much more positive view of what instruction in a course covers than what actually transpires.

Because the process of evaluation of elementary mathematics content and reading preparation is quite involved, it is discussed in more detail below.

Analyzing Reading Syllabi and Textbooks

Each of the collected syllabi was reviewed and rated by a reviewer with expertise in early reading instruction as well as years of experience in evaluating this standard for NCTQ in previous studies.

The expert reviewers looked for evidence that each of the five components of effective reading instruction (phonemic awareness, phonics, fluency, vocabulary and comprehension) was the topic of 1) part of a lecture, 2) all of a single lecture, or 3) multiple lectures. Two lectures on a single component were sufficient to receive the maximum score, although in reality, more exposure would undoubtedly be beneficial. The reviewers also analyzed whether students in the class were expected to demonstrate their knowledge of effective reading instruction by different kinds of assessments and assignments.[10]

When considering the lectures, the reviewers did not speculate about the quality of instruction and whether topics were taught appropriately. For example, a course that simply listed "phonics" as a lecture topic would receive credit for lecture coverage even though the professor could have spoken about the advisability of only teaching phonics when children were having difficulty sounding out a word, an instructional practice not supported by research.

The sampling and methodology are described in more detail in Appendix A of NCTQ's national report on reading.[11]

The evaluation of the texts was a process separate from the analysis of the syllabi and was conducted by reading experts hired as consultants for this project. These consultants categorized each textbook as follows:

Acceptable core textbook	The text accurately and thoroughly covers all five components of sound reading instruction.
Acceptable supplemental	The text accurately and completely covers one or more, but not all, of the five components of sound reading instruction and is suitable as supplemental reading for a course.
Not acceptable core textbook	The text was intended to be a comprehensive source on sound reading instruction but was inaccurate and/or incomplete.

10 As the framework for both the analysis of the syllabi and the reading texts, we used four syllabi that literacy expert Louisa Moats designed for Maryland. The syllabi serve as a guide to the four reading courses required of elementary teachers in that state. For a resource guide, see http://www.marylandpublicschools.org/nr/rdonlyres/c90fec83-190a-4efd-92e1-7344e7527c2b/7875/readingcourserevisionguidelines1./pd

11 http://www.nctq.org/p/publications/docs/nctq_reading_study_app_20071202065019.pdf

Not acceptable supplementary	The text was intended to cover some aspect of reading instruction but did not cover even one component of sound reading instruction in an accurate and complete manner.
Not relevant	The text was not intended to teach teachers how to teach reading.

A complete list of ratings for required reading textbooks in Illinois' teacher preparation programs can be found in Section 16 of this appendix. In addition, more extensive reviews are provided on 14 textbooks, six of which we deem "acceptable core" textbooks. This section of the appendix also provides information about the reading expert who served as the textbook reviewer.

Mathematics Syllabi and Textbooks

Elementary content course syllabi were evaluated by trained reviewers with mathematical expertise and years of experience reviewing on this standard. The reviewer evaluated a syllabus for indications that the classroom instruction at least intended to cover all of the 12 topics established as essential by an advisory group to NCTQ's national math report.[12]

When syllabi were too ambiguous to warrant any conclusions about coverage, the reviewer checked textbook pages assigned for class or reading to ascertain the nature of the instruction.

Samples of course syllabi and their scores are contained in Appendix E of NCTQ's national mathematics report.[13]

The evaluation of texts was a separate process from the analysis of the syllabi and was conducted by mathematicians hired as consultants for this project. Only one elementary mathematics textbooks used for courses analyzed in this review required extensive review because it had not already been reviewed in NCTQ's national mathematics report.[14]

The review process for all mathematics textbooks involved a preliminary screening by a mathematician to ascertain the adequacy of their treatment of the 12 essential topics. All but the weakest and/or least commonly used textbooks were reviewed twice in the three critical areas of numbers and operations, algebra and geometry, and measurement. The evaluators assessed the topics in each critical area on the basis of coverage, connection, integrity, the sufficiency and significance of examples, and whether the text addressed methods of teaching. The expert reviewers considered word problems of paramount importance in elementary content coursework. They paid particular attention in their reviews to the sufficiency and appropriateness of word problems.

The rubric for evaluating textbooks, textbook evaluation scores and descriptions of features of selected textbooks are found in Appendix D of NCTQ's national mathematics report.

A complete list of ratings for required mathematics textbooks in Illinois' teacher preparation programs can be found in Section 17 of this appendix. We also provide information about the mathematicians who served as textbook reviewers.

12 http://www.nctq.org/p/publications/docs/nctq_ttmath_fullreport_20090603062928.pdf
13 http://www.nctq.org/p/publications/docs/nctq_ttmath_fullreport_20090603062928.pdf
14 http://www.nctq.org/p/publications/docs/nctq_ttmath_fullreport_20090603062928.pdf

Our standards: rationales for, methodologies and findings

The next sections of this appendix are organized to provide the rationales, methodologies and findings for each of NCTQ's 39 standards. The standards are presented in the same order in which they appear on the rating sheet for each institution, but only a selection of standards is used in the review of each program. A full list of our standards follows. Summary results are found in Section 21 of the appendix.

Standard 1:
The institution admits teacher candidates with strong academic records as determined by objective measures used typically for admission to undergraduate or graduate programs.

Standard 2:
The institution ensures that coursework has a seriousness of purpose, reflecting college-level work.

Standard 3:
When state standards as measured by licensing exams appear inadequate, the institution elects to set a higher standard for program completion.

Standard 4:
The institution exposes teacher candidates to the history, culture and language of the principal minority and ethnic groups residing in the state.

Standard 5:
Where relevant, the institution incorporates the state's student learning standards into the preparation program.

Standard 6:
The curriculum required by the institution acknowledges the challenges teachers will face in meeting the instructional needs of English language learners.

Standard 7:
The institution exposes teacher candidates to the most critical education issues of the day, notably the achievement gap.

Standard 8:
The institution ensures that applications of technology are integrated into the pedagogy associated with specific content areas.

Standard 9:
The institution ensures that special education teacher candidates are adequately prepared on the uses of assistive technologies.

Standard 10:
The institution values the importance of a global perspective, imparting an understanding of the world, its history and its cultures to all students enrolled in the institution, including teacher candidates.

Standard 11:
The institution has a strong clinical model with some level of commitment to training student teachers in high-needs, high-functioning schools.

Standard 12:
The institution exposes teacher candidates to field work early on in their preparation.

Standard 13:
The institution designs a full-time student teaching experience.

Standard 14:
The institution designs student teaching to have a local experience of sufficient length.

Standard 15:
The institution carefully screens and qualifies expert cooperating teachers from its partner schools.

Standard 16:
The institution sets degree requirements that make it practical for any candidate who may be unsuccessful in student teaching to still qualify in relatively short order for a college degree.

Standard 17:
The institution provides a thorough overview of all types of classroom assessments, including how to analyze student data.

Standard 18:
The institution provides a thorough overview of the use of assessment data to plan education programs for students with special needs.

Standard 19:
The institution requires teacher candidates to understand key principles from cognitive psychology that address how children learn and develop, omitting those principles that do not have a scientific basis.

Standard 20:
The institution imparts methods in classroom management targeted to the grade levels at which the candidate intends to teach.

Standard 21:
The institution provides an orientation to special education targeted to the grade levels at which the candidate intends to teach.

Standard 22:
The institution offers an efficient program of study, as indicated by the required credit hours needed for completion.

Standard 23:
The institution offers all required courses at least once each year to make it possible to complete the program in a timely fashion.

Standard 24:
The institution tracks graduate outcomes such as employment and retention.

Standard 25:
The institution fully utilizes any available data provided by the state or school districts to measure the effectiveness of its graduates in order to make program improvements.

Standard 26:
The institution mirrors the scholarship practiced in other fields by not expecting faculty members to teach multiple disparate disciplines.

Standard 27:
The institution requires that elementary teacher candidates receive a broad liberal arts education appropriately focused on the background knowledge relevant to elementary grades.

Standard 28A:
The institution prepares elementary teacher candidates in the essential components of effective reading instruction.

Standard 28B:
The institution ensures that all coursework adheres to the essential components of effective reading instruction.

Standard 29:
The institution provides adequate preparation in the specific mathematics content needed by elementary teachers.

Standard 30:
The institution provides appropriate preparation in elementary mathematics methods.

Standard 31:
The institution provides appropriate preparation in methods in elementary science, social studies and language arts/writing.

Standard 32:
The institution requires rigorous academic coursework of its middle school teacher candidates.

Standard 33:
The institution requires an academic major of its high school teacher candidates that is equivalent in rigor to that of non-education majors.

Standard 34:
The institution provides appropriate preparation for secondary teacher candidates in content area methods.

Standard 35:
The institution ensures that special education teacher candidates receive a broad liberal arts education.

Standard 36A:
The institution prepares special education teacher candidates in the essential components of effective reading instruction.

Standard 36B:
The institution ensures that all coursework adheres to the essential components of effective reading instruction.

Standard 37:
The institution provides adequate preparation in the specific elementary mathematics content needed by special education teachers.

Standard 38:
The institution gears pedagogical training for special education teacher candidates to the specific knowledge and skills that they need for teaching.

Standard 39:
The institution is attentive to the numbers of special education and general education teachers it graduates, striving to achieve production in some proportional relationship to the state's demand for such teachers.

SECTION 2:
Standards on Selectivity

Together, the three selectivity standards aim to ensure that teacher candidates are capable of meeting the intellectual demands of teaching, receive preparation that truly prepares them to meet those demands in the classroom and are required to demonstrate that they know the subjects they will teach.

STANDARD 1:
The institution admits teacher candidates with strong academic records as determined by objective measures used typically for admission to undergraduate or graduate programs.

RATIONALE

Most teacher preparation programs in the United States, even undergraduate programs housed in college departments rather than professional schools, have an application process. This application process presents an opportunity to select only candidates that meet high standards.

There is extensive research supporting this standard, including 1) research spanning six decades showing a strong correlation of teacher "verbal ability"[1] and student achievement (verbal ability being generally measured by the SAT, ACT or other vocabulary tests), 2) a similarly strong correlation of the selectivity of the teacher's college and student achievement,[2] and 3) more limited findings showing that teachers who pass their licensing tests on the first attempt and have much less difficulty passing subsequent licensing tests and produce higher levels of achievement in students.[3]

In countries in which students outperform our own, international studies show a clear pattern of institutional and cultural forces that attract the most capable young adults into the teaching profession. McKinsey's 2007 study of high-performing educational systems indicates that other countries set a higher bar than the United States, with the least selective among high performers still selecting teachers from no lower than the top third of students.[4] A 2010 McKinsey study found that only 23 percent of new teachers in the United States come from the top third.[5]

1 Verbal ability has been measured many different ways but is most frequently measured on the SAT or ACT, performance on licensure tests and on simple vocabulary tests.

2 Ehrenberg, R., & Brewer, D. (1994). Do school and teacher characteristics matter? Evidence from high school and beyond. Economics of Education Review, 13(1): 1-17; Wayne, A., & Youngs, P. (2003). Teacher characteristics and student achievement gains: A review. R*eview of Educational Research*, 71(1): 89-122; Winkler, D. (1975). Educational achievement and school peer composition. *Journal of Human Resources*, 10, 189-204.

3 Gitomer, D., Brown, T., Bonett, I. (200) Useful Signal or Unnecessary Obstacle? The Role of Basic Skills Tests in Teacher Preparation, Paper presented at the annual meeting of the American Educational Research Association (AREA). White, B. R., Presley, J. B., & DeAngelis, K. J. (2008). *Leveling up: Narrowing the teacher academic capital gap in Illinois* (IERC 2008-1). Edwardsville, IL: Illinois Education Research Council.

4 McKinsey & Co. (Report, September 2007). *How the World's Best-Performing School Systems Come Out on Top*, 16. While the applicant pool has been improving and prospective secondary teachers are generally more capable than prospective elementary teachers, our nation's teachers do not come from the top ranks of high school graduates going to college.

5 http://www.mckinsey.com/clientservice/Social_Sector/our_practices/Education/Knowledge_Highlights/~/media/Reports/SSO/Closing_the_talent_gap.ashx

In a study of a group of countries that scored as well as or better than the United States on the 1999 TIMSS test of 8th grade mathematics, researchers found that in most of the countries, teacher candidate screening criteria are more rigorous and applied earlier in the certification pipeline.[6]

A recent survey of teacher-educators in four year colleges and universities found that 73 percent expressed concern about the quality of teacher candidates in their programs.[7]

METHODOLOGY

Our examination of both undergraduate and graduate Illinois programs looked for evidence that teacher candidates are likely to be in the top half of the college population either because of the selectivity of the institution in which the education school is housed (in the case of undergraduate programs) or because of admissions standards used by the education school itself (in the case of both undergraduate and graduate programs). Requirements for exceptionally high grade point averages (GPA) of 3.5 or above will raise an institution's rating.

Education schools have established many other criteria for admission that are not evaluated in this standard. Many education schools require that applicants be interviewed, provide evidence of "positive dispositions" for teaching and/or have minimum grade point averages. Some require a considerable commitment to satisfy and provide insight on the orientation of the education school on the profession's mission. For example, the **University of Illinois at Chicago** requires undergraduates to the elementary preparation program to complete 100 hours of community service. Whatever their merit, these criteria are not relevant for this standard.

For **undergraduate programs** we used *U.S. News and World Report* (USNWR) ratings to determine if an institution is "more selective" or "most selective"; these levels of selectivity fully meet the standard of screening for teacher candidates in the top half of the college population without further analysis.

For programs in institutions with lower selectivity in general admissions, we looked at the program's requirements relative to tests of academic proficiency normed to the college population or the population of teacher candidates. Although tests such as the SAT and ACT commonly taken for college admission may be used for this purpose, these tests are not the only ones available. Additionally, any test required for admission need not be taken until a prospective teacher candidate has had the opportunity to remediate deficiencies during the first two years of college coursework.

The Illinois Certification Testing System's Basic Skills Test is generally the only standardized test used for admission into Illinois teacher preparation programs. The test appears to be more rigorous than most analogous tests because it assesses mastery of middle school level concepts rather than a mixture of elementary and middle school level concepts. (For example, the mathematics section assesses mastery of middle school level concepts and includes algebra and geometry problems.) In September 2010, new regulations went into effect raising the required scores needed to enter an education school in Illinois and only 22 percent of test-takers passed all four sections of the test. While this is a dramatic shift, it does not indicate whether or not the test is selecting candidates who are in the top half of the college-going population and it is incumbent upon the state to ascertain this so that it can decide on the advisable level of cut-scores.

6 Wang, Aubrey H., et al. (2003). *Preparing teachers around the world.* Princeton, NJ: Educational Testing Service.
7 http://www.edexcellence.net/doc/cracksintheivorytower/Cracks_in_the_Ivory_Tower_Full.pdf, p. 25.

More on the Argument for Selectivity in Admissions

Countries that have education systems better than our own have much higher standards for applicants wanting to enter the teaching profession. Finland's education programs, for example, only admit the top 10 percent of their high school graduating classes. Singapore's programs only admit the top third of their high school or college graduating classes. We are only advocating that the floor be no lower than standards admitting the top 50 percent of the college-going population—still not as selective as the practices of higher-performing countries.

Does this violate our democratic tradition? Frankly, that democratic philosophy seems much more alive at the doors to education schools than at the doors to our PK-12 schools, with the result that the philosophy doesn't have a democratic effect at all. You won't find high-performing school districts willing to hire teachers who were themselves poor students and who have demonstrably low academic performance. Where are those teachers teaching? With high-poverty schools' staff having half the number of "upper third" teachers as the national average,* it is poor and minority children who are most likely to be assigned the teachers with the weakest academic backgrounds. The notion that academic background shouldn't matter that much has had disastrous consequences for poor and minority children, the ones who are most in need of a high-quality education. We tend to be okay with allowing low-performing teachers into the profession as long as they don't teach our own kids.

The shortages that could result are often cited as a reason not to raise admission standards, but there is little evidence from states that have raised their standards that big teacher shortages ensue. In truth, raising standards makes the profession more attractive to academically talented individuals who are otherwise put off by the profession's low standards. Massachusetts ignored warnings about shortages when it raised its standards to some of the highest in the nation and has not experienced any teacher shortages. Likewise, England found that teaching became the most popular profession among undergraduates and graduates after program standards were raised.

In fact, we can probably reduce the current number of education school students and not feel the effects at all in the classroom since many people getting teaching degrees never intend to teach. We can only surmise the popularity of teacher preparation programs are connected to the perception that it's an easy major.

Would all hopes of having a sufficient number of teachers of color be dashed with higher admission standards? While a far lower proportion of the most talented minority students choose to become teachers than do talented white students, highly selective education programs that heavily recruit talent of all colors do succeed in attracting minority teacher candidates. For example, 30 percent of **Teach For America** teachers are of color.

The long-term strategy to achieve a teaching force that better mirrors the student population is to immediately improve the educational prospects of every child by putting an effective teacher in every classroom. Those effective teachers we so desperately need will be produced by education schools with higher, not lower, admission standards. Among many other things, the fruit of more effective instruction will be many more minority high school graduates qualified to enter teaching in a decade, no matter how selective admissions have become.

* http://www.mckinsey.com/clientservice/Social_Sector/our_practices/Education/Knowledge_Highlights/~/media/Reports/SSO/Closing_the_talent_gap.ashx, p. 5.

Old and New Illinois Basic Skills Test Cut-Scores

Test Subject Area	Minimum score: % of questions correct (old)	Approximate % of test takers passing (old)	Minimum score: % of questions correct (new)	Approximate % of test takers passing (new)*
Reading	50%	95%	79%	57%
Language Arts	50%	94%	79%	47%
Math	35%	95%	75%	56%

** Data uses approximations of old and new minimum scores for the September 2009 test administration. Data on writing subject area are non-comparable and not included.*

In addition to meeting the criteria related to selectivity, in order for institutions to receive the highest rating on this standard they also must provide a flexible program of study tailored to students' knowledge and skill level. A flexible program of study allows students who satisfied general education course requirements before entering the teacher preparation program (for example, by taking Advanced Placement or International Baccalaureate courses) to take more advanced elective classes or other courses in areas in which they need reinforcement. An institution was judged to have this flexible program of study if it allows students to gain course credit based on scores on standardized tests of content mastery or its own institutional placement tests.

Standard 1: Selective admissions, undergraduate

Score	Criteria	Special considerations
4	(a) Programs housed in institutions that are "more" or "most" selective according to USNWR. OR (b) Programs that have a general standardized assessment with cut-scores that allow admission to candidates at or above the 50th percentile of the college-going population.*	Score shifts down one level if institution's placement policy does not allow candidates to place out of general education coursework based on acceptable performance on appropriately focused assessments.
3	Programs that have a general standardized assessment with cut-scores that allow admission to candidates just below the 50th percentile of the college-going population.*	Score shifts up one level for GPA of 3.5 or above.
2	1) Programs that have a teacher-specific standardized assessment (generally a basic skills test) with cut-scores that allow admission to candidates at or above the 50th percentile of teacher candidates.** OR 2) Programs that have a general standardized assessment with cut-scores that allow admission to candidates considerably below the 50th percentile of the college-going population.*	Score shifts up one level for GPA of 3.5 or above.
1	Programs that have a teacher-specific standardized assessment (generally a basic skills test) with cut-scores that allow admission to candidates below the 50th percentile of teacher candidates. **	Score shifts up one level for GPA of 3.5 or above.

0	No admissions requirements based on criteria that allow comparison of applicants to the college-going or teacher candidate population.	Score shifts up one level for GPA of 3.5 or above.

* These tests might be SATs, ACTs, the COMPASS, MAPP, etc. For the SATs, the 50th percentile is represented by cut-scores of 501 in reading and 515 in math. For the ACTs, the 50th percentile is represented by cut-scores of 21 in reading, 21 in math or a composite score of 21.

** For the Praxis I, the 50th percentile is represented by scores of 178 in reading, 179 in math and 176 in writing.

For **graduate programs** we examined admissions criteria to ascertain if programs require applicants to take a standardized test commonly used for admission to graduate programs, tests for teacher candidates of content mastery or tests for teacher candidates of basic skills. As in the case of undergraduate admissions, our standard is based on the presumption that applicants to any teacher preparation programs should demonstrate that their level of academic proficiency places them in the top half of the college-going population (a less selective expectation than that of proficiency placing them in the top half of the population intending to enroll in graduate school).

Standard 1: Selective admissions, graduate

Score	Criteria	Special considerations
4	Programs that require applicants to take a standardized test commonly used for admission to graduate programs, such as the Graduate Record Exam (GRE) or Millers Analogy Test (MAT), with cut-scores that allow admission of candidates at or above the 50th percentile of the college-going population.*	Programs may also demonstrate that those candidates that are accepted into their program are at or above the 50th percentile of the college-going population by providing 1) information on the selectivity of the undergraduate institutions those candidates attended and/or 2) the candidates' scores on national standardized tests of the college-going population.
3	Programs that have Graduate Record Exam (GRE) or Millers Analogy Test (MAT) admission requirements with a cut-score allowing admission to candidates below the 50th percentile of the college-going population or with no specified cut-scores.*	Score shifts up one level for GPA of 3.5 or above.
2	Programs that have Praxis II or other content test admission requirements with cut-scores set at or above the 50th percentile.**	Score shifts up one level for GPA of 3.5 or above.
1	Programs that have Praxis II or other content test admission requirements with cut-scores set below the 50th percentile.**	Score shifts up one level for GPA of 3.5 or above.
0	Programs that require a teacher-specific standardized assessment (generally a basic skills test) or that have no admissions requirements based on criteria that allow comparison of applicants to the college-going or teacher candidate population.	Score shifts up one level for GPA of 3.5 or above.

* Note that these cut-off scores are below the 50th percentile on these tests because the graduate test takers are a more select population than the college-going populations: For the GREs, the 50th percentile of the college-going population (not the population taking the GRE) is represented by a composite score of around 990. For the MAT, the 50th percentile of the college-going population (not the population taking the GRE) is represented by a score around 400.

** For the Praxis II, the 50th percentile for the elementary content test is represented by a score of 164; the 50th percentile scores vary by test at the secondary level.

FINDINGS

Findings for undergraduate programs

Twenty-one schools meet our admission standard by virtue of the fact that the selectivity of the institutions in which they are housed ensures that teacher candidates have strong academic records.

The remaining 29 educations schools with undergraduate programs are housed in institutions with low to nonexistent admission standards. While many of these education schools require that applicants be interviewed, provide evidence of "positive dispositions" for teaching and/or have minimum grade point averages, none has standards enabling them to compare applicant academic caliber to the general college-going population.

Much distance remains to the goal line for Illinois' education schools if they want to mirror the selectivity practiced in nations in which future teacher candidates must prove themselves academically competitive, not only with other teachers but also with all peers, no matter what their intended profession.

Findings for graduate programs

The picture is no brighter for admissions at the graduate level. Nearly three-fourths of the graduate level programs we evaluated still rely on the state's basic skills test as their lone academic screen into graduate studies. Sometimes they serve as the lone graduate school on a campus that eschews the types of graduate admissions tests customarily used in higher education.[8]

Just six institutions refuse to rely only on this basic skills test, instead employing the standard test used for admission to graduate school: **Governors State University**, **National-Louis University**, **Northern Illinois University**, **Rockford College**, **Trinity International University** and the **University of Illinois at Urbana-Champaign**.

☆ While six graduate programs do require that applicants take the Graduate Record Exam (GRE) for admission, only **Rockford College**'s education department specifies a minimum score that a candidate must have to be considered for admission. On the issue of whether selectivity in admissions is problematic when trying to attract minority applicants, **Teach For America** provides evidence that high standards and diversity can go hand in hand. Nationally, 30 percent of its corps members are teachers of color.

One additional education school met the standard by virtue of being essentially a fifth-year program at a "most selective" institution.

8 The proportion of education schools in Illinois that use the GRE for any certificate or master's program may be below the national average. Of 279 education schools surveyed by *US News and World Report*, 75 percent reported considering or requiring the GRE or MAT for at least one certificate or master's program.

How Illinois teacher preparation programs fare on this standard

NCTQ STANDARD 1.
The institution admits teacher candidates with strong academic records as determined by objective measures used typically for admission to undergraduate or graduate programs.

★ Programs with Strong Design	**Rockford College (GR-ELEM)**
● Programs Meet Standard	Augustana College (UG-ELEM), Bradley University (UG-ELEM), DePaul University (UG-ELEM), Elmhurst College (UG-ELEM), Illinois College (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Judson University (UG-ELEM), Knox College (UG-ELEM), Lake Forest College (UG-ELEM), Loyola University Chicago (UG-ELEM), McKendree University (UG-ELEM), Millikin University (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), Wheaton College (UG-ELEM), Augustana College (UG-SEC), Judson University (UG-SEC), Knox College (UG-SEC), Lake Forest College (UG-SEC), Loyola University Chicago (UG-SEC), McKendree University (UG-SEC), Millikin University (UG-SEC), Northwestern University (UG-SEC), Bradley University (UG-SPED), Elmhurst College (UG-SPED), The University of Chicago (GR-ELEM)
◕ Programs Nearly Meet Standard	National-Louis University (UG-ELEM), Northeastern Illinois University (UG-ELEM), St. Xavier University (UG-ELEM), Trinity International University (UG-ELEM), Northeastern Illinois University (UG-SPED), National-Louis University (GR-ELEM), Northern Illinois University (GR-ELEM), Trinity International University (GR-ELEM), National-Louis University (GR-SEC), University of Illinois at Urbana-Champaign (GR-SEC), Governors State University (GR-SPED), National-Louis University (GR-SPED) , Northern Illinois University (GR-SPED), University of Illinois at Urbana-Champaign (GR-SPED)
◔ Programs Meet Small Part of Standard	Columbia College (UG-EC), Dominican University (UG-EC), Kendall College (UG-EC), Aurora University (UG-ELEM), Blackburn College (UG-ELEM), Chicago State University (UG-ELEM), Concordia University Chicago (UG-ELEM), Eastern Illinois University (UG-ELEM), Eureka College (UG-ELEM), Governors State University (UG-ELEM), Greenville College (UG-ELEM), Illinois State University (UG-ELEM), Lewis University (UG-ELEM), MacMurray College (UG-ELEM), Monmouth College (UG-ELEM), North Central College (UG-ELEM), North Park University (UG-ELEM), Northern Illinois University (UG-ELEM), Olivet Nazarene University (UG-ELEM), Principia College (UG-ELEM), Quincy University (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), Trinity Christian College (UG-ELEM), University of Illinois Springfield (UG-ELEM), University of St. Francis (UG-ELEM), Western Illinois University (UG-ELEM), Eastern Illinois University (UG-SEC), Eureka College (UG-SEC), Greenville College (UG-SEC), Illinois State University (UG-SEC), Principia College (UG-SEC), University of Illinois Springfield (UG-SEC), Concordia University Chicago (UG-SPED), Eastern Illinois University (UG-SPED), Illinois State University (UG-SPED), Lewis University (UG-SPED), MacMurray College (UG-SPED), Northern Illinois University (UG-SPED), Southern Illinois University Carbondale (UG-SPED), Southern Illinois University Edwardsville (UG-SPED), Trinity Christian College (UG-SPED), University of St. Francis (UG-SPED), Western Illinois University (UG-SPED)
○ Programs Do Not Meet Standard	DePaul University (GR-EC), Dominican University (GR-EC), Erikson Institute (GR-EC), Benedictine University (GR-ELEM), Chicago State University (GR-ELEM), Greenville College (GR-ELEM), Lewis University (GR-ELEM), Loyola University Chicago (GR-ELEM), Olivet Nazarene University (GR-ELEM), Roosevelt University (GR-ELEM), St. Xavier University (GR-ELEM), University of St. Francis (GR-ELEM), Chicago State University (GR-SEC), Concordia University Chicago (GR-SEC), Illinois Institute of Technology (GR-SEC), Loyola University Chicago (GR-SEC), Olivet Nazarene University (GR-SEC), Roosevelt University (GR-SEC), St. Xavier University (GR-SEC), Benedictine University (GR-SPED), Chicago State University (GR-SPED), Dominican University (GR-SPED), Northeastern Illinois University (GR-SPED), University of Illinois at Chicago (GR-SPED)

STANDARD 2:
The institution ensures that coursework has a seriousness of purpose, reflecting college-level work.

RATIONALE

Teaching is hard, hard work, particularly in urban environments. Coursework should reflect that reality. It should have a seriousness of purpose, with compelling portrayals of instructional problems that teachers will encounter and how those problems can be resolved with an arsenal of instructional strategies at the ready. In fact, teacher preparation coursework is seldom characterized in this way and is generally perceived to be the easiest major or program on any campus.

METHODOLOGY

The syllabi of the three most advanced non-clinical professional courses were examined for the "seriousness of purpose" if the assignments required of teacher candidates. Coursework was considered lacking in seriousness of purpose based on the following four criteria: 1) group assignments with no individual accountability,[9] 2) assignments requiring only "reflection," 3) assignments allowing submission of an "arts and crafts" or other non-traditional product, or 4) attendance and participation (with no rubric for evaluation of individual contributions) counted for 15 percent or more of the grade. The proportion of assignments reflecting seriousness of purpose against these other kinds of assignments were averaged.

Here are a few examples of the types of assignments captured by this standard as showing a lack of seriousness of purpose:

- A classroom-management course in an undergraduate elementary education program requires "personal reflections" in 21 assignments. The reflections address such questions as, "What classroom-management program most closely reflects your own philosophy?" and "Do you feel that establishing a positive classroom atmosphere at the beginning of the school year is important?" or ask the candidate to comment on class lectures or activities.

  Reflection assignments are rife in professional coursework, and all too seldom do they have the teacher candidate think and write about what should be the focus of their preparation: the learning and behavior of students.

- A mathematics methods course in an undergraduate elementary program at a "more selective" institution in which 60 percent of the grade is based on a project for which the instructor provided the work product of a teacher candidate he'd judged exemplary: a children's story that had lovely crayon drawings but was devoid of mathematics content. You can see this project for yourself in section 20 of this appendix.

  This assignment exemplifies a broader problem—that professors often expect no more from their teacher candidates than the candidates might expect of the children they will teach.

9 Slavin, Robert E. (1995). Research on cooperative learning and achievement: What we know, what we need to know. *Center for Research on the Education of Students Placed at Risk* (John Hopkins University).

Standard 2: Serious coursework

Score	Criteria
4	Assignments reflecting seriousness of purpose account for 90 percent or more of all assignments.
3	Assignments reflecting seriousness of purpose account for 80-89 percent of all assignments.
2	Assignments reflecting seriousness of purpose account for 70-79 percent of all assignments.
1	Assignments reflecting seriousness of purpose account for 60-69 percent of all assignments.
0	Assignments reflecting seriousness of purpose account for less than 60 percent of all assignments.

FINDINGS

About 60 percent of undergraduate and graduate programs in our evaluation met our standard, with no undergraduate and only two graduate programs entirely failing to meet it.

NCTQ STANDARD 2.
The institution ensures that coursework has a seriousness of purpose, reflecting college-level work.

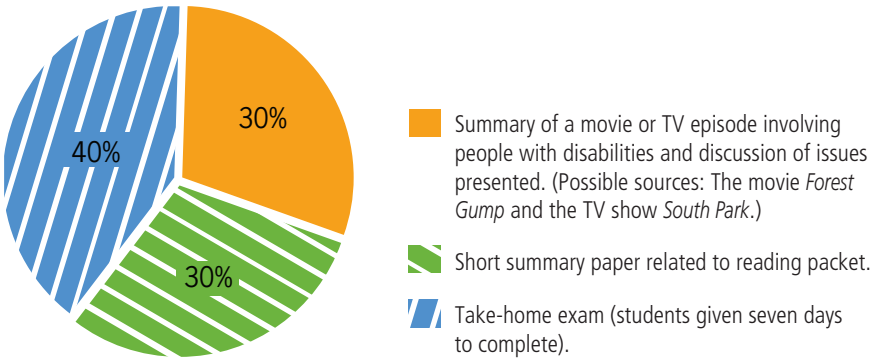
● Programs Meet Standard	Dominican University (UG-EC), Augustana College (UG-ELEM), Blackburn College (UG-ELEM), DePaul University (UG-ELEM), Eastern Illinois University (UG-ELEM), Elmhurst College (UG-ELEM), Eureka College (UG-ELEM), Governors State University (UG-ELEM), Greenville College (UG-ELEM), Knox College (UG-ELEM), Lake Forest College (UG-ELEM), Lewis University (UG-ELEM), McKendree University (UG-ELEM), Millikin University (UG-ELEM), Monmouth College (UG-ELEM), National-Louis University (UG-ELEM), North Central College (UG-ELEM), North Park University (UG-ELEM), Northeastern Illinois University (UG-ELEM), Northern Illinois University (UG-ELEM), Principia College (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), St. Xavier University (UG-ELEM), Trinity Christian College (UG-ELEM), Western Illinois University (UG-ELEM), Augustana College (UG-SEC), Eastern Illinois University (UG-SEC), Eureka College (UG-SEC), Greenville College (UG-SEC), Knox College (UG-SEC), Lake Forest College (UG-SEC), McKendree University (UG-SEC), Millikin University (UG-SEC), Northwestern University (UG-SEC), Principia College (UG-SEC), Eastern Illinois University (UG-SPED), Elmhurst College (UG-SPED), Lewis University (UG-SPED), Northeastern Illinois University (UG-SPED), Northern Illinois University (UG-SPED), Southern Illinois University Carbondale (UG-SPED), Trinity Christian College (UG-SPED), Western Illinois University (UG-SPED), DePaul University (GR-EC), Erikson Institute (GR-EC), Benedictine University (GR-ELEM), Lewis University (GR-ELEM), Northern Illinois University (GR-ELEM), Rockford College (GR-ELEM), Roosevelt University (GR-ELEM), St. Xavier University (GR-ELEM), Illinois Institute of Technology (GR-SEC), Roosevelt University (GR-SEC), St. Xavier University (GR-SEC), University of Illinois at Urbana-Champaign (GR-SEC), Benedictine University (GR-SPED), Governors State University (GR-SPED), Northeastern Illinois University (GR-SPED), Northern Illinois University (GR-SPED), University of Illinois at Chicago (GR-SPED), University of Illinois at Urbana-Champaign (GR-SPED)
◕ Programs Nearly Meet Standard	Aurora University (UG-ELEM), Bradley University (UG-ELEM), Illinois State University (UG-ELEM), Judson University (UG-ELEM), Loyola University Chicago (UG-ELEM), MacMurray College (UG-ELEM), Quincy University (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of St. Francis (UG-ELEM), Wheaton College (UG-ELEM), Illinois State University (UG-SEC), Judson University (UG-SEC), Loyola University Chicago (UG-SEC), Bradley University (UG-SPED), Illinois State University (UG-SPED), MacMurray College (UG-SPED), Southern Illinois University Edwardsville UG-SPED), University of St. Francis (UG-SPED), Greenville College (GR-ELEM), Loyola University Chicago (GR-ELEM), The University of Chicago (GR-ELEM), University of St. Francis (GR-ELEM), Concordia University Chicago (GR-SEC), Loyola University Chicago (GR-SEC)
◑ Programs Partly Meet Standard	Columbia College (UG-EC), Concordia University Chicago (UG-ELEM), Illinois College (UG-ELEM), Illinois Wesleyan University (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), University of Illinois Springfield (UG-ELEM), University of Illinois Springfield (UG-SEC), Concordia University Chicago (UG-SPED), Dominican University (GR-EC), Trinity International University (GR-ELEM), Dominican University (GR-SPED)
◔ Programs Meet Small Part of Standard	Trinity International University (UG-ELEM)
○ Programs Do Not Meet Standard	National-Louis University (GR-ELEM), National-Louis University (GR-SEC), National-Louis University (GR-SPED)
? Programs Whose Performance Cannot be Determined	Kendall College (UG-EC), Chicago State University (UG-ELEM), Olivet Nazarene University (UG-ELEM), Chicago State University (GR-ELEM), Olivet Nazarene University (GR-ELEM), Chicago State University (GR-SEC), Olivet Nazarene University (GR-SEC), Chicago State University (GR-SPED)

The findings suggest that assignments with a "seriousness of purpose" are indeed found in professional coursework. However, there were troubling signs of assignments that these findings did not illuminate but which were a prevalent feature of many courses. Consider these examples:

- An assignment in a social studies methods course required a two-page field report that had to include no more than what might be found on a website: "the name, address, hours, etc. of a museum visited, a brief description of its purpose and general holdings, and a brief description of its educational services."
- A child-development course in which 25 percent of the grade is based on a "lot in life" paper. For this assignment each student is randomly assigned a condition (e.g., your child was born blind) and is then asked to write a first-person narrative to describe and define the condition.

  The connection between, in this case, being the parent of a blind child and teaching elementary school is not made—in fact, the course objectives and its assignments (like so many others we found) never make any explicit reference to the classroom or the implications for instruction of any material addressed.
- A course purporting to teach secondary teacher candidates how to instruct students with special needs in which 30 percent of the course grade is based on little more than a movie review.

Course assignments for secondary special education course



This chart shows the weights for course grades of assignments in a course that purports to teach secondary teachers candidates how to instruct students with special needs. Note that 30 percent of the class grade is earned by producing a movie review.

These examples of assignments that do not have a seriousness of purpose *for the purpose at hand—preparing teacher candidates for the classroom*—encourage us to continue to refine this standard so that ratings better reflect this necessary aspect of assignments.

STANDARD 3:
When state standards as measured by licensing exams appear inadequate, the institution elects to set a higher standard for program completion.

RATIONALE

If teachers are to teach well, they must acquire many essential teaching skills as well as a solid understanding of content. Licensing examinations are required by states to ensure that teachers meet a *minimum* standard of subject-matter knowledge. There is research, albeit limited, correlating a teacher's ability to pass a licensure test with impact on student achievement.[10] Licensing tests are the best lever available to states for ensuring that institutions preparing teachers are following state regulations.

Unfortunately, with the exception of most secondary level licensing tests, current teacher licensing tests in the nation are generally not up to the task because they have common weaknesses, both substantive and structural.

Problem #1. The tests are almost always too easy to pass. Here is an example of a mathematics problem taken from the Illinois Basic Skills "diagnostic practice test," which we assume conveys the level of rigor of at least some questions on the actual test:

Use the information below about coins to answer the question that follows:

> 10 quarters with bald eagle emblem
> 6 quarters with the Illinois state emblem
> 8 quarters with any other state emblem
>
> What percentage of the quarters listed above have the Illinois state emblem:
>
> A. 25% B. 30% C. 33% D. 40%

Problem #2. At all levels, different subjects are often tested together, with one overall score determining if a candidate passes. The better alternative—having separate scores provided for each subject and establishing minimum passing scores for each—is rarely used.

The typical elementary content test includes reading pedagogy, English/language arts, science, social studies and mathematics. The typical middle school and high school social studies test covers history, government, geography and economics. Because passing score requirements, known as "cut-scores," are not set for each subject on these tests, a high score in one subject area can compensate for a low score in another. At the elementary school level, one result is that candidates who have little to no skills in mathematics—typically the subject area with the lowest performance—can still pass and receive a license.

Some states are beginning to remedy these deficiencies. Massachusetts, the nation's highest performing state on the National Assessment of Educational Progress (NAEP), requires that elementary teachers pass stand-alone mathematics content and reading pedagogy tests. Virginia, Connecticut and California require that all elementary teachers pass a stand-alone reading pedagogy test. Several other states are considering even more broad-ranging changes in licensing tests.

10 White, B. R., Presley, J. B., & DeAngelis, K. J. (2008). *Leveling up: Narrowing the teacher academic capital gap in Illinois* (IERC 2008-1). Edwardsville, IL: Illinois Education Research Council.

Illinois has developed its own series of licensing tests, the Illinois Certification Testing System (ICTS). Many of its most commonly administered tests suffer from the same flaws found in their counterparts in other states:

1. Early childhood, elementary and special education content tests that are too easy and cover five or more subjects.

   The fact that elementary teachers seeking a middle school endorsement that will allow them to teach in self-contained classrooms in grades 5-8 do not take any test additional to the elementary generalist test to assure their content mastery is especially problematic.

2. Secondary tests that test social science and science subjects together. Candidates who pass these tests—possibly answering all the questions incorrectly in one area—are certified to teach all the subjects. For example, a psychology major may teach history, economics or geography, having passed the psychology licensing that has a small share of questions on each of those subjects.[11] Test deficiencies will not be addressed in proposed changes to science and social science certification regulations that will take effect in February 2012.

3. For all the tests that combine subjects, one global passing score rather than separate passing scores for each subject.

Fortunately, Illinois does not share a problem found in many states in which loopholes allow teacher candidates who have not yet passed a licensing exam to teach for as many as three years, and sometimes more.

Teacher preparation programs need not wait for state action to improve licensure tests. Any preparation program for which the certification test is inadequate should attempt to remedy its weaknesses with its own exit tests for content mastery. State regulations do not preclude any program from taking this initiative.

METHODOLOGY

We examined the sets of licensing tests required for certification at the elementary, middle and high school levels and for special education certification to determine their adequacy for assessing the content knowledge of teacher candidates in every subject they will be licensed to teach. Illinois licensing tests designed to assess content mastery were inadequate in a number of certification areas: early childhood, elementary, special education, and in the sciences and social sciences at the secondary level. Exit requirements of teacher preparation programs do not fill the vacuum with better exit assessments of content knowledge. In terms of defining "better exit assessments," performance assessments in which teacher candidates are evaluated extensively on one or more teaching episodes, whatever their merit in evaluating overall professional competence, are not comprehensive assessments of content mastery and are therefore not relevant to the standard.

11 Each test in these subject areas has a primary science or social science focus with the highest proportion of questions and then a number of subsidiary subjects, each with a lower proportion of questions. Passing any given test does not allow the candidate to teach the subsidiary subjects at the honors or Advanced Placement level, but by taking another test focused on a different subject and including other subsidiary subjects, certification to teach at the honors or Advanced Placement level in a second subject can be obtained.

Standard 3: Exit exams, early childhood, elementary and special education programs

Score	Criteria
4	At some point in the preparation process elementary teacher candidates take acceptable tests* with identified cut-scores in every core subject, including elementary mathematics and reading.
3	At some point in the preparation process, all elementary teacher candidates take acceptable tests with identified cut-scores in reading and mathematics.
2	At some point in the preparation process all elementary teacher candidates take an acceptable test with an identified cut-score in either reading or mathematics.
1	At some point in the preparation process, all elementary teacher candidates take tests of reading and/or mathematics with a cut-score for one or both subjects.
0	At no point in the preparation process are teacher candidates required to take a test of core subjects—including mathematics and reading—with any identified cut-scores.

* For purposes of this rating, "acceptable" is defined as 1) a commercially available test or 2) a test used by an institution whose validation by an external, independent entity is confirmed by a technical report made available publicly upon request. If the conformance with relevant standards of the contents of the institution's test is not evident, NCTQ will ask that its contents be made available for review by experts.

Standard 3: Exit exams, secondary programs

Score	Criteria
4	All teacher candidates take a state licensure or institutional test that provides identified cut-scores in each subject area.
3	With the exception of one certification area, teacher candidates take a state licensure or institutional test that provides identified cut-scores in each subject they will be certified to teach.
2	With the exception of two certification areas, teacher candidates take a state licensure or institutional test that provides identified cut-scores in each subject they will be certified to teach.
1	Teacher candidates in only selected certification areas are required to take a state licensure or institutional test that provides identified cut-scores in each subject they will be certified to teach.
0	No teacher candidates are required to take a state licensure or institutional test for each subject that they will be certified to teach.

FINDINGS

All of the early childhood, elementary and special education programs in our evaluation fail to meet this standard because they rely entirely on inadequate state licensing tests to ensure that their graduates know sufficient content in reading, mathematics, the language arts, science and social studies.

All secondary programs only partly meet the standard because they rely on licensing tests in English and mathematics that are adequate and tests in the sciences and social sciences that are not.

How Illinois teacher preparation programs fare on this standard

NCTQ STANDARD 3.
When state standards as measured by licensing exams appear inadequate, the institution elects to set a higher standard for program completion.

● Programs Meet Standard	Principia College (UG-SEC)
◑ Programs Partly Meet Standard	Augustana College (UG-SEC), Eastern Illinois University (UG-SEC), Eureka College (UG-SEC), Greenville College (UG-SEC), Illinois State University (UG-SEC), Judson University (UG-SEC), Knox College (UG-SEC), Lake Forest College (UG-SEC), McKendree University (UG-SEC), Millikin University (UG-SEC), Northwestern University (UG-SEC), University of Illinois Springfield (UG-SEC), Concordia University Chicago (GR-SEC), Illinois Institute of Technology (GR-SEC), National-Louis University (GR-SEC), Olivet Nazarene University (GR-SEC), Roosevelt University (GR-SEC), St. Xavier University (GR-SEC), University of Illinois at Urbana-Champaign (GR-SEC)
○ Programs Do Not Meet Standard	Columbia College (UG-EC), Dominican University (UG-EC), Kendall College (UG-EC), Augustana College (UG-ELEM), Aurora University (UG-ELEM), Blackburn College (UG-ELEM), Bradley University (UG-ELEM), Chicago State University (UG-ELEM), Concordia University Chicago (UG-ELEM), DePaul University (UG-ELEM), Eastern Illinois University (UG-ELEM), Elmhurst College (UG-ELEM), Eureka College (UG-ELEM), Governors State University (UG-ELEM), Greenville College (UG-ELEM), Illinois College (UG-ELEM), Illinois State University (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Judson University (UG-ELEM), Knox College (UG-ELEM), Lake Forest College (UG-ELEM), Lewis University (UG-ELEM), Loyola University Chicago (UG-ELEM), MacMurray College (UG-ELEM), McKendree University (UG-ELEM), Millikin University (UG-ELEM), Monmouth College (UG-ELEM), National-Louis University (UG-ELEM), North Central College (UG-ELEM), North Park University (UG-ELEM), Northeastern Illinois University (UG-ELEM), Northern Illinois University (UG-ELEM), Olivet Nazarene University (UG-ELEM), Principia College (UG-ELEM), Quincy University (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), St. Xavier University (UG-ELEM), Trinity Christian College (UG-ELEM), Trinity International University (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), University of Illinois Springfield (UG-ELEM), University of St. Francis (UG-ELEM), Western Illinois University (UG-ELEM), Wheaton College (UG-ELEM), Loyola University Chicago (UG-SEC), Bradley University (UG-SPED), Concordia University Chicago (UG-SPED), Eastern Illinois University (UG-SPED), Elmhurst College (UG-SPED), Illinois State University (UG-SPED), Lewis University (UG-SPED), MacMurray College (UG-SPED), Northeastern Illinois University (UG-SPED), Northern Illinois University (UG-SPED), Southern Illinois University Carbondale (UG-SPED), Southern Illinois University Edwardsville (UG-SPED), Trinity Christian College (UG-SPED), University of St. Francis (UG-SPED), Western Illinois University (UG-SPED), DePaul University (GR-EC), Dominican University (GR-EC), Erikson Institute (GR-EC), Benedictine University (GR-ELEM), Chicago State University (GR-ELEM), Greenville College (GR-ELEM), Lewis University (GR-ELEM), Loyola University Chicago (GR-ELEM), National-Louis University (GR-ELEM), Northern Illinois University (GR-ELEM), Olivet Nazarene University (GR-ELEM), Rockford College (GR-ELEM), Roosevelt University (GR-ELEM), St. Xavier University (GR-ELEM), The University of Chicago (GR-ELEM), Trinity International University (GR-ELEM), University of St. Francis (GR-ELEM), Chicago State University (GR-SEC), Loyola University Chicago (GR-SEC), Benedictine University (GR-SPED), Chicago State University (GR-SPED), Dominican University (GR-SPED), Governors State University (GR-SPED), National-Louis University (GR-SPED), Northeastern Illinois University (GR-SPED), Northern Illinois University (GR-SPED), University of Illinois at Chicago (GR-SPED), University of Illinois at Urbana-Champaign (GR-SPED)

SECTION 3: Standards on Preparation for the 21st Century Classroom

Preparation to be an effective teacher means preparation for today's classroom, which is increasingly sophisticated in terms of technology, which contains more and more students from diverse backgrounds—including some who don't speak English—and in which state and federal policies play a much more dominant role than in the previous century.

Because all the relevant syllabi from secondary and special education methods courses were not solicited from institutions, the full set of standards was only evaluated for elementary programs.

Our evaluation of these standards was limited to non-clinical coursework. While clinical experiences are extremely important, the likelihood that they will vary is considerable, unless they are conducted only in a laboratory school affiliated with the teacher preparation program. For that reason, they provide better opportunities for practice than instruction, and, conversely, non-clinical coursework is more suitable for instruction.

STANDARD 4:
The institution exposes teacher candidates to the history, culture and language of the principal minority and ethnic groups residing in the state.

RATIONALE

A teacher's knowledge of children's cultures and backgrounds helps the teacher design lessons that meet those children's needs. For example, the understanding that a student's home language may omit certain sounds that are used in English can suggest a helpful change in a phonetics lesson. In addition, cultural understanding helps a teacher to draw on students' strengths and experiences to enhance their learning.

The types of cultural understanding that would be useful in teaching requires real content knowledge. For example, a teacher with African-American students should be prepared to understand differences in pronunciation in the "vernacular English" some might use, a topic on which respected linguists have written extensively.[1] Teachers should be assessed, for example, on the sound a speaker of African-American vernacular is apt to use to replace the "th" sound.

Instruction to develop pragmatic cultural understanding should be distinguished from instruction to reduce prejudice and increase sensitivity. While we know little about how and with what success teacher candidates might use the cultural understanding they have learned to meet the needs of their diverse students, the research on the impact

1 See, for example, "Summary Statement on African American Vernacular English," made by nine linguists (William Labov and Anne Charity Hudley included) in response to the new criterion in the California Curriculum Commission 2008 K-8 Reading/Language Arts/ English Language Arts Criteria, adopted April 17, 2006: www.cde.ca.gov/ci/rl/im/documents/**aavestatement**labov.doc

of prejudice reduction also provides little assurance of efficacy. There are studies reporting positive short-term impacts on candidates' attitudes and beliefs, but it is difficult to determine the sustainability of these outcomes over time.[2]

METHODOLOGY

While we reviewed syllabi on this standard for all programs in the review, our final analysis of how institutions expose teacher candidates to the history, culture and language of principal minority and ethnic groups residing in the state is confined to undergraduate elementary preparation programs at five public and five private institutions. These institutions were randomly chosen for analysis. Prior to their selection for this analysis, all available syllabi from these programs was reviewed to assess how coursework incorporates specific information about the traditions, cultures and languages of the principal minority and ethnic groups residing in the state. An inventory of the courses in which we noted such information was provided to the institution, and an opportunity was provided to supply information on additional courses that might address diversity. The syllabus for any course nominated by the institution was added to the review for diversity content.

We hoped to locate instruction on actual content knowledge.[3] Content knowledge is often conflated with two other aspects of multicultural education: knowledge of personal prejudices and biases, and knowledge of the cultural aspects of schools and classrooms, the latter often portrayed as non-neutral spaces. Additionally, we distinguished instruction on diversity that involved simply mentioning it as a course objective and instruction that involved readings, lectures and, ideally, assignments requiring demonstration of content knowledge. Instruction on diversity was inventoried along two dimensions: the degree to which it focused on content rather than sensitivity and the depth of its presentation. While textbooks or other required reading were not evaluated, it is a reasonable assumption that the transmission of diversity content knowledge as we are defining it requires readings. While this may be too conservative an assumption, it is balanced by the very liberal allowance that any required reading appearing to address diversity had the potential to provide diversity content.

FINDINGS

Because this standard is still in a pilot phase, the findings should only be viewed as exploratory. This standard is not rated, nor does it factor into overall program or institutional ratings. The purpose of our analysis is to provide an inventory of our findings in order to establish the foundation for a more robust analysis of this area of teacher preparation in future studies.

The analysis of our sample of 10 programs indicated that for nine programs, at least one course and as many as five were identified by education schools as addressing diversity as we defined it. (In the case of the 10th program, no course was identified but the diversity of the institution and activities offered to teacher candidates were noted.) Of

2 Cochan-Smith, M., & Zeicherner, K. M. (eds.) (2005, p. 489). Studying teacher education: The report of the AERA Panel on Research and Teacher Education. Mahwah, NJ : Lawrence Erlbaum Associates.

3 Our review was made more difficult because of terminology issues. The fact that Illinois regulations have a more expansive definition of diversity than is expressed in this standard may be a factor in the difficulty we had sorting out the information provided by institutions: Illinois regulations on teacher preparation relative to diversity encompass knowledge of the culture and language of the principal minority and ethnic groups residing in the state as well as knowledge of the characteristics of 1) students with all forms of exceptionalities, 2) English language learners (ELL), and 3) students who have different learning styles, multiple intelligences and performance modes. (Note that "learning styles" are addressed in Standard 19 and described as "pseudo-science." They do not belong in a teacher preparation program, much less in state regulations.) Additionally, NCATE's accreditation standards in this area encompass consideration of the diversity of the institution itself and field experiences, also making for a broader scope.

these nine, six included content only by a very generous interpretation, such as having a potentially relevant textbook or article on the required reading list and/or any potentially relevant assignment (typically one involving reflection). Only three of the nine included readings from textbooks that at least hold the possibility of providing content understanding combined with some indication that lecture or discussion topics addressed those readings.

Somewhere between 30 percent and 60 percent of programs in our sample have the *potential* to be providing diversity content is unsatisfactory. None of the programs in the sample, moreover, included a treatment of diversity as robust and definitive as the one shown below, which was taken from the syllabus of a course in an undergraduate secondary program:

Race, Class, and Language	Nieto, S. On being successful students from *Affirming Diversity: The Sociopolitical Context of Multicultural Educatio*n (Ch. 9, pp. 225-245) Heath, S. B. (1982). Questioning at home and at school: A comparative study. In G. Spindler (Ed.), *Doing the ethnography of schooling: Education anthropology in action* (pp. 102-131). New York: Holt, Rinehart & Winston. Delpit: Ebonics and Culturally Responsive Instruction: What Should Teachers Do? http://www.rethinkingschools.org/archive/12_01/ebdelpit.shtml Moschkovich, J. (1999). Supporting the participation of English language learners in mathematical discussions. *For the Learning of Mathematics*, 19(1), 11-19.

The bottom line on our review of syllabi to determine the nature of the treatment of diversity in coursework from all programs and from those in our sample is that the topic of diversity is pervasive but its treatment may be amorphous. It is likely that teachers are prepared in vital diversity content in only a minority of courses.

STANDARD 5:
Where relevant, the institution incorporates the state's student learning standards into the preparation program.

RATIONALE

The Illinois Learning Standards delineate the state's expectations for what students must know and be able to do. Since 1999, the state's student assessments have been based on these standards. All teacher candidates need to be familiar with a state's student learning standards (and soon the national Common Core standards) in order to be effective. Ideally, every methods course should include a significant number of assignments in which lesson planning and other tasks give teacher candidates practice in using the Illinois Learning Standards to organize their instruction.

METHODOLOGY

Using the syllabi provided to us for non-clinical coursework addressing instruction (except syllabi for courses on reading), we looked for lectures addressing the Illinois Learning Standards or student assignments requiring the use of the standards.

Standard 5: Learning standards

Score	Criteria
4	At least half of the set of all methods courses selected for review or provided by the institution in response to our findings of fact has at least one assignment requiring that teacher candidates apply their knowledge of the K-9 Illinois Learning Standards.
2	The institution only partially meets the standard because only a minority of the courses reviewed that address teaching strategies has one or more assignments or lectures on planning instruction around the K-9 Illinois Learning Standards.
0	The institution fails to meet the standard because no course reviewed that addresses teaching strategies contains any assignments or lectures on planning instruction around the K-9 Illinois Learning Standards.

FINDINGS

The vast majority of undergraduate (92 percent) and graduate (84 percent) programs evaluated meet our standard of requiring that teacher candidates practice developing instruction using the Illinois Learning Standards. Some programs had coursework that was commendably detailed in its requirements. For example, a social studies methods course at **National-Louis University** requires elementary teacher candidates to develop a unit of instruction that fits within the K-8 Illinois social studies curriculum and that covers all five goal areas for social studies: history, geography, political systems, economics systems and social systems.

In many cases, programs indicated that they have developed a lesson-planning template used in all coursework that explicitly asks the teacher candidate to reference the state learning standards that are relevant to the lesson. A good example is **Millikin University**'s template, which contains the following category of information for inclusion:

> Illinois Learning Standards (ILS or Early Learning Standards) met:
> (Use the Illinois Learning Standards for 1-12, Kindergarten Learning Standards for Kindergarten, and Early Learning Standards for Pre-K to identify a performance indicator/benchmark met by each objective.)

However, it is also clear that some programs do not provide a vehicle for ensuring integration and simply expose teacher candidates to the standards. For example, **Aurora College** contested the statement in our findings concluding that the program did not require sufficient integration of the state learning standards: "As each semester begins students are provided a copy of the Illinois State Standards [sic]. Collaborative groups are formed and each group is assigned one goal. Each group also receives a copy of the Performance Indicators. After reading and studying the goal, teacher candidates present their assigned goal to the whole class." Because this does not meet the standard that teacher candidates apply their knowledge of the learning standards, the findings of fact were not changed.

Millikin University's standardized institutional lesson planning template ensures that teacher candidates in all of its preparation programs (including the undergraduate elementary and secondary programs noted in this review) anchor their plans in the Illinois Learning Standards.

How Illinois teacher preparation programs fare on this standard

NCTQ STANDARD 5.
Where relevant, the institution incorporates the state's student learning standards into the preparation program.

This standard only applies to early childhood and elementary teacher preparation programs.

★ Programs with Strong Design	**Millikin University (UG-ELEM)**
● Programs Meet Standard	Columbia College (UG-EC), Dominican University (UG-EC), Augustana College (UG-ELEM), Blackburn College (UG-ELEM), Bradley University (UG-ELEM), Chicago State University (UG-ELEM), Concordia University Chicago (UG-ELEM), DePaul University (UG-ELEM), Eastern Illinois University (UG-ELEM), Elmhurst College (UG-ELEM), Eureka College (UG-ELEM), Governors State University (UG-ELEM), Greenville College (UG-ELEM), Illinois College (UG-ELEM), Illinois State University (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Judson University (UG-ELEM), Knox College (UG-ELEM), Lake Forest College (UG-ELEM), Lewis University (UG-ELEM), Loyola University Chicago (UG-ELEM), MacMurray College (UG-ELEM), McKendree University (UG-ELEM), Monmouth College (UG-ELEM), National-Louis University (UG-ELEM), North Central College (UG-ELEM), North Park University (UG-ELEM), Northeastern Illinois University (UG-ELEM), Northern Illinois University (UG-ELEM), Principia College (UG-ELEM), Quincy University (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), St. Xavier University (UG-ELEM), Trinity Christian College (UG-ELEM), Trinity International University (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), University of Illinois Springfield (UG-ELEM), University of St. Francis (UG-ELEM), Western Illinois University (UG-ELEM), Wheaton College (UG-ELEM), DePaul University (GR-EC), Dominican University (GR-EC), Erikson Institute (GR-EC), Benedictine University (GR-ELEM), Chicago State University (GR-ELEM), Greenville College (GR-ELEM), Lewis University (GR-ELEM), Loyola University Chicago (GR-ELEM), National-Louis University (GR-ELEM), Rockford College (GR-ELEM), Roosevelt University (GR-ELEM), St. Xavier University (GR-ELEM), The University of Chicago (GR-ELEM), Trinity International University (GR-ELEM), University of St. Francis (GR-ELEM)
○ Programs Do Not Meet Standard	Kendall College (UG-EC), Aurora University (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), Northern Illinois University (GR-ELEM), Olivet Nazarene University (GR-ELEM)
? Programs Whose Performance Cannot be Determined	Olivet Nazarene University (UG-ELEM)

STANDARD 6:
The curriculum required by the institution acknowledges the challenges teachers will face in meeting the instructional needs of English language learners.

RATIONALE

Many U.S. communities are increasingly home to students from different backgrounds in which many different languages are spoken. Teachers must be prepared to teach a class of children who may speak a variety of languages. About eight percent of school-age children in Illinois are classified as Limited English Proficient.[4] Preparation to teach such children is important for all teachers, particularly elementary teachers who are often the first English instructors for these students, and for the additional 15 percent of Illinois children who may have some English proficiency but speak a language other than English at home. Ideally, every methods course should include a significant number of assignments in which lesson planning and other tasks give teacher candidates practice in using instructional strategies designed to teach English language learners (ELL).

METHODOLOGY

Using the syllabi provided to us for any non-clinical course flagged for "diversity," we looked for assignments requiring teacher candidates to practice using instructional strategies designed to teach ELL students. Because reading instruction should address strategies for ELL students in much greater depth than was the subject of this review, syllabi from reading courses was not included.

Standard 6: Learning standards

Score	Criteria
4	At least half of the set of all methods courses provided for review contain at least one assignment that requires the teacher candidate to identify strategies that will address the learning needs of English language learners. Stand-alone ELL course meets standard.
2	At least one methods course of the set of all methods courses provided for review has at least one assignment or lecture on strategies to address the learning needs of English language learners.
0	No methods courses of the set of all methods courses provided for review have assignments or lectures on strategies to address the learning needs of English language learners.

FINDINGS

Results on this standard are much more mixed than those for the state learning standards, even though it would seem as if integration of practice could use the same vehicle (a lesson planning template): Of the programs evaluated, about one-fifth of undergraduate programs failed to meet the standard, as did about one-half of graduate programs. About 40 percent of undergraduate programs met the standard, but only 25 percent of graduate programs did. A recent U.S. General Accounting Office survey found that about 20 percent of teacher preparation programs nationwide provide instruction on ELL in a stand-alone course, but no Illinois program evaluated here does so.[5]

4 http://www.isbe.state.il.us/research/pdfs/quickstats_2009.pdf, p. 5

5 Teacher Preparation: Multiple Federal Education Offices Support Teacher Preparation for Instructing Students with Disabilities and English Language Learners, but Systematic Departmentwide Coordination Could Enhance This Assistance, GAO-09-573, July 20, 2009.

★ The lesson-planning template used for all coursework at **Quincy University** is an exemplar for how an institution can ensure that teacher candidates practice accommodating ELL students in their instruction. At Quincy, each lesson plan prepared by teacher candidates must explicitly address the types of accommodations required for the "student who needs instructional material in a language other than English."

How Illinois teacher preparation programs fare on this standard

NCTQ STANDARD 6.
The curriculum required by the institution acknowledges the challenges teachers will face in meeting the instructional needs of English language learners.

This standard only applies to early childhood and elementary teacher preparation programs.

★ Programs with Strong Design	**Quincy University (UG-ELEM)**
● Programs Meet Standard	Columbia College (UG-EC), Kendall College (UG-EC), Blackburn College (UG-ELEM), Bradley University (UG-ELEM), DePaul University (UG-ELEM), Eastern Illinois University (UG-ELEM), Elmhurst College (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Knox College (UG-ELEM), Lake Forest College (UG-ELEM), Loyola University Chicago (UG-ELEM), McKendree University (UG-ELEM), North Park University (UG-ELEM), Northeastern Illinois University (UG-ELEM), Northern Illinois University (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), University of St. Francis (UG-ELEM), Wheaton College (UG-ELEM), DePaul University (GR-EC), Erikson Institute (GR-EC), Greenville College (GR-ELEM), The University of Chicago (GR-ELEM), University of St. Francis (GR-ELEM)
◑ Programs Partly Meet Standard	Augustana College (UG-ELEM), Aurora University (UG-ELEM), Concordia University Chicago (UG-ELEM), Governors State University (UG-ELEM), Greenville College (UG-ELEM), Illinois College (UG-ELEM), Illinois State University (UG-ELEM), Judson University (UG-ELEM), MacMurray College (UG-ELEM), Monmouth College (UG-ELEM), North Central College (UG-ELEM), Principia College (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), Trinity Christian College (UG-ELEM), Trinity International University (UG-ELEM), Dominican University (GR-EC), Loyola University Chicago (GR-ELEM)
◔ Programs Meet Small Part of Standard	Rockford College (UG-ELEM), Rockford College (GR-ELEM)
○ Programs Do Not Meet Standard	Dominican University (UG-EC), Chicago State University (UG-ELEM), Eureka College (UG-ELEM), Lewis University (UG-ELEM), Millikin University (UG-ELEM), National-Louis University (UG-ELEM), Roosevelt University (UG-ELEM), St. Xavier University (UG-ELEM), University of Illinois Springfield (UG-ELEM), Western Illinois University (UG-ELEM), Benedictine University (GR-ELEM), Chicago State University (GR-ELEM), Lewis University (GR-ELEM), National-Louis University (GR-ELEM), Northern Illinois University (GR-ELEM), Roosevelt University (GR-ELEM), St. Xavier University (GR-ELEM), Trinity International University (GR-ELEM)
? Programs Whose Performance Cannot be Determined	Olivet Nazarene University (UG-ELEM), Olivet Nazarene University (GR-ELEM)

STANDARD 7:
The institution exposes teacher candidates to the most critical education issues of the day, notably the achievement gap.

RATIONALE

Placing a teacher in a classroom that is unfamiliar with major issues affecting the current educational landscape is a recipe for professional confusion and discontent. For example, teachers must know about the achievement gap and how it has engendered mandates for standardized testing and the publication of disaggregated test results in order to understand why testing of all kinds plays such a large role in schools and receives so much public attention.

METHODOLOGY

Because this standard is still in a pilot phase, the findings should only be viewed as exploratory. This standard is not rated, nor does it factor into overall program or institutional ratings. Syllabi were reviewed for all relevant professional coursework to locate lectures and required reading that address educational policy challenges relating to equity (e.g., racial and economic achievement gaps), efforts to increase educational opportunities (e.g., desegregation, Head Start) and/or reforming educational institutions (e.g., charter schools, alternative certification).

FINDINGS

Consistently across all program types, both undergraduate and graduate, critical education issues were not addressed in at least one course in about one-third of programs.

STANDARD 8:
The institution ensures that applications of technology are integrated into the pedagogy associated with specific content areas.

RATIONALE

Technology in the classroom is undoubtedly engaging, but it has persistently failed to affect student learning, despite its potential to allow students to access information from around the world, interact with simulations and virtual environments and display their knowledge in new ways. There appears to be a consensus among experts that the potential impact of technology can be increased if the applications of technology are integrated into the pedagogy associated with specific content areas, rather than being addressed in a stand-alone technology course. This type of integration ensures that teacher candidates learn about the use of technology from subject matter rather than technical experts. The practice of integrating technology into instruction should be assigned in all methods coursework.

METHODOLOGY

Using the syllabi provided to us for content-specific, non-clinical methods courses and reading courses, we looked for assignments requiring that teacher candidates practice using technology.

Standard 8: Integrating technology

Score	Criteria
4	At least half (but no fewer than two) of the set of methods courses* provided for review has at least one assignment requiring applications of technology.
2	At least one but less than half of the set of methods courses provided for review has at least one demonstration or assignment requiring use of technology. OR At least half (but only one) of the set of methods courses provided for review has at least one assignment requiring applications of technology.
0	None of the set of methods courses provided for review has demonstrations or assignments requiring use of technology.

* Stand-alone technology courses do not satisfy this standard. Methods courses covering more than two subjects are not reviewed for applications of technology.

FINDINGS

Results on this standard are much more mixed than those for the state learning standards even though it would seem as if integration could use the same vehicle (a lesson-planning template): While close to 60 percent of undergraduate programs and about half of graduate programs that we evaluated met the standard for requiring that teacher candidates practice how to use technology in instruction, about 15 percent of undergraduate programs and one-fifth of graduate programs fail the standard completely. Five programs (three undergraduate elementary and two graduate elementary[6])failed to meet the standard because they required teacher candidates to take a stand-alone technology course and presumably on that basis did not integrate technology elsewhere in professional coursework.

In contesting our findings on this standard, many programs pointed to requirements that teacher candidates use technology for their own studies rather than that they learn how to use technology in classroom instruction. (For example, **North Central College** was one of many programs that indicated that teacher candidates are required to use "LiveText "—an online tool that allows for both instructional and administrative oversight of the preparation program—to prepare and submit assignments.)

A few programs seemed to be distinguishing more clearly not only between use of technology in teacher preparation, as opposed to instructional use of technology in the classroom, but also among the ways technology can be used in the classroom. For example, a syllabus for a elementary science methods course at **Western Illinois University** had a relatively sophisticated assignment requiring teacher candidates to create five lesson plans in which technological tools are included as part of an "investigation manipulating tools and collecting data not just conducting research and writing a report."

6 Undergraduate elementary programs: **DePaul University**, **North Park University**, **Northern Illinois University**. Graduate elementary programs: **DePaul University**, **Greenville College**.

How Illinois teacher preparation programs fare on this standard

NCTQ STANDARD 8.
The institution ensures that applications of technology are integrated into the pedagogy associated with specific content areas.

This standard only applies to early childhood and elementary teacher preparation programs.

★ Programs with Strong Design	Quincy University (UG-ELEM)
● Programs Meet Standard	Dominican University (UG-EC), Augustana College (UG-ELEM), Blackburn College (UG-ELEM), Bradley University (UG-ELEM), Chicago State University (UG-ELEM), DePaul University (UG-ELEM), Eastern Illinois University (UG-ELEM), Elmhurst College (UG-ELEM), Eureka College (UG-ELEM), Greenville College (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Knox College (UG-ELEM), Lake Forest College (UG-ELEM), Lewis University (UG-ELEM), Loyola University Chicago (UG-ELEM), MacMurray College (UG-ELEM), Monmouth College (UG-ELEM), Principia College (UG-ELEM), Quincy University (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), St. Xavier University (UG-ELEM), Trinity Christian College (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of Illinois Springfield (UG-ELEM), University of St. Francis (UG-ELEM), Western Illinois University (UG-ELEM), Wheaton College (UG-ELEM), DePaul University (GR-EC), Dominican University (GR-EC), Erikson Institute (GR-EC), Chicago State University (GR-ELEM), Lewis University (GR-ELEM), Loyola University Chicago (GR-ELEM), Roosevelt University (GR-ELEM), St. Xavier University (GR-ELEM), The University of Chicago (GR-ELEM), University of St. Francis (GR-ELEM)

◑ Programs Partly Meet Standard	Columbia College (UG-EC), Aurora University (UG-ELEM), Concordia University Chicago (UG-ELEM), Governors State University (UG-ELEM), Illinois College (UG-ELEM), Judson University (UG-ELEM), National-Louis University (UG-ELEM), North Central College (UG-ELEM), Northeastern Illinois University (UG-ELEM), Roosevelt University (UG-ELEM), Trinity International University (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), Benedictine University (GR-ELEM), National-Louis University (GR-ELEM), Trinity International University (GR-ELEM)
○ Programs Do Not Meet Standard	Kendall College (UG-EC), Illinois State University (UG-ELEM), McKendree University (UG-ELEM), Millikin University (UG-ELEM), North Park University (UG-ELEM), Northern Illinois University (UG-ELEM), Rockford College (UG-ELEM), Greenville College (GR-ELEM), Northern Illinois University (GR-ELEM), Rockford College (GR-ELEM)
? Programs Whose Performance Cannot be Determined	Olivet Nazarene University (UG-ELEM), Olivet Nazarene University (GR-ELEM)

STANDARD 9:
The institution ensures that special education teacher candidates are adequately prepared on the uses of assistive technologies.

RATIONALE

Assistive technology has the potential to enable students with disabilities, including students with high-incidence disabilities, to fully access instruction and demonstrate their capabilities. Because the ideal time for such children to learn to use assistive technology is when learning other K-12 skills, assistive technology should be included in Individualized Education Programs (IEPs). Special education teacher candidates should be fully familiar with the potential and uses of assistive technology.

METHODOLOGY

We reviewed course requirements and catalog course descriptions to ascertain whether assistive technologies were addressed in non-clinical coursework.

Standard 9: Assistive technology

Score	Criteria
4	At least one course addresses the use of assistive technology for students with special needs.
0	No course addresses the use of assistive technology for students with special needs.

FINDINGS

All undergraduate special education programs evaluated met the standard of requiring teacher candidates to be introduced to the appropriate use of assistive technologies for students with special needs, but about 20 percent of graduate special education programs did not do so.

How Illinois institutions fare on this standard

NCTQ STANDARD 9.
The institution ensures that special education teacher candidates are adequately prepared on the uses of assistive technologies.

This standard only applies to special education teacher preparation programs.

● Programs Meet Standard	Bradley University (UG-SPED), Concordia University Chicago (UG-SPED), Eastern Illinois University (UG-SPED), Elmhurst College (UG-SPED), Illinois State University (UG-SPED), Lewis University (UG-SPED), MacMurray College (UG-SPED), Northeastern Illinois University (UG-SPED), Northern Illinois University (UG-SPED), Southern Illinois University Carbondale (UG-SPED), Southern Illinois University Edwardsville (UG-SPED), Trinity Christian College (UG-SPED), University of St. Francis (UG-SPED), Western Illinois University (UG-SPED), Chicago State University (GR-SPED), Dominican University (GR-SPED), Governors State University (GR-SPED), National-Louis University (GR-SPED), Northeastern Illinois University (GR-SPED), Northern Illinois University (GR-SPED), University of Illinois at Urbana-Champaign (GR-SPED)
○ Programs Do Not Meet Standard	Benedictine University (GR-SPED), University of Illinois at Chicago (GR-SPED)

STANDARD 10:
The institution values the importance of a global perspective, imparting an understanding of the world, its history and its cultures to all students enrolled in the institution, including teacher candidates.

RATIONALE

College is a time when opportunities to study abroad or to strike up an acquaintance with a student from another country can substantially broaden one's understanding of other cultures. Unfortunately, the heavy course demands of an undergraduate education program (including a semester devoted to student teaching) may make this more problematic for the prospective teacher than for fellow students taking other courses of study. If a jam-packed professional preparation program makes it difficult for teachers to have the opportunity to share discussions and activities with people from distant countries, contemplate global issues in coursework or fit in a learning experience abroad, many aspects of the instruction they offer their students will be subtly impoverished. Since teachers may be the most important source of a global perspective for the students they teach, this has classroom implications.

METHODOLOGY

Because this standard is still in a pilot phase, the findings should only be viewed as exploratory. This standard is not rated, nor does it factor into overall program or institutional ratings. The results of our evaluation are provided in narrative form. In our evaluation we look for evidence that education programs have acknowledged the importance of a global perspective in their program requirements, or that the institutions in which those programs are housed have features conducive to the development of this perspective in all students, including teacher candidates. Programs can meet this standard through multiple combinations:

1. Required coursework that ensures that teacher candidates graduate with a solid understanding of physical and cultural geography and foreign language;
2. Availability of numerous electives that enhance the global perspective;
3. Opportunities to study abroad, especially in education-focused programs; and
4. The presence of a significant number of undergraduate foreign students on campus.

FINDINGS

Education schools were not rated on this standard. Information relative to the standard is offered to the institution and the public in order to plant a seed of thought as to what expectations relative to this standard might legitimately be held for education schools and the institutions in which they are housed. That said, our analysis found that a majority of Illinois institutions do not seem to be imparting an understanding of the world, its history and its cultures by the measures of this standard.

Only four institutions have a relatively large percentage of foreign undergraduate students—just one of the ways schools might be evaluated positively on this standards—only 26 percent have established foreign language requirements for all teacher candidates. Further, while many schools offer some coursework related to world geography or foreign cultures (usually as electives in broader categories of general education requirements), only 30 percent of institutions require that students take such classes.

One program to look to for guidance on engendering a global perspective is **Northeastern Illinois University**, which offers a program of student teaching in South Korean classrooms that supplements, rather than substitutes for, local student teaching. (Unfortunately, other institutions that offer student teaching options abroad allow teacher candidates to substitute teaching abroad for a local, supervised student teaching experience.)

There were two institutions at which we were unable to identify any institutional characteristic, coursework or program relevant to the standard.

SECTION 4:
Standards on Practice Teaching

Practice teaching, whether it is a single lesson presented to a class or the many weeks during a culminating student teaching experience in which the class is turned over to the teacher candidate, presents critical opportunities to learn "from a pro." The standards in this section address the extent to which programs fully exploit the opportunities provided by practice teaching for maximum professional growth:

- Does the program ensure that teacher candidates will experience high-functioning schools serving high-risk populations, banishing any doubts that disadvantaged kids can learn?
- Is the experience sufficiently long and designed so that teacher candidates aren't distracted by other coursework?
- Does the education school offer study abroad or urban semester programs that essentially outsource student teaching, rather than supervise all student teachers themselves?
- Is early exposure to the classroom provided so that teacher candidates can decide if teaching is a good professional fit? Is there a back-up degree option if the candidates change their mind—or the program develops strong reservations about the candidate?
- Most importantly, do preparation programs play a role in the assignment of student teachers to classrooms, working to ensure that they are placed only with effective classroom teachers?

STANDARD 11:
The institution has a strong clinical model with some level of commitment to training student teachers in high-needs, high-functioning schools.

RATIONALE

Only by exposure to teachers that are successfully teaching students in high-needs schools will those about to enter the profession learn by observation and supervised practice the necessary methods of instruction and management. Such a training model can also prevent teacher candidates from developing misguided notions that lower their expectations of what disadvantaged students can achieve.

METHODOLOGY

Because this standard is still in a pilot phase, the findings should only be viewed as exploratory. This standard is not rated, nor does it factor into overall program or institutional ratings. We requested of each institution the names of 10 elementary schools used for placement. The schools were classified as "high needs and high functioning" if 40 percent or more of students received free or reduced-price lunches and if the average student performance in reading

and mathematics on the Illinois Standards Achievement tests exceeded the district average.[1] The proportion of such schools was provided to institutions in a report on preliminary findings of fact, with the acknowledgement that the 10 schools provided were not necessarily representative of all those used for placement. Institutions were given the opportunity to provide complete lists of schools used for student teaching placements and some did so.

FINDINGS

★ **The University of Chicago** has a year-long student teaching program in which teacher candidates spend four full days a week in the classroom over the course of the year. The internship comprises two placements, with each candidate spending at least one semester in The University of Chicago charter elementary or middle school, both are which are high-needs, high-performing schools.

There is considerable variation among education schools in relatively close proximity in terms of the proportion of the elementary schools used for placement that are high-needs, high-functioning schools. This variation can be seen by accessing information on maps provided at www.edschoolreports/illinois/standards/11Findings.jsp

The variations are suggestive but should be interpreted with caution. While only a small number of schools provided may be high needs, high functioning, they may be schools disproportionately used for student teaching placement and/or that there may be geographical or other constraints that prevent the expression of an institution's commitment to training teachers in high-needs, high-functioning schools.

STANDARD 12:
The institution exposes teacher candidates to field work early in their preparation.

RATIONALE

Field experiences range from observations in classrooms, practicums that complement methods courses and allow opportunities for classroom practice, and community-based field experiences that allow teacher candidates to familiarize themselves with diverse populations. Early exposure to field work may help teacher candidates develop a realistic perspective on the profession and consider their personal fit before investing time and resources.

METHODOLOGY

Through review of catalog course descriptions and/or syllabi, we determined the earliest course in the professional coursework sequence that had a field work component.

1 There should be considerable overlap among schools with these characteristics and the schools that the Illinois State Board of Education designates as "Illinois Spotlight Schools" that have 1) at least 50 percent of students from low-income families, 2) at least 70 percent of students that pass the state achievement tests in reading and mathematics (50 percent until 2009), and 3) made "annual yearly progress" as defined by federal guidelines under the No Child Left Behind Act for the past two years.

Standard 12: Early fieldwork

Score	Criteria
4	Field work is required early in the teacher preparation program (no later than fall semester of the junior year in an undergraduate program).
0	Field work is not required early in the teacher preparation program.

FINDINGS

The evaluated undergraduate secondary, graduate secondary and undergraduate special programs uniformly met this standard. Undergraduate and graduate elementary programs did almost as well, with 97 percent and 95 percent, respectively, meeting the standard. The worst results were for graduate special education, where one-third of the programs we reviewed did not meet the standard.

There was considerable variation among programs in terms of field work requirements (not including student teaching) along three dimensions:

- The total number of hours required.

  As the table below indicates, the differences within programs in the total number of hours required are large: from an 85-hour difference between the program with the highest requirements and the program with the lowest (graduate secondary) to an over 400-hour difference (undergraduate early childhood education).

Hours of Required Field Work

Program Type	Minimum Hours	Maximum Hours	Median Hours*
Undergraduate Early Childhood and Elementary	35	495	130
Undergraduate Special Education	45	450	195
Undergraduate Secondary	80	280	128
Graduate Early Childhood and Elementary	60	180	116
Graduate Special Education	100	515	140
Graduate Secondary	80	165	100

* The median rather than the mean was provided as a measure of central tendency because each category of program contains several high outliers in terms of the number of hours of field work required. It is possible that some of these outliers reflect program tallies of field work hours that include student teaching.

- The nature of the required field work. The type of field work experiences varied, including whole class observations, individual observations, tutoring individual students or small groups of students, serving as a teacher's assistant and conducting projects.

  By far the most common field work activity appears to be serving as a teacher's assistant.

- The distribution of field work. Some programs make the field experiences a part of professional coursework while others consolidate the experiences into discrete practicums.

These variations occurred both across education schools and within education schools when examining different preparation programs.

NCTQ STANDARD 12.
The institution exposes teacher candidates to field work early in their preparation.

● Programs Meet Standard	Columbia College (UG-EC), Dominican University (UG-EC), Kendall College (UG-EC), Augustana College (UG-ELEM), Aurora University (UG-ELEM), Blackburn College (UG-ELEM), Bradley University (UG-ELEM), Chicago State University (UG-ELEM), Concordia University Chicago (UG-ELEM), DePaul University (UG-ELEM), Eastern Illinois University (UG-ELEM), Elmhurst College (UG-ELEM), Eureka College (UG-ELEM), Governors State University (UG-ELEM), Greenville College (UG-ELEM), Illinois College (UG-ELEM), Illinois State University (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Judson University (UG-ELEM), Knox College (UG-ELEM), Lake Forest College (UG-ELEM), Lewis University (UG-ELEM), Loyola University Chicago (UG-ELEM), MacMurray College (UG-ELEM), McKendree University (UG-ELEM), Millikin University (UG-ELEM), Monmouth College (UG-ELEM), National-Louis University (UG-ELEM), North Central College (UG-ELEM), Northeastern Illinois University (UG-ELEM), Principia College (UG-ELEM), Quincy University (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), St. Xavier University (UG-ELEM), Trinity Christian College (UG-ELEM), Trinity International University (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), University of Illinois Springfield (UG-ELEM), University of St. Francis (UG-ELEM), Western Illinois University (UG-ELEM), Wheaton College (UG-ELEM), Augustana College (UG-SEC), Eastern Illinois University (UG-SEC), Eureka College (UG-SEC), Greenville College (UG-SEC), Illinois State University (UG-SEC), Judson University (UG-SEC), Knox College (UG-SEC), Lake Forest College (UG-SEC), Loyola University Chicago (UG-SEC), McKendree University (UG-SEC), Millikin University (UG-SEC), Northwestern University (UG-SEC), Principia College (UG-SEC), University of Illinois Springfield (UG-SEC), Bradley University (UG-SPED), Concordia University Chicago (UG-SPED), Eastern Illinois University (UG-SPED), Elmhurst College (UG-SPED), Illinois State University (UG-SPED), Lewis University (UG-SPED), MacMurray College (UG-SPED), Northeastern Illinois University (UG-SPED), Northern Illinois University (UG-SPED), Southern Illinois University Carbondale (UG-SPED), Southern Illinois University Edwardsville (UG-SPED), Trinity Christian College (UG-SPED), University of St. Francis (UG-SPED), Western Illinois University (UG-SPED), DePaul University (GR-EC), Dominican University (GR-EC), Erikson Institute (GR-EC), Benedictine University (GR-ELEM), Chicago State University (GR-ELEM), Greenville College (GR-ELEM), Lewis University (GR-ELEM), Loyola University Chicago (GR-ELEM), National-Louis University (GR-ELEM), Roosevelt University (GR-ELEM), St. Xavier University (GR-ELEM), The University of Chicago (GR-ELEM), Trinity International University (GR-ELEM), University of St. Francis (GR-ELEM), Chicago State University (GR-SEC), Concordia University Chicago (GR-SEC), Illinois Institute of Technology (GR-SEC), Loyola University Chicago (GR-SEC), National-Louis University (GR-SEC), Olivet Nazarene University (GR-SEC), Roosevelt University (GR-SEC), St. Xavier University (GR-SEC), University of Illinois at Urbana-Champaign (GR-SEC), Benedictine University (GR-SPED), Chicago State University (GR-SPED), Governors State University (GR-SPED), National-Louis University (GR-SPED), University of Illinois at Chicago (GR-SPED), University of Illinois at Urbana-Champaign (GR-SPED)
○ Programs Do Not Meet Standard	North Park University (UG-ELEM), Rockford College (GR-ELEM), Dominican University (GR-SPED), Northeastern Illinois University (GR-SPED), Northern Illinois University (GR-SPED)
? Programs Whose Performance Cannot be Determined	Northern Illinois University (UG-ELEM), Olivet Nazarene University (UG-ELEM), Northern Illinois University (GR-ELEM), Olivet Nazarene University (GR-ELEM)

STANDARD 13:
The institution designs a full-time student teaching experience.

RATIONALE

Student teaching is the capstone experience for professional preparation for teaching. It should be a full-time commitment. Even though programs often structure such experiences with required coursework that they see as relevant to the experience (e.g., a classroom management course), the practice is ill advised. Requiring coursework and student teaching simultaneously does a disservice to both by either reducing the amount of reading and number of assignments that can be associated with the course(s) or reducing the time and attention the teacher candidate can devote to what should be a challenging classroom experience.

A seminar designed to accompany the student teaching experience is, however, acceptable since it serves as the mechanism for essential debriefings on classroom experiences and the means of making connections to material covered in earlier coursework.

METHODOLOGY

Information on student teaching requirements was examined, pulled from catalogs, student teaching handbooks and degree plans to determine expectations conveyed about coursework taken during the student teaching experience. A program was considered full time if no other coursework—apart from a student teaching seminar—was required during the semester of student teaching, or if no other coursework was listed as occurring during the semester of student teaching on any recommended degree plan.

Standard 13: Full-time student teaching

Score	Criteria
4	The education school does not allow teacher candidates to take any course other than a companion seminar during student teaching.*
2	The education school discourages teacher candidates from taking any course other than a companion seminar during student teaching.
0	The education school allows or requires that teacher candidates take one or more courses other than a companion seminar during student teaching.

* The program may allow a student to petition to take coursework, but it must be clear that permission will be granted only in the case of rare extenuating circumstances.

FINDINGS

A large majority of education schools (85 percent) either did not allow or require teacher candidates to take coursework while they were student teaching. Some commendably accompanied their prohibition with a strong statement about priorities, as illustrated by this excerpt from **St. Xavier University**'s student teaching handbook:

> *Student teaching involves a unique, full-time commitment. It is 5 days a week, for 16 weeks, during fall or spring semesters only; no exceptions.*

In only about five percent of the schools, programs placed competing demands on teacher candidates. **Concordia University**'s undergraduate education program required that candidates take a course in classroom management and a course in assessment during student teaching.

Other programs only allowed for other commitments at the teacher candidate's discretion.

NCTQ STANDARD 13.
The institution designs a full-time student teaching experience.

● Programs Meet Standard	Columbia College (UG-EC), Dominican University (UG-EC), Augustana College (UG-ELEM), Aurora University (UG-ELEM), Blackburn College (UG-ELEM), Bradley University (UG-ELEM), Eastern Illinois University (UG-ELEM), Elmhurst College (UG-ELEM), Eureka College (UG-ELEM), Governors State University (UG-ELEM), Greenville College (UG-ELEM), Illinois College (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Judson University (UG-ELEM), Knox College (UG-ELEM), Lake Forest College (UG-ELEM), MacMurray College (UG-ELEM), McKendree University (UG-ELEM), Millikin University (UG-ELEM), Monmouth College (UG-ELEM), National-Louis University (UG-ELEM), North Central College (UG-ELEM), North Park University (UG-ELEM), Principia College (UG-ELEM), Quincy University (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), St. Xavier University (UG-ELEM), Trinity Christian College (UG-ELEM), Trinity International University (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), University of Illinois Springfield (UG-ELEM), University of St. Francis (UG-ELEM), Western Illinois University (UG-ELEM), Wheaton College (UG-ELEM), Augustana College (UG-SEC), Eastern Illinois University (UG-SEC), Eureka College (UG-SEC), Greenville College (UG-SEC), Judson University (UG-SEC), Knox College (UG-SEC), Lake Forest College (UG-SEC), McKendree University (UG-SEC), Millikin University (UG-SEC), Northwestern University (UG-SEC), Principia College (UG-SEC), University of Illinois Springfield (UG-SEC), Bradley University (UG-SPED), Eastern Illinois University (UG-SPED), Elmhurst College (UG-SPED), MacMurray College (UG-SPED), Southern Illinois University Carbondale (UG-SPED), Trinity Christian College (UG-SPED), University of St. Francis (UG-SPED),
	Western Illinois University (UG-SPED), Dominican University (GR-EC), Erikson Institute (GR-EC), Benedictine University (GR-ELEM), Greenville College (GR-ELEM), National-Louis University (GR-ELEM), Rockford College (GR-ELEM), Roosevelt University (GR-ELEM), St. Xavier University (GR-ELEM), The University of Chicago (GR-ELEM), Trinity International University (GR-ELEM), University of St. Francis (GR-ELEM), Illinois Institute of Technology (GR-SEC), National-Louis University (GR-SEC), Roosevelt University (GR-SEC), St. Xavier University (GR-SEC), University of Illinois at Urbana-Champaign (GR-SEC), Benedictine University (GR-SPED), Dominican University (GR-SPED), Governors State University (GR-SPED), National-Louis University (GR-SPED), University of Illinois at Chicago (GR-SPED), University of Illinois at Urbana-Champaign (GR-SPED)
◑ Programs Partly Meet Standard	Chicago State University (UG-ELEM), Illinois State University (UG-ELEM), Lewis University (UG-ELEM), Northeastern Illinois University (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), Illinois State University (UG-SEC), Illinois State University (UG-SPED), Lewis University (UG-SPED), Northeastern Illinois University (UG-SPED), Southern Illinois University Edwardsville (UG-SPED), Chicago State University (GR-ELEM), Lewis University (GR-ELEM), Chicago State University (GR-SEC), Chicago State University (GR-SPED), Northeastern Illinois University (GR-SPED)
○ Programs Do Not Meet Standard	Kendall College (UG-EC), Concordia University Chicago (UG-ELEM), Loyola University Chicago (UG-ELEM), Loyola University Chicago (UG-SEC), Concordia University Chicago (UG-SPED), Loyola University Chicago (GR-ELEM), Concordia University Chicago (GR-SEC), Loyola University Chicago (GR-SEC)
? Programs Whose Performance Cannot be Determined	DePaul University (UG-ELEM), Northern Illinois University (UG-ELEM), Olivet Nazarene University (UG-ELEM), Northern Illinois University (UG-SPED), DePaul University (GR-EC), Northern Illinois University (GR-ELEM), Olivet Nazarene University (GR-ELEM), Olivet Nazarene University (GR-SEC), Northern Illinois University (GR-SPED)

STANDARD 14:
The institution designs student teaching to have a supervised experience of sufficient length.

RATIONALE

Unless preparation programs can establish true satellite campuses to closely supervise Illinois student teaching arrangements, placements in urban or otherwise novel locales should be supplementary to a standard student teaching arrangement. Otherwise, outsourcing the arrangements for student teaching makes it impossible to ensure the selection of the best cooperating teacher and adequate supervision of the student teacher. Foreign student teaching experiences, whether supervised by a satellite campus or outsourced, must also be supplementary to a standard student teaching experience since those experiences cannot expose the student teacher to an exemplary teacher working in the same classroom environment that the teacher candidate will experience, nor can they provide training on Illinois instructional frameworks.

METHODOLOGY

Catalogs, websites and student teaching handbooks were reviewed to ascertain the options available to teacher candidates for student teaching. Alternatives available for student teaching were evaluated in the context of 1) whether they took place in Illinois or elsewhere, 2) the total length of the student teaching experience, and 3) whether they were conducted under the auspices of the preparation program itself or outsourced to another organization.[2]

If an alternative to "standard student teaching"[3] was offered, the number of teacher candidates who chose that alternative was not relevant to the rating. The only exception to this was an alternative that was offered under clearly extenuating circumstances and for which a rigorous approval process was required.

Standard 14: Aligned student teaching

Score	Criteria
4	All student teachers spend at least 10 weeks in a placement or combination of two placements that prepare them for teaching in Illinois classrooms.* At least five weeks of the student teaching experience are done under the auspices of the institution itself, either in the institution's locale or through use of a complete satellite office making placements in Illinois schools.
2	All student teachers spend 8 to10 weeks in a placement or combination of two placements that prepare them for teaching in Illinois classrooms. At least five weeks of the student teaching experience are done under the auspices of the institution itself, either in the institution's locale or through use of a complete satellite office making placements in Illinois schools. OR All student teachers spend at least 10 weeks in a placement or combination of two placements that prepare them for teaching in Illinois classrooms. While some of the student teaching experience is done under the auspices of the institution itself, either in the institution's locale or through use of a complete satellite office making placements in Illinois schools, this part of the experience is less than five weeks of the total.

2 The determination that a placement was local was sometimes made implicitly based on indications in the student teaching handbook that all student teaching placements were made within a given driving radius from campus.

3 "Standard student teaching" entailing: 1) a quarter or semester-long experience in a local school, 2) teaching in the classroom of a teacher in which the preparation programs played some role in selection, and 3) supervision by individuals under contract to the preparation program.

0	The total student teaching experience for some or all teacher candidates is less than eight weeks in length. OR For some or all teacher candidates, none of the student teaching experience is done under the auspices of the institution itself, either because it is not in the institution's locale or because it is not done through a complete satellite office making placements in Illinois schools.

* Special consideration will be given if a program explicitly offers candidates a choice as to the state in which they will be certified and offers appropriate programs for each choice.

FINDINGS

The results on this standard are very similar to the results for full-time student teaching. Only a handful of education schools allow teacher candidates to spend the majority or all of their student teaching experience overseas (e.g., at a Department of Defense school), in an urban setting that is not supervised by a satellite campus or arranged entirely on their own.

Eastern Illinois University offer candidates the opportunity to student teach in numerous regions. It currently has 11 student teaching centers across the state where it has full-time student teaching coordinators living and assigned to work.

Northeastern Illinois University (NEIU) has designed a student teaching experience that is well aligned both with the design of their preparation program and with the instructional expectations teacher candidates will experience as licensed Illinois teachers. The institution also provides the opportunity to develop a global perspective: candidates may complete eight weeks of student teaching in a public school in Chicago and then travel to Korea to complete 20 more weeks of student teaching, with both experiences supervised by NEIU faculty or clinical supervisors.

How Illinois institutions fare on this standard

NCTQ STANDARD 14.
The institution designs student teaching to have a local experience of sufficient length.

★ Programs with Strong Design	**Eastern Illinois University (UG-ELEM), Northeastern Illinois University (UG-ELEM), Eastern Illinois University (UG-SEC), Eastern Illinois University (UG-SPED), Northeastern Illinois University (UG-SPED), Northeastern Illinois University (GR-SPED)**
● Programs Meet Standard	Columbia College (UG-EC), Dominican University (UG-EC), Augustana College (UG-ELEM), Aurora University (UG-ELEM), Blackburn College (UG-ELEM), Chicago State University (UG-ELEM), Concordia University Chicago (UG-ELEM), DePaul University (UG-ELEM), Elmhurst College (UG-ELEM), Eureka College (UG-ELEM), Greenville College (UG-ELEM), Illinois College (UG-ELEM), Illinois State University (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Judson University (UG-ELEM), Knox College (UG-ELEM), Lake Forest College (UG-ELEM), Lewis University (UG-ELEM), Loyola University Chicago (UG-ELEM), MacMurray College (UG-ELEM), McKendree University (UG-ELEM), Millikin University (UG-ELEM), Monmouth College (UG-ELEM), National-Louis University (UG-ELEM), North Park University (UG-ELEM), Northern Illinois University (UG-ELEM), Principia College (UG-ELEM), Quincy University (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), St. Xavier University (UG-ELEM), Trinity Christian College (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), University of Illinois Springfield (UG-ELEM), University of St. Francis (UG-ELEM), Western Illinois University (UG-ELEM), Augustana College (UG-SEC), Eureka College (UG-SEC), Greenville College (UG-SEC), Illinois State University (UG-SEC), Judson University (UG-SEC), Knox College (UG-SEC), Lake Forest College (UG-SEC), Loyola University Chicago (UG-SEC), McKendree University (UG-SEC), Millikin University (UG-SEC), Northwestern University (UG-SEC), Principia College (UG-SEC), University of Illinois Springfield (UG-SEC), Concordia University Chicago (UG-SPED), Elmhurst College (UG-SPED), Illinois State University (UG-SPED), Lewis University (UG-SPED), MacMurray College (UG-SPED), Northern Illinois University (UG-SPED), Southern Illinois University Carbondale (UG-SPED), Southern Illinois University Edwardsville (UG-SPED), Trinity Christian College (UG-SPED), University of St. Francis (UG-SPED), Western Illinois University (UG-SPED), DePaul University (GR-EC), Dominican University (GR-EC), Erikson Institute (GR-EC), Benedictine University (GR-ELEM), Chicago State University (GR-ELEM), Greenville College (GR-ELEM), Lewis University (GR-ELEM), Loyola University Chicago (GR-ELEM), National-Louis University (GR-ELEM), Northern Illinois University (GR-ELEM), Rockford College (GR-ELEM), Roosevelt University (GR-ELEM), St. Xavier University (GR-ELEM), The University of Chicago (GR-ELEM), University of St. Francis (GR-ELEM), Chicago State University (GR-SEC), Concordia University Chicago (GR-SEC), Illinois Institute of Technology (GR-SEC), Loyola University Chicago (GR-SEC), National-Louis University (GR-SEC), Roosevelt University (GR-SEC), St. Xavier University (GR-SEC), University of Illinois at Urbana-Champaign (GR-SEC), Benedictine University (GR-SPED), Chicago State University (GR-SPED), Dominican University (GR-SPED), National-Louis University (GR-SPED), Northern Illinois University (GR-SPED), University of Illinois at Chicago (GR-SPED), University of Illinois at Urbana-Champaign (GR-SPED)
○ Programs Do Not Meet Standard	Kendall College (UG-EC), Bradley University (UG-ELEM), Governors State University (UG-ELEM), North Central College (UG-ELEM), Trinity International University (UG-ELEM), Wheaton College (UG-ELEM), Bradley University (UG-SPED), Trinity International University (GR-ELEM), Governors State University (GR-SPED)
? Programs Whose Performance Cannot be Determined	Olivet Nazarene University (UG-ELEM), Olivet Nazarene University (GR-ELEM), Olivet Nazarene University (GR-SEC)

STANDARD 15:
The institution carefully screens and qualifies expert cooperating teachers from its partner schools.

RATIONALE

The most critical aspect of student teaching is finding the best possible teacher to serve as the "cooperating teacher" in whose classroom the teacher candidate will work. The only aspect of student teaching arrangements that have been shown to have an impact on student achievement is the positive effect of selection of the cooperating teacher by the preparation program rather than the student teacher or school district staff.[4] Exposure to the very best instruction will permanently shape the candidate's outlook and teaching. The cooperating classroom teacher should be carefully screened to ensure that he or she has demonstrated both the capacity to increase student learning above the average and to mentor an adult.

METHODOLOGY

Student teaching handbooks and other documents (e.g., form letters sent by education schools to principals) were reviewed for information on the criteria for selection of cooperating teachers and the selection process. We also interviewed principals of schools where student teachers were placed about the criteria and selection process. One hundred and fifty principals participated, an average of slightly fewer than three interviews per education school. Principal interviews were used only when we were able to speak to two or more principals whose schools hosted student teachers from the same education schools and whose statements were in agreement.

Standard 14: Aligned student teaching

Score	Criteria
4	Documents provided by the institution indicate that it plays a central role in the selection of cooperating teachers who demonstrate the ability to increase student learning and to mentor an adult and either: a) this information was corroborated by principal interviews, OR b) principal interviews were not determinative.
2	Documents provided by the institution did not indicate that it plays a central role in the selection of cooperating teachers. The institution does indicate, however, that it provides guidelines to principals on the characteristics cooperating teachers must have.
0	Either: a) Documents provided by the institution indicate that it does not play a central role in the selection of cooperating teachers who demonstrate an ability to increase student learning and to mentor an adult, for example, because students can make their own placements or cooperating teachers are selected by a school district employee without meaningful consultation with the institution. OR b) Documents provided by the institution indicate that it plays a central role in the selection of cooperating teachers who demonstrate the ability to increase student learning and to mentor an adult, BUT principal interviews did not corroborate this information.

4 Boyd, D., Grossman, P., Lankford, H., Loeb, S., & Wyckoff, J. (Sept. 2008). *Teacher preparation and student achievement.* National Bureau of Economic Research Working Paper Series (No. 14314). Cambridge, MA: National Bureau of Economic Research.

FINDINGS

There are three steps an education school must take to ensure that there is an appropriate selection of cooperating teachers: 1) establishing criteria for selection, 2) conveying those criteria to the principal at the prospective placement school, and 3) either screening cooperating teachers directly or weighing in on the individuals that might be nominated for the role by the principal.

Documents obtained from education schools indicate that while two-thirds of them portray themselves as involved in all aspects of the entire process, most are generally only establishing criteria for selection and then conveying the criteria (usually by letter or contract) to the principal.[5] These documents from education schools also indicate that the criteria for selection are usually quite minimal: 1) that cooperating teachers have at least three years of experience and are certified in the area in which they are teaching (the most common criterion), 2) that teachers are "master teachers" (without defining what constitutes mastery), and 3) that cooperating teachers are willing to supervise student teachers (without any requirement of previously demonstrated mentorship skills).

Our interviews indicated, however, that minimal or not, selection criteria are often not conveyed by the education school to principals. For example, two principals working with **Roosevelt University** were unaware of any formal selection criteria for cooperating teachers, while two other principals had received minimum criteria.

The degree to which education schools are involved in selection is also erratic. Some of the principals who work with **North Park University** said that they make placements in consultation with university staff, while others reported that there is no collaboration. In a rare contrast, six principals whose schools hosted student teachers from **Eastern Illinois University** reported that university staff consistently participated in the selection of mentor teachers.

While it is possible that principals will "read between the lines" of pro forma characteristics to select a cooperating teacher who is an effective teacher and a good adult mentor, or do so even without criteria provided at all, there are no guarantees. Some school principals may simply pick the teacher who loves children or who needs help to manage an unruly class, a fact that the education school won't know until after a less than optimal placement is already underway.

Our interviews with principals revealed that they have many different definitions for their "best teacher." One principal who received student teachers from **Rockford College** said that he interpreted "best teacher" to be an individual with strong instructional and communications skills, whereas a second said the "best teacher" was one with considerable experience and a willingness to mentor.

The bottom line is that principals whose schools host student teachers from Illinois education schools stated that only about 20 percent of those institutions played any role in the selection process.

5 Field placement coordinators are undoubtedly engaged in informal communications with school principals. We did not attempt to collect information on the nature of those communications because we interviewed school principals on the nature of their formal and informal communications with education school staff.

As a result, only seven institutions meet this standard, with another seven only partially meeting it. The typical program failed to meet the standard because it did not participate actively in choosing cooperating teachers and did not provide guidance to principals specifying that cooperating teachers must demonstrate **both** instructional and mentorship skills.

★ **The University of Chicago** is an excellent example of a university that is completely involved in the cooperating teacher selection process in that it has made a clear statement of the criteria for selection, which include a candidate teacher's demonstrated ability to increase student learning and to mentor an adult. It conveys those criteria to principals to seek their nomination of candidate teachers, and then it screens and selects the cooperating teachers using written applications, completed self-evaluations, observations and interviews.

How Illinois institutions fare on this standard

NCTQ STANDARD 15.
The institution carefully screens and qualifies expert cooperating teachers from its partner schools.

	The University of Chicago (GR-ELEM)
★ Programs with Strong Design	
● Programs Meet Standard	Aurora University (UG-ELEM), Concordia University Chicago (UG-ELEM), Quincy University (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), Concordia University Chicago (UG-SPED), Concordia University Chicago (GR-SEC), Illinois Institute of Technology (GR-SEC), University of Illinois at Urbana-Champaign (GR-SEC), University of Illinois at Chicago (GR-SPED), University of Illinois at Urbana-Champaign (GR-SPED)
◑ Programs Partly Meet Standard	Chicago State University (UG-ELEM), Eastern Illinois University (UG-ELEM), Greenville College (UG-ELEM), Illinois College (UG-ELEM), Principia College (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), Eastern Illinois University (UG-SEC), Greenville College (UG-SEC), Principia College (UG-SEC), Eastern Illinois University (UG-SPED), Southern Illinois University Carbondale (UG-SPED), Southern Illinois University Edwardsville (UG-SPED), Chicago State University (GR-ELEM), Greenville College (GR-ELEM), Chicago State University (GR-SEC), Chicago State University (GR-SPED)
○ Programs Do Not Meet Standard	Columbia College (UG-EC), Dominican University (UG-EC), Kendall College (UG-EC), Augustana College (UG-ELEM), Blackburn College (UG-ELEM), Bradley University (UG-ELEM), DePaul University (UG-ELEM), Elmhurst College (UG-ELEM), Eureka College (UG-ELEM), Governors State University (UG-ELEM), Illinois State University (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Judson University (UG-ELEM), Knox College (UG-ELEM), Lake Forest College (UG-ELEM), Lewis University (UG-ELEM), Loyola University Chicago (UG-ELEM), MacMurray College (UG-ELEM), McKendree University (UG-ELEM), Millikin University (UG-ELEM), Monmouth College (UG-ELEM), North Central College (UG-ELEM), North Park University (UG-ELEM), Northeastern Illinois University (UG-ELEM), Northern Illinois University (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), St. Xavier University (UG-ELEM), Trinity Christian College (UG-ELEM), Trinity International University (UG-ELEM), University of Illinois Springfield (UG-ELEM), University of St. Francis (UG-ELEM), Western Illinois University (UG-ELEM), Wheaton College (UG-ELEM), Augustana College (UG-SEC), Eureka College (UG-SEC), Illinois State University (UG-SEC), Judson University (UG-SEC), Knox College (UG-SEC), Lake Forest College (UG-SEC), Loyola University Chicago (UG-SEC), McKendree University (UG-SEC), Millikin University (UG-SEC), Northwestern University (UG-SEC), University of Illinois Springfield (UG-SEC), Bradley University (UG-SPED), Elmhurst College (UG-SPED), Illinois State University (UG-SPED), Lewis University (UG-SPED), MacMurray College (UG-SPED), Northeastern Illinois University (UG-SPED), Northern Illinois University (UG-SPED), Trinity Christian College (UG-SPED), University of St. Francis (UG-SPED), Western Illinois University (UG-SPED), DePaul University (GR-EC), Dominican University (GR-EC), Erikson Institute (GR-EC), Benedictine University (GR-ELEM), Lewis University (GR-ELEM), Loyola University Chicago (GR-ELEM), Northern Illinois University (GR-ELEM), Rockford College (GR-ELEM), Roosevelt University (GR-ELEM), St. Xavier University (GR-ELEM), Trinity International University (GR-ELEM), University of St. Francis (GR-ELEM), Loyola University Chicago (GR-SEC), Roosevelt University (GR-SEC), St. Xavier University (GR-SEC), Benedictine University (GR-SPED), Dominican University (GR-SPED), Governors State University (GR-SPED), Northeastern Illinois University (GR-SPED), Northern Illinois University (GR-SPED)
? Programs Whose Performance Cannot be Determined	National-Louis University (UG-ELEM), Olivet Nazarene University (UG-ELEM), National-Louis University (GR-ELEM), Olivet Nazarene University (GR-ELEM), National-Louis University (GR-SEC), Olivet Nazarene University (GR-SEC), National-Louis University (GR-SPED)

STANDARD 16:
The institution sets degree requirements that make it practical for any candidate who may be unsuccessful in student teaching to still qualify in relatively short order for a college degree.

RATIONALE

The undergraduate collegiate experience has traditionally been designed to educate students broadly and then to hone their knowledge in one area through increasingly rigorous advanced (often called "upper division") coursework in a major. While there is no research evidence that such expertise in a single academic field makes a teacher more effective, it has been posited that a strong grounding in the "disciplinary ways of knowing" will make for greater teacher effectiveness,[6] and also that a major in an elementary content area can't hurt when teaching that content.

Yet there is another, more practical rationale for this standard. Unless a teacher candidate has a major or has fulfilled a very substantial part of the requirements for a major, the ramifications of failing student teaching are great: the loss or serious delay of a college degree. *While a few Illinois programs indicated that candidates are failed for poor performance, there is a strong disincentive for the education program to fail candidates even in the face of poor performance.*[7] Moreover, if elementary teacher candidates take it upon themselves to earn a full major, they will have a more transferable credential than an education major, which will help ease voluntary and involuntary exit from the teaching profession after hiring.

The recommendation of a concentration—essentially 18 credit hours of coursework in one subject—is conservative. Ten states require that all elementary teacher candidates also earn an academic major.[8]

The amount of coursework necessary to be prepared for the elementary classroom may make it difficult for the prospective teacher to take a full major outside of the education department. Until more candidates for elementary teaching are more content-proficient and able to satisfy content requirements by placing out through examination, the next best thing to a major is an area of concentration. In fact, many teacher preparation programs nationwide require that elementary teacher candidates have this type of area of concentration.

Because of the dual rationale for this standard, it is listed here, among other "practice teaching" standards, but for purposes of calculating program grades, it is grouped with other standards involving the preparation of elementary teachers.

6 Grossman, P., & Schoenfeld, A., *Teaching subject matter*. In L. D. Hammond & John Bransford (Eds.), *Preparing teachers for a changing world* (San Francisco, Jossey-Bass, 2005), 230.

7 For example, North Central College indicated that it has dismissed three elementary candidates over the past two years. Several programs also indicated that teacher candidates who chose to leave the preparation program or are counseled out in their senior year can nonetheless graduate on time, even without a strong concentration, because they are offered a general education major without a recommendation for certification.

On the other hand, when a California education school attempted to flunk a teacher candidate from student teaching in the mid-1990s, the case was litigated for three years, and the education school's attorney indicated that in the entire history of teacher preparation in California to date there was no record of a credential candidate actually failing student teaching. In all other cases, candidates were "counseled" out of the program and free to apply to another program. The education school prevailed in the litigation with evidence from nursing programs that do fail nurse candidate in their clinicals.

8 The states that require that elementary teacher candidates have an academic major are California, Colorado, Connecticut, Massachusetts, Michigan, New Hampshire, New Jersey, New Mexico, Tennessee and Vermont.

METHODOLOGY

In evaluating Illinois' teacher preparation programs, evidence was sought that elementary teacher candidates completed a content specialization in an academic subject area. Such evidence could be the requirement of an academic major or at least 18 semester hours of coursework that would count toward a major in a single academic discipline other than education. Methods coursework was not counted, useful as it might be, since it does not satisfy either rationale for the standard. The fact that upper division courses were or were not required was not a consideration.

Standard 16: Back-up degree

Score	Criteria	
4	The institution requires a concentration of 18 or more semester hours that could count toward a major in one academic subject other than education.	
3	The institution requires at least 15 but fewer than 18 semester hours that could count toward a major in one academic subject other than education.	
2	The institution requires a concentration of at least 12 but fewer than 15 semester hours that could count toward a major in one academic subject other than education.	
1	The institution requires a concentration of at least nine but fewer than 12 semester hours that could count toward a major in one academic subject other than education. OR A concentration in a composite subject (e.g., natural science) requiring at least 15 semester hours is allowed.	The institution offers a multi-disciplinary major to non-teacher candidates.
0	The institution requires fewer than nine semester hours that could count toward a major in any one academic subject other than education. OR A concentration in education is allowed. OR A concentration in a composite subject (e.g., natural science) requiring no more than 12 semester hours is allowed.	The institution offers a multi-disciplinary major to non-teacher candidates.

FINDINGS

Until about 10 years ago, Illinois required elementary teachers to have a concentration of 18 credits, including 9 credits of upper division coursework. Vestiges of this regulation are still evident, with three-quarters of programs falling short of meeting the standard, most only slightly short. Nearly one-fifth failed to meet the standard, 12 of them because they allowed a concentration in education.

Judson University offered the greatest number of concentrations that did not satisfy the standard, allowing education concentrations that include early childhood education (for elementary teacher candidates), elementary education (for early childhood teacher candidates), physical education and special education, as well as concentrations in Christian studies and several management and business areas.

★ **Lake Forest College** requires that all undergraduate elementary teacher candidates take a liberal arts major in addition to their education major. **Roosevelt University** met the standard and expressed one of its rationales well: Teacher candidates must take a concentration in a "teachable content area."

How Illinois institutions fare on this standard

NCTQ STANDARD 16.
The institution sets degree requirements that make it practical for any candidate who may be unsuccessful in student teaching to still qualify in relatively short order for a college degree.

This standard applies only to undergraduate early childhood and elementary teacher preparation programs.

★ Programs with Strong Design	**Lake Forest College (UG-ELEM), Roosevelt University (UG-ELEM)**
● Programs Meet Standard	Columbia College (UG-EC), DePaul University (UG-ELEM), Elmhurst College (UG-ELEM), Lewis University (UG-ELEM), North Park University (UG-ELEM), Principia College (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), Trinity International University (UG-ELEM), University of Illinois Springfield (UG-ELEM)
◕ Programs Nearly Meet Standard	Illinois College (UG-ELEM), Knox College (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), Wheaton College (UG-ELEM)
◑ Programs Partly Meet Standard	Aurora University (UG-ELEM), St. Xavier University (UG-ELEM), Western Illinois University (UG-ELEM)
◔ Programs Meet Small Part of Standard	Augustana College (UG-ELEM), Blackburn College (UG-ELEM), Bradley University (UG-ELEM), Chicago State University (UG-ELEM), Dominican University (UG-EC), Concordia University Chicago (UG-ELEM), Eastern Illinois University (UG-ELEM), Eureka College (UG-ELEM), Governors State University (UG-ELEM), Illinois State University (UG-ELEM), Loyola University Chicago (UG-ELEM), MacMurray College (UG-ELEM), McKendree University (UG-ELEM), Monmouth College (UG-ELEM), National-Louis University (UG-ELEM), North Central College (UG-ELEM), Olivet Nazarene University (UG-ELEM), Quincy University (UG-ELEM), Rockford College (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of St. Francis (UG-ELEM)
○ Programs Do Not Meet Standard	Greenville College (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Judson University (UG-ELEM), Kendall College (UG-EC), Millikin University (UG-ELEM), Northeastern Illinois University (UG-ELEM), Northern Illinois University (UG-ELEM), Trinity Christian College (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM)

SECTION 5:
Standards on Professional Training

NCTQ attempts to formulate its standards on the basis of research that examines effects of different aspects of teacher preparation on student performance. Given a century of formal teacher preparation, one would expect that relevant research on the efficacy of different types of professional training would be abundant, but this is not the case. While there is a wealth of research that has been conducted on teacher preparation with a broad range of quality, there is virtually no research on the effect of different approaches to professional training on student performance. Instead, research has focused on "how new teachers are socialized into the profession and how beliefs and actions changed (or resisted change) while engaged in methods courses and field experiences."[1] As a result, many of our standards are based on the consensus positions of relevant organizations and assembled experts; policies and practices of countries whose students out-perform our own—as well as those of high-performing states; and, for some standards, a strong dose of common sense.[2]

As noted with regard to standards relating to the 21st century classroom, our evaluation on these standards was limited to non-clinical coursework. While clinical experiences are extremely important, the likelihood that they will vary is considerable unless they are conducted only in a laboratory school affiliated with the teacher preparation program. For that reason, they provide better opportunities for practice than instruction, and, conversely, non-clinical coursework is more suitable for instruction.

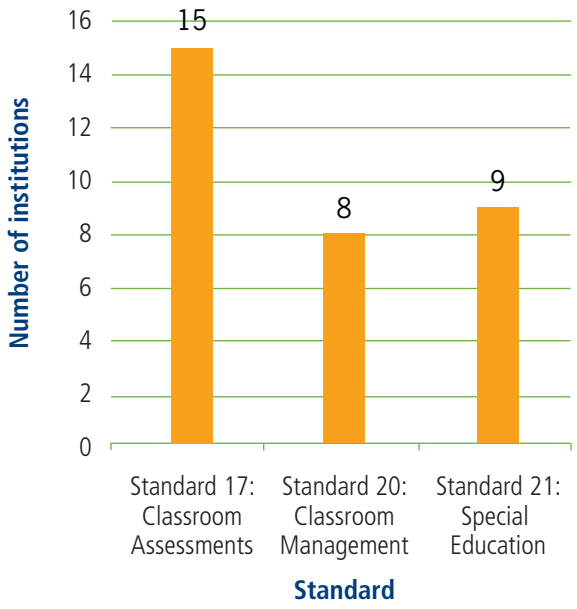
Unlike the standards relating to the 21st century classroom in which we looked for application and practice distributed throughout preparation, in these professional coursework standards we look for instruction to be concentrated in two or fewer courses. Our rationale is that the standards address topics that can be presented in one course (and often are), with practice opportunities provided in field experiences. The risk of incoherence, contradiction and redundancy in addressing these topics increases with their dispersion among different courses, especially given the high proportion of adjunct instructors rather than permanent faculty teaching non-clinical coursework in many teacher preparation programs.

Our concern about dispersion does not appear to be shared by most institutions. As the graphic below illustrates, in several areas of professional preparation, programs were quite eager to indicate that instruction is widely dispersed. For example, **Southern Illinois University Edwardsville** volunteered that classroom management was addressed in no fewer than five non-clinical courses, with no indication that most or all might be reinforcing the same management approach.

1 AERA Panel on Research and Teacher Education (2005). Studying teacher education: The report of the AERA Panel on Research and Teacher Education. *Psychology Press*,[volume?]325.

2 For very concrete guidance on a wealth of practices that may lead to more effective teaching, we recommend "Taxonomy of Effective Teaching," which has been produced by Uncommon Schools. http://www.uncommonschools.org/usi/aboutUs/taxonomy.php.

Institutions claiming topics covered in 3 or more courses



STANDARD 17:
The institution provides a thorough overview of all types of classroom assessments, including how to analyze student data.

RATIONALE

With increased accountability for student performance, teachers need a thorough introduction to the multifaceted role of assessment in schools, including how assessment connects to standards-based instruction. Teachers should understand the purposes and applications of different types of tests and be able to interpret student performance data. They should also know how to use test data to inform instructional planning in their own classrooms, as well as when planning with colleagues. While practice with classroom assessment might well be provided in several curriculum and instruction or methods courses, foundational topics in assessment seem best consolidated in one or two courses in order to provide comprehensive coverage while avoiding redundancies.

METHODOLOGY

We reviewed syllabi for non-clinical coursework (with the exception of reading courses[3]) provided to us in order to determine assignments, classroom instruction and/or required reading on the following topics: 1) an introduction to various assessments and their purposes, 2) standardized testing, 3) how to appropriately prepare classroom assessments, and 4) interpreting and applying data from both classroom and standardized assessments to improve instruction.

3 Reading coursework may contain coverage of assessment issues, but not in a standards-based context.

Standard 17: Classroom Assessments

Score	Criteria	Special considerations
4	The following four assessment topics are addressed in one or two courses through assignments, instruction and/or required readings: 1) An introduction to various assessments and their purposes, 2) Standardized testing, 3) How to appropriately prepare classroom assessments, and 4) Interpreting and applying data from both classroom and standardized assessments to improve instruction.	Clearly defined coursework sequences, e.g., "C&I, I, C&I, 2, C&I, 3"
3	Three of the four assessment topics are addressed. OR All four assessment topics are addressed but in more than two courses.	
2	Two assessment topics are addressed. OR Three topics are addressed but in more than two courses.	
1	One assessment topic is addressed.	
0	None of the four assessment topics is addressed.	

FINDINGS

The results in this area of professional preparation differ considerably from those in preceding standards in that there is a quite even distribution of results. In undergraduate elementary preparation, for example, while only about ten percent of programs reviewed did poorly on the standard (failing or meeting only a small part of it), a quarter of programs only partly met the standard, almost a third nearly met the standard and just over a third fully met the standard. This same distribution is found in the other programs as well.

Only a minority of programs reviewed (about 30 percent) have a course that focuses exclusively or almost exclusively and comprehensively on this critical topic.

Of the four topics in assessment examined, the most commonly addressed in both elementary and secondary preparation programs was classroom assessment. With the exception of graduate secondary programs (for which standardized testing was the least commonly addressed topic), the least commonly addressed topic in both elementary and secondary programs was instruction on how to use data to improve instruction. These findings are not surprising given that a recent study of teacher educators found that only 24 percent believe it is absolutely essential to produce "teachers who understand how to work with the state's standards, tests, and accountability systems."[4]

The assessment course offered to both undergraduate elementary and secondary candidates at **McKendree University** addresses all of the relevant assessment topics (including important statistical issues such as reliability and error that do not appear to be addressed in many courses we evaluated) and includes a considerable number of application-based assignments.

4 Based on survey findings from a nationwide, randomly selected sample of 716 teacher educators in four-year colleges and universities: Farkas, S., & Duffet, A. (Sept. 29, 2010). *Cracks in the Ivory Tower? The Views of Education Professors Circa 2010.* The Thomas B. Fordham Institute, p. 5. http://www.edexcellence.net/doc/cracksintheivorytower/Cracks_in_the_Ivory_Tower_Full.pdf

NCTQ STANDARD 17.
The institution provides a thorough overview of all types of classroom assessments, including how to analyze student data.

★ Programs with Strong Design	**McKendree University (UG-ELEM), McKendree University (UG-SEC)**
● Programs Meet Standard	Dominican University (UG-EC), Kendall College (UG-EC), Augustana College (UG-ELEM), Blackburn College (UG-ELEM), Concordia University Chicago (UG-ELEM), DePaul University (UG-ELEM), Elmhurst College (UG-ELEM), Greenville College (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Lake Forest College (UG-ELEM), North Park University (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), St. Xavier University (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), Augustana College (UG-SEC), Greenville College (UG-SEC), Lake Forest College (UG-SEC), Loyola University Chicago (UG-SEC), DePaul University (GR-EC), Dominican University (GR-EC), Benedictine University (GR-ELEM), Loyola University Chicago (GR-ELEM), St. Xavier University (GR-ELEM), The University of Chicago (GR-ELEM), Illinois Institute of Technology (GR-SEC), Loyola University Chicago (GR-SEC), St. Xavier University (GR-SEC)
◕ Programs Nearly Meet Standard	Columbia College (UG-EC), Eastern Illinois University (UG-ELEM), Eureka College (UG-ELEM), Knox College (UG-ELEM), Loyola University Chicago (UG-ELEM), MacMurray College (UG-ELEM), Millikin University (UG-ELEM), National-Louis University (UG-ELEM), Northeastern Illinois University (UG-ELEM), Northern Illinois University (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), Trinity Christian College (UG-ELEM), University of St. Francis (UG-ELEM), Western Illinois University (UG-ELEM), Wheaton College (UG-ELEM), Eureka College (UG-SEC), Judson University (UG-SEC), Knox College (UG-SEC), Millikin University (UG-SEC), Northwestern University (UG-SEC), Erikson Institute (GR-EC), Lewis University (GR-ELEM), Northern Illinois University (GR-ELEM), Concordia University Chicago (GR-SEC), National-Louis University (GR-SEC), University of Illinois at Urbana-Champaign (GR-SEC)
◑ Programs Partly Meet Standard	Bradley University (UG-ELEM), Chicago State University (UG-ELEM), Governors State University (UG-ELEM), Illinois College (UG-ELEM), Illinois State University (UG-ELEM), Lewis University (UG-ELEM), Principia College (UG-ELEM), Quincy University (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), Trinity International University (UG-ELEM), University of Illinois Springfield (UG-ELEM), Eastern Illinois University (UG-SEC), Illinois State University (UG-SEC), Principia College (UG-SEC), University of Illinois Springfield (UG-SEC), Rockford College (GR-ELEM), Trinity International University (GR-ELEM), University of St. Francis (GR-ELEM), Chicago State University (GR-SEC), Roosevelt University (GR-SEC)
◔ Programs Meet Small Part of Standard	North Central College (UG-ELEM), Roosevelt University (GR-ELEM)
○ Programs Do Not Meet Standard	Aurora University (UG-ELEM), Judson University (UG-ELEM), Monmouth College (UG-ELEM), Chicago State University (GR-ELEM), Greenville College (GR-ELEM), National-Louis University (GR-ELEM)
? Programs Whose Performance Cannot be Determined	Olivet Nazarene University (GR-ELEM), Olivet Nazarene University (GR-SEC), Olivet Nazarene University (UG-ELEM)

STANDARD 18:
The institution provides a thorough overview of the use of assessment data to plan education programs for students with special needs.

RATIONALE

Special education teacher candidates must be taught how to use appropriate tests for diagnostic and lesson-planning purposes and to determine if children are meeting Individualized Education Program (IEP) goals.

METHODOLOGY

We reviewed course descriptions and syllabi provided to us to determine if non-clinical coursework addresses assessment issues relevant to special education.

Standard 18: Special Education Assessment

Score	Criteria
4	Required coursework addresses assessment strategies tailored to teachers of special education students.
0	Required coursework fails to address assessment strategies tailored to teachers of special education students.

FINDINGS

All undergraduate and graduate special education programs we reviewed met the standard of requiring coursework that addresses assessment strategies tailored to students with special needs.

How Illinois institutions fare on this standard

NCTQ STANDARD 18.
The institution provides a thorough overview of the use of assessment data to plan education programs for students with special needs.

This standard applies only to special education teacher preparation programs.

● Programs Meet Standard	Bradley University (UG-SPED), Concordia University Chicago (UG-SPED), Eastern Illinois University (UG-SPED), Elmhurst College (UG-SPED), Illinois State University (UG-SPED), Lewis University (UG-SPED), MacMurray College (UG-SPED), Northeastern Illinois University (UG-SPED), Northern Illinois University (UG-SPED), Southern Illinois University Carbondale (UG-SPED), Southern Illinois University Edwardsville (UG-SPED), Trinity Christian College (UG-SPED),
	University of St. Francis (UG-SPED), Western Illinois University (UG-SPED), Benedictine University (GR-SPED), Chicago State University (GR-SPED), Dominican University (GR-SPED), Governors State University (GR-SPED), National-Louis University (GR-SPED), Northeastern Illinois University (GR-SPED), Northern Illinois University (GR-SPED), University of Illinois at Chicago (GR-SPED), University of Illinois at Urbana-Champaign (GR-SPED)

STANDARD 19:
The institution requires teacher candidates to understand key principles from cognitive psychology that address how children learn and develop, omitting those principles that do not have a scientific basis.

RATIONALE

To create developmentally appropriate, successful learning opportunities, teachers need to understand how children learn and how their students' development affects their learning. All teacher candidates should understand key ideas, such as 1) people understand new things in the context of the information they already know, 2) proficiency in new mental tasks requires practice, 3) children are more alike than different in how they learn, and 4) children differ in intelligence, but intelligence can be changed by hard work. Instruction should not endorse topics that constitute pseudo-science (e.g., learning styles). As a team of psychologists wrote in a review of relevant research on learning styles, "[T]he contrast between the enormous popularity of the learning-styles approach within education and the lack of credible evidence for its utility is, in our opinion, striking and disturbing.[5]

METHODOLOGY

Because this standard is still in a pilot phase, the findings should only be viewed as exploratory. This standard is not rated, nor does it factor into overall program or institutional ratings. We reviewed syllabi and tables of contents of required textbooks to ascertain 1) the number of psychology courses in which cognitive psychology is found; 2) the proportion of cognitive psychology in each course, as opposed to what may be superficial coverage of topics such as classroom management or assessment, or topics in psychology that are not central to instruction, such as eating disorders; and 3) whether pseudo-science, such as learning styles, is covered in a manner that suggests that it is being presented as science.

FINDINGS

Programs were not rated on this standard, but our analysis still illuminated some broad issues related to the adequacy of cognitive science coverage.

Roughly 63 percent of programs included in our Illinois review devote less than half of one course to cognitive psychology topics. This would not appear to be adequate to cover critical topics such as reinforcement, motivation, transfer theories and instructional strategies that would promote student learning.

Commendably, several schools, such as **Governors State University** and **Monmouth College**, dedicate entire courses to solid cognitive science.

We noted that **North Park University** and **Trinity International University** were the only institutions in which psychology courses that teach and do not repudiate the pseudo-science of learning styles were noted.[6]

5 http://www.psychologicalscience.org/media/releases/2009/learningstylespspi.cfm

6 Our analysis did not include review of other professional coursework for endorsement of teaching to student learning styles. Pseudo-science may lurk elsewhere in preparation programs where we did not detect it, as a required instructional element in lesson-planning templates or as a topic in curriculum and instruction coursework.

Monmouth College's "theories of learning" course for its undergraduate elementary teacher is devoted to cognitive science and utilizes an excellent textbook: *Why Don't Students Like School: A Cognitive Scientist Answers Questions About How the Mind Works and What It Means for the Classroom* by Daniel Willingham. The book provides a distilled and pragmatic guide to classroom applications of educational psychology.

STANDARD 20:
The institution imparts methods in classroom management targeted to the grade levels at which the candidate intends to teach.

RATIONALE

A positive, orderly classroom environment helps students learn, but new teachers often cite classroom management as their primary problem in teaching. Teacher candidates will be better able to establish a classroom environment that makes learning possible if they are taught a coherent management approach, not a grab-bag of techniques.

Moreover, it does a considerable disservice to candidates when the curriculum fails to differentiate among grade-ranges addressing preschoolers to high school seniors. How much can a prospective high school mathematics teacher learn from a discussion about how to deal with a 3-year-old having a tantrum? Classroom management courses that mix elementary and secondary teacher candidates are not only unnecessary, they also prevent prospective teachers from receiving the most relevant training.

METHODOLOGY

We examined syllabi provided to us to find those for non-clinical courses in which teacher candidates had assignments focused on classroom management and then identified whether the course was unique to the elementary or secondary certification program.

Standard 20: Classroom Management

Score	Criteria
4	Classroom management is a targeted skill of the program, as evidenced by it being addressed in one or two courses, each of which is tailored to the elementary or secondary certification program.
2	Classroom management is taught in too disparate a manner as it is addressed in more than two courses; it is tailored to the elementary or secondary program. OR Classroom management is a targeted skill of the program, as evidenced by it being addressed in one or two courses, but at least one of these courses is too broad in scope, failing to focus on a particular grade span (elementary or secondary).

0	Teacher candidates receive no instruction in classroom management. OR Classroom management is taught in too disparate a manner, as evidenced by it being addressed in more than two courses, and at least one of these courses is too broad in scope, failing to focus on a particular grade span (elementary or secondary).

FINDINGS

Perhaps not surprisingly given the need for special education teachers to deal with behavior-related disabilities, the only type of program that routinely passed this standard was the undergraduate special education programs we evaluated. The highest proportion of programs meeting the standard (three-quarters) was found in graduate special education programs.

Secondary programs showed the greatest weakness on this standard, with one-third of graduate secondary and half of undergraduate secondary programs reviewed failing to have any coursework at all dealing with classroom management, or failing to target the skills appropriately by covering the subject in too many courses (with at least one not unique to the secondary grade span).

While most programs appear to treat classroom management with sufficient gravitas, some programs did not do so for the following reasons:

- Seven programs do not address classroom management at all.
- Nineteen programs do not teach it with sufficient focus, with the topic spread out among too many courses.
- Eighteen programs do not tailor classroom management to a specific grade span.

Eastern Illinois University addresses classroom management in one grade span-specific course in the undergraduate elementary program and a different single course in the undergraduate secondary program.

How Illinois institutions fare on this standard

NCTQ STANDARD 20.
The institution imparts methods in classroom management targeted to the grade levels at which the candidate intends to teach.

★ Programs with Strong Design	**Eastern Illinois University (UG-ELEM), Eastern Illinois University (UG-SEC)**
● Programs Meet Standard	Columbia College (UG-EC), Kendall College (UG-EC), Augustana College (UG-ELEM), Blackburn College (UG-ELEM), Chicago State University (UG-ELEM), DePaul University (UG-ELEM), Elmhurst College (UG-ELEM), Eureka College (UG-ELEM), Illinois State University (UG-ELEM), Lake Forest College (UG-ELEM), Loyola University Chicago (UG-ELEM), Millikin University (UG-ELEM), Monmouth College (UG-ELEM), National-Louis University (UG-ELEM), North Central College (UG-ELEM), North Park University (UG-ELEM), Northern Illinois University (UG-ELEM), Principia College (UG-ELEM), Quincy University (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), Trinity International University (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of St. Francis (UG-ELEM), Wheaton College (UG-ELEM), Augustana College (UG-SEC), Eureka College (UG-SEC), Illinois State University (UG-SEC), Loyola University Chicago (UG-SEC), Millikin University (UG-SEC), Northwestern University (UG-SEC), Principia College (UG-SEC), Bradley University (UG-SPED), Elmhurst College (UG-SPED), Illinois State University (UG-SPED), Lewis University (UG-SPED), MacMurray College (UG-SPED), Northeastern Illinois University (UG-SPED), Northern Illinois University (UG-SPED), Southern Illinois University Edwardsville (UG-SPED), Trinity Christian College (UG-SPED), University of St. Francis (UG-SPED), DePaul University (GR-EC), Dominican University (GR-EC), Erikson Institute (GR-EC), Benedictine University (GR-ELEM), Greenville College (GR-ELEM), Loyola University Chicago (GR-ELEM), Roosevelt University (GR-ELEM), St. Xavier University (GR-ELEM), The University of Chicago (GR-ELEM), Trinity International University (GR-ELEM), University of St. Francis (GR-ELEM), Concordia University Chicago (GR-SEC), Illinois Institute of Technology (GR-SEC), Loyola University Chicago (GR-SEC), Roosevelt University (GR-SEC), St. Xavier University (GR-SEC), Benedictine University (GR-SPED), Chicago State University (GR-SPED), Dominican University (GR-SPED), National-Louis University (GR-SPED), Northeastern Illinois University (GR-SPED), Northern Illinois University (GR-SPED), University of Illinois at Chicago (GR-SPED), University of Illinois at Urbana-Champaign (GR-SPED)
◑ Programs Partly Meet Standard	Dominican University (UG-EC), Aurora University (UG-ELEM), Bradley University (UG-ELEM), Concordia University Chicago (UG-ELEM), Greenville College (UG-ELEM), Illinois College (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Lewis University (UG-ELEM), MacMurray College (UG-ELEM), McKendree University (UG-ELEM), Northeastern Illinois University (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), St. Xavier University (UG-ELEM), Trinity Christian College (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), University of Illinois Springfield (UG-ELEM), Western Illinois University (UG-ELEM), Greenville College (UG-SEC), Lake Forest College (UG-SEC), McKendree University (UG-SEC), Concordia University Chicago (UG-SPED), Eastern Illinois University (UG-SPED), Southern Illinois University Carbondale (UG-SPED), Western Illinois University (UG-SPED), Chicago State University (GR-ELEM), Lewis University (GR-ELEM), National-Louis University (GR-ELEM), Northern Illinois University (GR-ELEM), Rockford College (GR-ELEM), National-Louis University (GR-SEC), University of Illinois at Urbana-Champaign (GR-SEC)
○ Programs Do Not Meet Standard	Governors State University (UG-ELEM), Judson University (UG-ELEM), Knox College (UG-ELEM), Judson University (UG-SEC), Knox College (UG-SEC), Chicago State University (GR-SEC), Governors State University (GR-SPED)
? Programs Whose Performance Cannot be Determined	Olivet Nazarene University (GR-ELEM), Olivet Nazarene University (GR-SEC), Olivet Nazarene University (UG-ELEM), University of Illinois Springfield (UG-SEC)

STANDARD 21:
The institution provides an orientation to special education targeted to the grade levels at which the candidate intends to teach.

RATIONALE

According to the National Center for Education Statistics, more than 13 percent of public school students receive special education services,[7] and three-quarters of these students spend at least 40 percent of their school day in a general education classroom.[8] These rates are much higher in poor, urban districts. Virtually every teacher will teach special education students at some point. Consequently, teachers should benefit from a "foundations" course in special education that provides an introduction to the instructional and policy issues related to high-incidence disabilities and that is taught by an individual with a high level of expertise on special education. (General education faculty may be unable to provide specific, cogent examples of pedagogical techniques. They may be unable to articulate the relationship between a particular pedagogy and the needs of students with disabilities, or they may lack familiarity with research on successful applications of pedagogical approaches.[9])

A course in the foundations of special education lays the groundwork for subsequent methods coursework addressing additional techniques for differentiating instruction. While the relevant policy topics addressed may be the same for elementary and secondary teachers, the candidates are at a considerable disadvantage if they have to learn about the nature and implications of disabilities and general strategies of instructing students with disabilities in a single class whose curriculum addresses students from preschoolers to high school seniors.

METHODOLOGY

We reviewed course descriptions and syllabi provided to us to determine which non-clinical courses address the nature of learning disabilities and other high-incidence disabilities as well as general instructional strategies for children with disabilities. We also noted whether the course is unique to the grade span (elementary or secondary).

Standard 21: Special Education

Score	Criteria
4	The foundations of special education have the potential to be addressed coherently because they are addressed in no more than two courses, each of which is unique to the elementary or secondary certification program.
2	The foundations of special education is taught in too disparate a manner, addressed in more than two courses, each of which is unique to the elementary or secondary program. OR The foundations of special education are addressed in no more than two courses, but at least one is not tailored to a particular grade span (elementary or secondary).

7 U.S. Department of Education, National Center for Education Statistics (2010). *Digest of Education Statistics*, 2009 (NCES 2010-013), Table 50. (http://nces.ed.gov/fastfacts/display.asp?id=64)

8 U.S. Department of Education, National Center for Education Statistics. (2010). *The Digest of Education Statistics* 2009 (NCES 2009-013), Table 51. (http://nces.ed.gov/fastfacts/display.asp?id=59)

9 AERA Panel on Research and Teacher Education (2005), Studying teacher education: the report of the AERA Panel on Research and Teacher Education. *Psychology Press*, p. 566.

0	Teacher candidates receive no instruction in the foundations of special education. OR The foundations of special education is taught in too disparate a manner, addressed in more than two courses, and at least one is not tailored to a grade span.

FINDINGS

The greatest share of programs that we reviewed partially met the standard, with the failure rate the highest in graduate secondary preparation programs (18 percent). Although numerous undergraduate programs reviewed had grade span-specific coursework, **Eastern Illinois University**, **Millikin University** and **Northwestern University** among them, only two graduate programs reviewed had grade span-specific special education coursework.

As in the case of classroom management, there were three common weaknesses in design:

- Five programs did not address this topic at all.
- Two programs addressed the topic in too many courses.
- Fifty programs did not tailor their coursework on this topic to a specific grade span.

Rationalizations for the lack of grade span-specificity of special education courses were commonly provided by programs. For example, **Northeastern Illinois University** defended the K-12 coverage of its special education coursework, indicating that elementary teachers need to understand their students' differences and similarities "after having worked with them."

NCTQ STANDARD 21.
The institution provides an orientation to special education targeted to the grade levels at which the candidate intends to teach.

This standard does not apply to special education teacher preparation programs.

● Programs Meet Standard	Columbia College (UG-EC), Dominican University (UG-EC), Kendall College (UG-EC), Aurora University (UG-ELEM), Bradley University (UG-ELEM), Chicago State University (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Lewis University (UG-ELEM), Loyola University Chicago (UG-ELEM), Millikin University (UG-ELEM), National-Louis University (UG-ELEM), Principia College (UG-ELEM), Quincy University (UG-ELEM), Roosevelt University (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), Wheaton College (UG-ELEM), Eastern Illinois University (UG-SEC), Illinois State University (UG-SEC), Loyola University Chicago (UG-SEC), Millikin University (UG-SEC), Northwestern University (UG-SEC), Principia College (UG-SEC), Dominican University (GR-EC), Erikson Institute (GR-EC), Greenville College (GR-ELEM), The University of Chicago (GR-ELEM), Trinity International University (GR-ELEM), University of St. Francis (GR-ELEM), Illinois Institute of Technology (GR-SEC), University of Illinois at Urbana-Champaign (GR-SEC)
◑ Programs Partly Meet Standard	Augustana College (UG-ELEM), Blackburn College (UG-ELEM), Concordia University Chicago (UG-ELEM), DePaul University (UG-ELEM), Elmhurst College (UG-ELEM), Eureka College (UG-ELEM), Governors State University (UG-ELEM), Greenville College (UG-ELEM), Illinois College (UG-ELEM), Illinois State University (UG-ELEM), Judson University (UG-ELEM), Knox College (UG-ELEM), Lake Forest College (UG-ELEM), MacMurray College (UG-ELEM), McKendree University (UG-ELEM), Monmouth College (UG-ELEM), North Central College (UG-ELEM), North Park University (UG-ELEM), Northeastern Illinois University (UG-ELEM), Northern Illinois University (UG-ELEM), Rockford College (UG-ELEM), St. Xavier University (UG-ELEM),
	Trinity Christian College (UG-ELEM), Trinity International University (UG-ELEM), University of Illinois Springfield (UG-ELEM), University of St. Francis (UG-ELEM), Western Illinois University (UG-ELEM), Augustana College (UG-SEC), Eureka College (UG-SEC), Greenville College (UG-SEC), Judson University (UG-SEC), Knox College (UG-SEC), Lake Forest College (UG-SEC), McKendree University (UG-SEC), University of Illinois Springfield (UG-SEC), DePaul University (GR-EC), Chicago State University (GR-ELEM), Loyola University Chicago (GR-ELEM), National-Louis University (GR-ELEM), Rockford College (GR-ELEM), Roosevelt University (GR-ELEM), St. Xavier University (GR-ELEM), Chicago State University (GR-SEC), Loyola University Chicago (GR-SEC), National-Louis University (GR-SEC), Roosevelt University (GR-SEC), St. Xavier University (GR-SEC)
○ Programs Do Not Meet Standard	Eastern Illinois University (UG-ELEM), Benedictine University (GR-ELEM), Lewis University (GR-ELEM), Concordia University Chicago (GR-SEC)
? Programs Whose Performance Cannot be Determined	Olivet Nazarene University (UG-ELEM), Northern Illinois University (GR-ELEM), Olivet Nazarene University (GR-ELEM), Olivet Nazarene University (GR-SEC)

STANDARD 22:
The institution offers an efficient program of study, as indicated by the required credit hours needed for completion

RATIONALE

Professional coursework should be sufficient to prepare the teacher for a challenging career but should not require so much time that teachers cannot take other classes. Excessive professional coursework discourages talented individuals from pursuing teacher preparation—and public school teaching.

Illinois does not monitor the number of credit hours that preparation programs require to ensure efficient delivery of content to teacher candidates. The state relies on a standards-based approach to coursework specifications, which requires that programs commit only to teaching state standards in return for approval.

ELEMENTARY TEACHER PREPARATION

By identifying the following necessary topics, we established that 51 semester hours of professional coursework more than reasonably accommodates preparation of elementary teacher candidates.

- Reading pedagogy[10]
- Methods coursework (involving field work) covering mathematics, science, social studies and language arts/writing in some combination, with the use of technology in instruction and instruction for English language learners addressed in conjunction with subject-specific pedagogy coursework
- Child development
- Classroom management
- Assessment
- Teaching diverse learners, especially the foundations of special education, and teaching student with special needs
- Education policy challenges
- Student teaching

It is also important to note that it is not necessarily the case that each topic needs its own three-semester-hour course (with the exception of reading pedagogy, which requires six semester hours, and methods coursework, including mathematics methods, requiring 9 to 12 semester hours). Even if each topic were addressed in a three-semester-hour course, the coursework would entail only 33 semester hours.

SECONDARY TEACHER PREPARATION

By identifying the following necessary topics, we established that 30 semester hours of professional coursework more than reasonably accommodates preparation of secondary teacher candidates:

- Subject-specific methods coursework (including field work), with the use of technology in instruction and instruction for English language learners addressed in conjunction with this coursework
- Reading across the content areas

10 One course in the fundamentals of effective reading instruction and one course in how to assess and provide effective remediation strategies for struggling readers.

- Adolescent development
- Classroom management
- Assessment
- Teaching diverse learners, especially the foundations of special education, and teaching student with special needs
- Education policy challenges
- Student teaching

It is also important to note that it is not necessarily the case that each topic needs its own three-semester-hour course. Even if each topic were addressed in a three-semester-hour course, the coursework would entail only 21 semester hours.

SPECIAL EDUCATION TEACHER PREPARATION

Fifty-seven semester hours of professional coursework more than reasonably accommodates preparation of special education teacher candidates with room to spare by 1) assuming that either the same coursework required for elementary teacher preparation would be required for special education teacher preparation (e.g., reading pedagogy courses), or that analog coursework would be required (e.g., subject-specific instructional design courses substituting for subject-specific methods courses); and 2) adding another six semester hours to the 18-hour "cushion" already provided in the case of the elementary program.[11]

METHODOLOGY

We counted the semester hours of required professional coursework in each preparation program. Because many programs do not provide an accurate accounting of student teaching (making it a 3-6 semester-hour course, rather than the 12-hour course it really is), semester hours for student teaching or any associated seminar were not included.

Standard 22: Special Education

Score	Criteria
4	Required professional coursework (not including student teaching or a student teaching seminar) totals 51 or fewer semester hours in an elementary program, 30 or fewer semester hours in a secondary program or 57 or fewer semester hours in a special education program.
2	Required professional coursework (not including student teaching or a student teaching seminar) totals 52-57 semester hours in an elementary program, 31-33 semester hours in a secondary program or 58-63 semester hours in a special education program.
0	The program's professional coursework requirement is over 57 semester hours in an elementary program, 33 semester hours in a secondary program or 63 semester hours in a special education program.

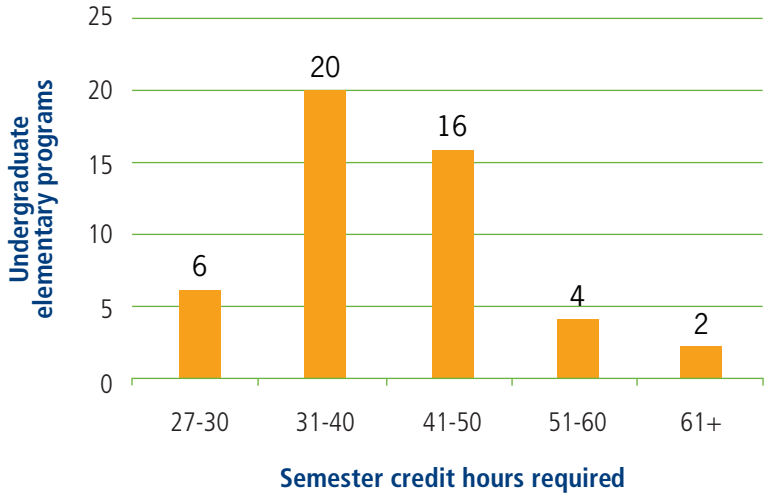
11 Since about one-third of undergraduate special education programs have coursework requirements that fall below this suggested upper-limit, the so-called "Corey H." regulations promulgated after litigation on the subject of the adequacy of preparation of special education teachers do not appear to conflict with this standard.

FINDINGS

"Professional coursework creep," the tendency for professional coursework requirements to grow to constitute as much as found in two majors, is not uncommon in teacher preparation programs nationwide, but—commendably—seems rare among the Illinois programs we reviewed. The one exception is undergraduate special education programs, of which fully a third fail our standard because they exceed a generous level of 63 semester hours (21 courses), and another third only partially meet it because they require between 58 and 63 credit hours.

There does appear to be a considerable variation in professional coursework requirements within program type, however. For example, the graphic below shows the variation in coursework requirements among undergraduate elementary programs, with the 65 credit hours required at **Kendall College** being the largest in our evaluation.

What is the right amount of education coursework?



Illinois institutions do not seem to have reached any consensus about how much education coursework is needed to prepare an elementary teacher, with coursework ranging from 27 credit hours to over 60 credit hours.

While we are not advocating lock-step preparation and standardized coursework requirements, the range in the coursework required for programs that are preparing candidates who arrive with the same background and exit to the same types of jobs is too large to be justified by the variations that should be the prerogative of each institution.

NCTQ STANDARD 22.
The institution offers an efficient program of study, as indicated by the required credit hours needed for completion.

● Programs Meet Standard	Columbia College (UG-EC), Dominican University (UG-EC), Augustana College (UG-ELEM), Aurora University (UG-ELEM), Blackburn College (UG-ELEM), Chicago State University (UG-ELEM), Concordia University Chicago (UG-ELEM), DePaul University (UG-ELEM), Eastern Illinois University (UG-ELEM), Elmhurst College (UG-ELEM), Eureka College (UG-ELEM), Governors State University (UG-ELEM), Greenville College (UG-ELEM), Illinois College (UG-ELEM), Illinois State University (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Judson University (UG-ELEM), Knox College (UG-ELEM), Lake Forest College (UG-ELEM), Lewis University (UG-ELEM), Loyola University Chicago (UG-ELEM), MacMurray College (UG-ELEM), McKendree University (UG-ELEM), Millikin University (UG-ELEM), Monmouth College (UG-ELEM), North Central College (UG-ELEM), North Park University (UG-ELEM), Northeastern Illinois University (UG-ELEM), Olivet Nazarene University (UG-ELEM), Quincy University (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), St. Xavier University (UG-ELEM), Trinity Christian College (UG-ELEM), Trinity International University (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), University of Illinois Springfield (UG-ELEM), University of St. Francis (UG-ELEM), Wheaton College (UG-ELEM), Augustana College (UG-SEC), Eastern Illinois University (UG-SEC), Eureka College (UG-SEC), Illinois State University (UG-SEC), Judson University (UG-SEC), Loyola University Chicago (UG-SEC), McKendree University (UG-SEC), Millikin University (UG-SEC), Northwestern University (UG-SEC), University of Illinois Springfield (UG-SEC), Illinois State University (UG-SPED), Lewis University (UG-SPED), Northeastern Illinois University (UG-SPED),
	Southern Illinois University Edwardsville (UG-SPED), Trinity Christian College (UG-SPED), DePaul University (GR-EC), Dominican University (GR-EC), Erikson Institute (GR-EC), Benedictine University (GR-ELEM), Chicago State University (GR-ELEM), Greenville College (GR-ELEM), Lewis University (GR-ELEM), Loyola University Chicago (GR-ELEM), National-Louis University (GR-ELEM), Northern Illinois University (GR-ELEM), Olivet Nazarene University (GR-ELEM), Rockford College (GR-ELEM), Roosevelt University (GR-ELEM), St. Xavier University (GR-ELEM), The University of Chicago (GR-ELEM), Trinity International University (GR-ELEM), University of St. Francis (GR-ELEM), Chicago State University (GR-SEC), Concordia University Chicago (GR-SEC), Illinois Institute of Technology (GR-SEC), Loyola University Chicago (GR-SEC), National-Louis University (GR-SEC), Olivet Nazarene University (GR-SEC), Roosevelt University (GR-SEC), St. Xavier University (GR-SEC), University of Illinois at Urbana-Champaign (GR-SEC), Benedictine University (GR-SPED), Chicago State University (GR-SPED), Dominican University (GR-SPED), Governors State University (GR-SPED), National-Louis University (GR-SPED), Northeastern Illinois University (GR-SPED), Northern Illinois University (GR-SPED), University of Illinois at Chicago (GR-SPED)
◑ Programs Partly Meet Standard	Bradley University (UG-ELEM), National-Louis University (UG-ELEM), Western Illinois University (UG-ELEM), Greenville College (UG-SEC), Knox College (UG-SEC), Concordia University Chicago (UG-SPED), MacMurray College (UG-SPED), Southern Illinois University Carbondale (UG-SPED), University of St. Francis (UG-SPED), University of Illinois at Urbana-Champaign (GR-SPED)
○ Programs Do Not Meet Standard	Kendall College (UG-EC), Northern Illinois University (UG-ELEM), Principia College (UG-ELEM), Lake Forest College (UG-SEC), Principia College (UG-SEC), Bradley University (UG-SPED), Eastern Illinois University (UG-SPED), Elmhurst College (UG-SPED), Northern Illinois University (UG-SPED), Western Illinois University (UG-SPED)

STANDARD 23:
The institution offers all required courses at least once each year to make it possible to complete the program in a timely fashion

RATIONALE

As may be evident, the coursework requirements associated with an education certification program are not trivial. Completing these extensive requirements becomes quite difficult if courses are not offered at least once a year. This not only makes it more difficult to complete a program, it also may be a disincentive for the most capable and ambitious individuals to consider teaching as a profession.

METHODOLOGY

In evaluating Illinois' teacher preparation programs, we looked for evidence in course schedules to see if each and every required course in any given preparation program was offered at least once in a recent fall and spring academic term in order to determine if it is possible to complete the full program in a timely fashion.

Standard 23: Course Frequency

Score	Criteria
4	Each required course is available at least once in an academic year (not including any summer session).
0	One or more courses are unavailable in an academic year (not including any summer session).

FINDINGS

With the exception of three undergraduate elementary programs, all Illinois programs offer coursework with sufficient frequency, meeting our standard.

NCTQ STANDARD 23.
The institution offers all required courses at least once each year to make it possible to complete the program in a timely fashion.

● Programs Meet Standard	Columbia College (UG-EC), Dominican University (UG-EC), Kendall College (UG-EC), Augustana College (UG-ELEM), Aurora University (UG-ELEM), Blackburn College (UG-ELEM), Bradley University (UG-ELEM), Chicago State University (UG-ELEM), Concordia University Chicago (UG-ELEM), DePaul University (UG-ELEM), Eastern Illinois University (UG-ELEM), Elmhurst College (UG-ELEM), Eureka College (UG-ELEM), Greenville College (UG-ELEM), Illinois College (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Judson University (UG-ELEM), Knox College (UG-ELEM), Lake Forest College (UG-ELEM), Lewis University (UG-ELEM), Loyola University Chicago (UG-ELEM), McKendree University (UG-ELEM), Millikin University (UG-ELEM), Monmouth College (UG-ELEM), National-Louis University (UG-ELEM), North Central College (UG-ELEM), North Park University (UG-ELEM), Northeastern Illinois University (UG-ELEM), Northern Illinois University (UG-ELEM), Olivet Nazarene University (UG-ELEM), Principia College (UG-ELEM), Quincy University (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), St. Xavier University (UG-ELEM), Trinity Christian College (UG-ELEM), Trinity International University (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), University of Illinois Springfield (UG-SEC), University of Illinois at Chicago (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), University of Illinois Springfield (UG-ELEM), University of St. Francis (UG-ELEM), Western Illinois University (UG-ELEM), Wheaton College (UG-ELEM), Augustana College (UG-SEC), Eastern Illinois University (UG-SEC), Eureka College (UG-SEC), Greenville College (UG-SEC), Illinois State University (UG-SEC), Judson University (UG-SEC), Knox College (UG-SEC), Lake Forest College (UG-SEC), Loyola University Chicago (UG-SEC), McKendree University (UG-SEC), Millikin University (UG-SEC), Northwestern University (UG-SEC), Principia College (UG-SEC), University of Illinois Springfield (UG-SEC), Bradley University (UG-SPED), Concordia University Chicago (UG-SPED), Eastern Illinois University (UG-SPED), Elmhurst College (UG-SPED), Illinois State University (UG-SPED), Lewis University (UG-SPED), MacMurray College (UG-SPED), Northeastern Illinois University (UG-SPED), Northern Illinois University (UG-SPED), Southern Illinois University Carbondale (UG-SPED), Southern Illinois University Edwardsville (UG-SPED), Trinity Christian College (UG-SPED), University of St. Francis (UG-SPED), Western Illinois University (UG-SPED), DePaul University (GR-EC), Dominican University (GR-EC), Erikson Institute (GR-EC), Benedictine University (GR-ELEM), Chicago State University (GR-ELEM), Lewis University (GR-ELEM), Loyola University Chicago (GR-ELEM), National-Louis University (GR-ELEM), Northern Illinois University (GR-ELEM), Olivet Nazarene University (GR-ELEM), Rockford College (GR-ELEM), Roosevelt University (GR-ELEM), St. Xavier University (GR-ELEM), The University of Chicago (GR-ELEM), Trinity International University (GR-ELEM), University of St. Francis (GR-ELEM), Chicago State University (GR-SEC), Concordia University Chicago (GR-SEC), Illinois Institute of Technology (GR-SEC), Loyola University Chicago (GR-SEC), National-Louis University (GR-SEC), Olivet Nazarene University (GR-SEC), Roosevelt University (GR-SEC), St. Xavier University (GR-SEC), University of Illinois at Urbana-Champaign (GR-SEC), Benedictine University (GR-SPED), Chicago State University (GR-SPED), Dominican University (GR-SPED), Governors State University (GR-SPED), National-Louis University (GR-SPED), Northeastern Illinois University (GR-SPED), Northern Illinois University (GR-SPED), University of Illinois at Chicago (GR-SPED), University of Illinois at Urbana-Champaign (GR-SPED)
○ Programs Do Not Meet Standard	Governors State University (UG-ELEM), Illinois State University (UG-ELEM), MacMurray College (UG-ELEM)
? Programs Whose Performance Cannot be Determined	Greenville College (GR-ELEM)

SECTION 6:
Standards on Program Evaluation

The significance of the standards in this area is greater than is conveyed by the fact that there are only two standards (as compared, for example, to the six in the area of professional preparation), and they don't figure heavily in our calculations of program grades. In this sense, they mirror the historic lack of prominence of data-driven program evaluation in teacher preparation itself. However, long overdue changes in stakeholder expectations and regulations will soon ensure that data on teacher performance and student performance—the latter category of data being the type that should count most—will be collected and shared to drive teacher preparation program improvement. With these changes taking hold, our standards in this area will soon assume a different magnitude in our evaluations.

STANDARD 24:
The institution tracks graduate outcomes such as employment and retention.

STANDARD 25:
The institution fully utilizes any available data provided by the state or school districts to measure the effectiveness of its graduates in order to make program improvements.

RATIONALE

Mirroring a similar commitment now found in K-12 education, higher education institutions must embrace data-driven decision making and accountability by tracking the performance of their graduates. In states such as Louisiana, Tennessee and Florida, state education agencies are developing this capacity through their longitudinal data systems and have begun to provide teacher preparation programs with the results. The most sophisticated use of such data is to measure the performance of the students taught by an institution's graduates relative to the performance of students taught by the graduates of other institutions in the state.

In Illinois, the state-level capacity to conduct this sort of analysis is still limited. Illinois does not have a state data system that can be used to provide evidence of teacher effectiveness. While it has assigned unique teacher identifiers and unique student identifiers that connect student data across key databases across years, and it has the capacity to match student test records from year to year to measure student academic growth, it cannot match individual teacher records with individual student records.

Nevertheless, teacher preparation programs can and should attempt to undertake less complex tracking systems and collect information on the performance of their graduates from hiring school districts using such resources as the Illinois Teacher Data Warehouse and the Consortium on Chicago School Research. Follow-up surveys of program graduates that provide self-assessments of the effectiveness of preparation are important but insufficient; school district personnel who hire program graduates are critical sources of feedback.

METHODOLOGY

Institutions were asked to provide information on the nature of data they obtained from hiring school districts on the performance of their graduates and their graduates' students.

For each program, NCTQ also surveyed personnel in hiring school districts. Using a very simple questionnaire sent to the superintendents of two districts that identified themselves as hiring from particular institutions, we asked whether programs sought out and received data from the hiring district(s) on 1) the job performance of graduates and 2) the performance of graduates' students.

The rating was based on documents substantiating data collection that were provided by the institution. If no such documents were provided, survey information was used.

Standard 24: Graduate outcomes

Score	Criteria	Special considerations
4	The institution collects information from school districts on its graduates (e.g., retention rates and evaluations).	Institutions may collect this information directly from databases, or in other ways that do not require that they request information from school districts.
3	The institution collects limited information from school districts on its graduates (e.g., retention rates or evaluations).	
2	The institution surveys its graduates regularly about their retention rate and performance and follows them for many years after they graduate	
1	The institution surveys its graduates sporadically .	
0	The institution does not systematically collect any information on its graduates.	

Standard 25: Graduates' effectiveness

Score	Criteria	Special considerations
4	The institution collects information from school districts on its graduates' students (e.g., test scores).	Institutions may collect this information directly from databases, or in other ways that do not require that they request information from school districts.
0	The institution does not systematically collect any information on its graduates' students (e.g., test scores).	

FINDINGS

Our evaluation of Illinois institutions indicates the following:

- All 12 of the public institutions obtain much of the information they should on what supervisors report about graduates' job performance (Standard 24). They also participate in a survey operated by **Eastern Illinois University** as an outgrowth of the state's Teacher Data Warehouse, providing feedback from hiring districts on their graduates' job performance one year into their teaching careers.

- Only two private institutions (**Illinois Wesleyan University** and **National-Louis University**) participate in the same employer survey as the 12 publics.
- Twenty private institutions report that they use "other means" to survey employers on their graduates' job retention and performance.
- Thirteen education schools, all private, do not appear to be collecting any information.
- The practices of five schools were unclear.

In terms of obtaining data on their graduates' effectiveness, the story is different: There is little utilization of output information (Standard 25). Part of the reason is that, unlike ground-breaking states like Louisiana, Illinois has not created the data systems that provide teacher preparation programs with the information they need. In view of the fact that the state has not provided education schools with a mechanism by which to obtain data on their graduates' effectiveness, it is not fair to hold the education schools fully accountable on this standard. *For that reason, we provided a rating for education schools on the standard, but did not include the rating when calculating overall grades for any program.*

That is not the end of the story, however. Acknowledging that the state has not provided a mechanism for institutions to obtain the data the education schools claim to want in this area, it is noteworthy that two education schools have managed to obtain some data.

The University of Chicago has shown great initiative to develop a means that could be replicated by other Chicago-area institutions to use student performance data from the Consortium on Chicago School Research. The education school makes the necessary connections between teachers and their students by requiring that teacher candidates sign data-release forms upon applying to the program and collecting graduates' school unit and room numbers after they begin teaching.

In an entirely different approach, but one that might be used by other Illinois institutions, **Aurora College** examines publicly available student performance data from three local school districts to pinpoint data about graduates who are teaching the only classes at particular grade levels.

NCTQ STANDARD 24.
The institution tracks graduate outcomes such as employment and retention.

● Programs Meet Standard	Aurora University (UG-ELEM), Bradley University (UG-ELEM), Chicago State University (UG-ELEM), DePaul University (UG-ELEM), Eastern Illinois University (UG-ELEM), Eureka College (UG-ELEM), Governors State University (UG-ELEM), Greenville College (UG-ELEM), Illinois State University (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Judson University (UG-ELEM), Lewis University (UG-ELEM), Loyola University Chicago (UG-ELEM), McKendree University (UG-ELEM), Monmouth College (UG-ELEM), National-Louis University (UG-ELEM), North Central College (UG-ELEM), Northeastern Illinois University (UG-ELEM), Northern Illinois University (UG-ELEM), Principia College (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), St. Xavier University (UG-ELEM), Trinity Christian College (UG-ELEM), Trinity International University (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), University of Illinois Springfield (UG-ELEM), University of St. Francis (UG-ELEM), Western Illinois University (UG-ELEM), Wheaton College (UG-ELEM), Eastern Illinois University (UG-SEC), Eureka College (UG-SEC), Greenville College (UG-SEC), Illinois State University (UG-SEC), Judson University (UG-SEC), Loyola University Chicago (UG-SEC), McKendree University (UG-SEC), Northwestern University (UG-SEC), Principia College (UG-SEC), University of Illinois Springfield (UG-SEC), Bradley University (UG-SPED), Eastern Illinois University (UG-SPED), Illinois State University (UG-SPED), Lewis University (UG-SPED), Northeastern Illinois University (UG-SPED), Northern Illinois University (UG-SPED), Southern Illinois University Carbondale (UG-SPED), Southern Illinois University Edwardsville (UG-SPED), Trinity Christian College (UG-SPED), University of St. Francis (UG-SPED), Western Illinois University (UG-SPED),
	DePaul University (GR-EC), Chicago State University (GR-ELEM), Greenville College (GR-ELEM), Lewis University (GR-ELEM), Loyola University Chicago (GR-ELEM), National-Louis University (GR-ELEM), Northern Illinois University (GR-ELEM), Rockford College (GR-ELEM), Roosevelt University (GR-ELEM), St. Xavier University (GR-ELEM), The University of Chicago (GR-ELEM), Trinity International University (GR-ELEM), University of St. Francis (GR-ELEM), Chicago State University (GR-SEC), Illinois Institute of Technology (GR-SEC), Loyola University Chicago (GR-SEC), National-Louis University (GR-SEC), Roosevelt University (GR-SEC), St. Xavier University (GR-SEC), University of Illinois at Urbana-Champaign (GR-SEC), Chicago State University (GR-SPED), Governors State University (GR-SPED), National-Louis University (GR-SPED), Northeastern Illinois University (GR-SPED), Northern Illinois University (GR-SPED), University of Illinois at Chicago (GR-SPED), University of Illinois at Urbana-Champaign (GR-SPED)
◑ Programs Partly Meet Standard	Augustana College (UG-ELEM), Blackburn College (UG-ELEM), Illinois College (UG-ELEM), Knox College (UG-ELEM), Lake Forest College (UG-ELEM), MacMurray College (UG-ELEM), Millikin University (UG-ELEM), North Park University (UG-ELEM), Quincy University (UG-ELEM), Augustana College (UG-SEC), Knox College (UG-SEC), Lake Forest College (UG-SEC), Millikin University (UG-SEC), MacMurray College (UG-SPED)
○ Programs Do Not Meet Standard	Dominican University (UG-EC), Concordia University Chicago (UG-ELEM), Elmhurst College (UG-ELEM), Concordia University Chicago (UG-SPED), Elmhurst College (UG-SPED), Dominican University (GR-EC), Erikson Institute (GR-EC), Concordia University Chicago (GR-SEC), Dominican University (GR-SPED)
? Programs Whose Performance Cannot be Determined	Columbia College (UG-EC), Kendall College (UG-EC), Olivet Nazarene University (UG-ELEM), Benedictine University (GR-ELEM), Olivet Nazarene University (GR-ELEM), Olivet Nazarene University (GR-SEC), Benedictine University (GR-SPED)

How Illinois teacher preparation programs fare on this standard

NCTQ STANDARD 25.
The institution fully utilizes any available data provided by the state or school districts to measure the effectiveness of its graduates in order to make program improvements.

★ Programs with Strong Design	**Aurora University (UG-ELEM), The University of Chicago (GR-ELEM)**
○ Programs Do Not Meet Standard	Columbia College (UG-EC), Dominican University (UG-EC), Kendall College (UG-EC), Augustana College (UG-ELEM), Blackburn College (UG-ELEM), Bradley University (UG-ELEM), Chicago State University (UG-ELEM), Concordia University Chicago (UG-ELEM), DePaul University (UG-ELEM), Eastern Illinois University (UG-ELEM), Elmhurst College (UG-ELEM), Eureka College (UG-ELEM), Governors State University (UG-ELEM), Greenville College (UG-ELEM), Illinois College (UG-ELEM), Illinois State University (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Judson University (UG-ELEM), Knox College (UG-ELEM), Lake Forest College (UG-ELEM), Lewis University (UG-ELEM), Loyola University Chicago (UG-ELEM), MacMurray College (UG-ELEM), McKendree University (UG-ELEM), Millikin University (UG-ELEM), Monmouth College (UG-ELEM), National-Louis University (UG-ELEM), North Central College (UG-ELEM), North Park University (UG-ELEM), Northeastern Illinois University (UG-ELEM), Northern Illinois University (UG-ELEM), Olivet Nazarene University (UG-ELEM), Principia College (UG-ELEM), Quincy University (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), St. Xavier University (UG-ELEM), Trinity Christian College (UG-ELEM), Trinity International University (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), University of Illinois Springfield (UG-ELEM), University of St. Francis (UG-ELEM), Western Illinois University (UG-ELEM), Wheaton College (UG-ELEM), Augustana College (UG-SEC), Eastern Illinois University (UG-SEC), Eureka College (UG-SEC), Greenville College (UG-SEC), Illinois State University (UG-SEC), Judson University (UG-SEC), Knox College (UG-SEC), Lake Forest College (UG-SEC), Loyola University Chicago (UG-SEC), McKendree University (UG-SEC), Millikin University (UG-SEC), Northwestern University (UG-SEC), Principia College (UG-SEC), University of Illinois Springfield (UG-SEC), Bradley University (UG-SPED), Concordia University Chicago (UG-SPED), Eastern Illinois University (UG-SPED), Elmhurst College (UG-SPED), Illinois State University (UG-SPED), Lewis University (UG-SPED), MacMurray College (UG-SPED), Northeastern Illinois University (UG-SPED), Northern Illinois University (UG-SPED), Southern Illinois University Carbondale (UG-SPED), Southern Illinois University Edwardsville (UG-SPED), Trinity Christian College (UG-SPED), University of St. Francis (UG-SPED), Western Illinois University (UG-SPED), DePaul University (GR-EC), Dominican University (GR-EC), Erikson Institute (GR-EC), Benedictine University (GR-ELEM), Chicago State University (GR-ELEM), Greenville College (GR-ELEM), Lewis University (GR-ELEM), Loyola University Chicago (GR-ELEM), National-Louis University (GR-ELEM), Northern Illinois University (GR-ELEM), Olivet Nazarene University (GR-ELEM), Rockford College (GR-ELEM), Roosevelt University (GR-ELEM), St. Xavier University (GR-ELEM), Trinity International University (GR-ELEM), University of St. Francis (GR-ELEM), Chicago State University (GR-SEC), Concordia University Chicago (GR-SEC), Illinois Institute of Technology (GR-SEC), Loyola University Chicago (GR-SEC), National-Louis University (GR-SEC), Olivet Nazarene University (GR-SEC), Roosevelt University (GR-SEC), St. Xavier University (GR-SEC), University of Illinois at Urbana-Champaign (GR-SEC), Benedictine University (GR-SPED), Chicago State University (GR-SPED), Dominican University (GR-SPED), Governors State University (GR-SPED), National-Louis University (GR-SPED), Northeastern Illinois University (GR-SPED), Northern Illinois University (GR-SPED), University of Illinois at Chicago (GR-SPED), University of Illinois at Urbana-Champaign (GR-SPED)

SECTION 7:
Standard on Faculty

As with our program evaluation standards, the significance for program design of the characteristics of the faculty involved in teacher preparation is not conveyed by this sole standard. Comprehensive evaluation of these instructors may be featured in future reviews.

STANDARD 26:
The institution mirrors the scholarship practiced in other fields by not expecting faculty members to teach multiple disparate disciplines.

RATIONALE

The depth of professional knowledge expected of those who teach college courses generally precludes any one person from being qualified to teach a wide range of disparate topics.

Programs that assign faculty to teach outside of individuals' areas of expertise serve neither their students nor their instructors well. It is certainly possible for an elementary practitioner to be an excellent instructor in a variety of subjects, and student teaching and other field placements should be designed to expose the prospective teacher to such practitioners. Coursework, however, is another matter. It is highly unlikely that any one individual would have the specialized professional background that would equip them to teach, for example, both reading and mathematics pedagogy or both the foundations of education and educational psychology in an elementary preparation program in a rigorous, research-based manner. With rare exceptions, having one person teach multiple, specialized topics is apt to do a disservice to preparation in at least one, if not all, of the subjects addressed.

METHODOLOGY

In our evaluation of programs, we examined teaching responsibilities for all faculty members, as indicated by course assignments in course schedules, excluding all clinical coursework. Two specific examples of inappropriate assignments were highlighted: 1) an instructor teaching across the areas of foundations of education, methods and educational psychology; and/or 2) an instructor who teaches both reading and mathematics methods courses. Other inappropriate assignments may well be made but were not included in our review.

Standard 26: Faculty expertise

Score	Criteria
4	No instructor is assigned to teach coursework in more than one of the following areas: foundations of education, methods, educational psychology. AND No instructor teaches both reading and mathematics methods courses.
0	One or more instructors are assigned to teach coursework in more than one of the following areas: foundations of education, methods, educational psychology. OR One or more instructors teach both reading and mathematics methods courses.

FINDINGS

Given the fact that this standard captures only the most egregious combinations of teaching assignments (ones that have faculty of non-clinical coursework teaching in multiple areas that are distinguished as distinct fields of professional expertise in all graduate education programs), the fact that fully a quarter of programs failed to meet the standard is notable.

Even more notable are the rationalizations provided for these disparate assignments. For example, one individual at **National-Louis University** has taught "The History and Philosophy of Education," "Human Learning and Development," "Teaching at the Secondary Level" and "Teaching Biology." **National-Louis University** did not provide evidence that this individual had the professional credentials to teach these disparate topics, or even think that relevant, but indicated that it had deliberately recruited individuals who "started out teaching in another field" and assigned them courses across a range of disciplines in order to "monitor candidates' preparation in areas besides contents and methods."

NCTQ STANDARD 26.

The institution mirrors the scholarship practiced in other fields by not expecting faculty members to teach multiple disparate disciplines.

● Programs Meet Standard	Columbia College (UG-EC), Dominican University (UG-EC), Augustana College (UG-ELEM), Aurora University (UG-ELEM), Blackburn College (UG-ELEM), Bradley University (UG-ELEM), Chicago State University (UG-ELEM), DePaul University (UG-ELEM), Eastern Illinois University (UG-ELEM), Elmhurst College (UG-ELEM), Governors State University (UG-ELEM), Greenville College (UG-ELEM), Illinois College (UG-ELEM), Illinois State University (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Knox College (UG-ELEM), Lake Forest College (UG-ELEM), Loyola University Chicago (UG-ELEM), North Central College (UG-ELEM), North Park University (UG-ELEM), Northeastern Illinois University (UG-ELEM), Northern Illinois University (UG-ELEM), Principia College (UG-ELEM), Quincy University (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), Trinity International University (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), University of Illinois Springfield (UG-ELEM), University of St. Francis (UG-ELEM), Western Illinois University (UG-ELEM), Wheaton College (UG-ELEM), Augustana College (UG-SEC), Eastern Illinois University (UG-SEC), Greenville College (UG-SEC), Illinois State University (UG-SEC), Knox College (UG-SEC), Lake Forest College (UG-SEC), Loyola University Chicago (UG-SEC), Northwestern University (UG-SEC), Principia College (UG-SEC), University of Illinois Springfield (UG-SEC), Bradley University (UG-SPED), Eastern Illinois University (UG-SPED), Elmhurst College (UG-SPED), Illinois State University (UG-SPED), Northeastern Illinois University (UG-SPED), Northern Illinois University (UG-SPED), Southern Illinois University Carbondale (UG-SPED), University of St. Francis (UG-SPED), Western Illinois University (UG-SPED), DePaul University (GR-EC), Dominican University (GR-EC), Benedictine University (GR-ELEM), Chicago State University (GR-ELEM), Greenville College (GR-ELEM), Loyola University Chicago (GR-ELEM), Northern Illinois University (GR-ELEM), Rockford College (GR-ELEM), Roosevelt University (GR-ELEM), The University of Chicago (GR-ELEM), Trinity International University (GR-ELEM), University of St. Francis (GR-ELEM), Chicago State University (GR-SEC), Illinois Institute of Technology (GR-SEC), Loyola University Chicago (GR-SEC), Roosevelt University (GR-SEC), University of Illinois at Urbana-Champaign (GR-SEC), Benedictine University (GR-SPED), Chicago State University (GR-SPED), Dominican University (GR-SPED), Governors State University (GR-SPED), Northeastern Illinois University (GR-SPED), Northern Illinois University (GR-SPED), University of Illinois at Chicago (GR-SPED), University of Illinois at Urbana-Champaign (GR-SPED)
○ Programs Do Not Meet Standard	Concordia University Chicago (UG-ELEM), Eureka College (UG-ELEM), Judson University (UG-ELEM), Lewis University (UG-ELEM), MacMurray College (UG-ELEM), McKendree University (UG-ELEM), Millikin University (UG-ELEM), Monmouth College (UG-ELEM), National-Louis University (UG-ELEM), Olivet Nazarene University (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), St. Xavier University (UG-ELEM), Trinity Christian College (UG-ELEM), Eureka College (UG-SEC), Judson University (UG-SEC), McKendree University (UG-SEC), Millikin University (UG-SEC), Concordia University Chicago (UG-SPED), Lewis University (UG-SPED), MacMurray College (UG-SPED), Southern Illinois University Edwardsville (UG-SPED), Trinity Christian College (UG-SPED), Lewis University (GR-ELEM), National-Louis University (GR-ELEM), Olivet Nazarene University (GR-ELEM), St. Xavier University (GR-ELEM), Concordia University Chicago (GR-SEC), National-Louis University (GR-SEC), Olivet Nazarene University (GR-SEC), St. Xavier University (GR-SEC), National-Louis University (GR-SPED)
? Programs Whose Performance Cannot be Determined	Kendall College (UG-EC), Erikson Institute (GR-EC)

SECTION 8:
Standards on Preparation Specific to Elementary Teacher Candidates

The six standards in this area cover the "make or break" topics in elementary teacher preparation—how to teach the "three Rs" as well as science and social studies at the more rigorous level required with Illinois' adoption of the Common Core standards. It is in this area of preparation that we know from the experience of **Teach For America** (whose corps members from many of the most elite universities in the country emerge from only five weeks of training to perform at a dead heat compared to other elementary teachers) that even a smart teacher with strong general academic preparation doesn't necessarily know how to teach reading or fractions to small children.

STANDARD 27:
The institution requires that elementary teacher candidates receive a broad liberal arts education appropriately focused on the background knowledge relevant to elementary grades.

Mathematics coursework is not included in this evaluation, since elementary mathematics coursework is evaluated under the mathematics preparation standard (Standard 29), and we do not evaluate the same program feature twice under two different standards.

RATIONALE

This standard begins with a common sense presumption: Teachers cannot teach what they don't know. Elementary teachers must be broadly educated with sufficient knowledge of the content they will need to deliver instruction in language arts, social studies, fine arts and science.

Not only is content understanding important in its own right, but a teacher's capacity to deliver content matters, because students' content understanding improves their reading comprehension, an area in which American students languish.[1]

There is no research that *directly* links a teacher's liberal arts knowledge with student achievement. However, the more a person knows about many different subject areas, the stronger his or her levels of literacy as measured by vocabulary and scores on tests of reading comprehension. It is in this fact that the importance of teachers being broadly educated gains such importance. There is a body of robust research spanning many decades connecting a

1 Willingham, D. T. (2006). How knowledge helps: It speeds and strengthens comprehension, learning—and thinking. *American Educator*, 30(1).

teacher's level of literacy and the achievement of that teacher's students. To simplify these findings to the core, the more broadly educated a teacher is, the stronger that teacher's vocabulary; teachers with strong vocabularies are more likely to be effective in the classroom.[2]

The importance of broad subject matter knowledge has gained even more urgency with the pending arrival of Common Core standards, in which teachers will be asked to teach many more nonfiction topics in the course of schools' literacy blocks.

Although the state does not specify any coursework requirements for general education candidates, Illinois requires completion of 32 semester hours leading to an elementary education major. In addition, Illinois articulates standards that its approved teacher preparation programs must use to frame instruction in elementary content. They address important areas such as U.S., world and children's literature; life and physical sciences; and U.S. and world history. However, the state's standards fail to mention some important areas such as world history, basic chemistry, American government and art history. There appears to be no guarantee that arts and sciences faculty will teach liberal arts classes to teacher candidates or that a test-out option is available for candidates who may already have a strong background in one or more content areas.

METHODOLOGY

In **undergraduate programs**, the evaluation of this standard begins with the identification of all the content coursework that institutions require students to take in order to meet general education requirements and/or education program requirements. Catalog course descriptions are then used to evaluate whether the courses sufficiently focus on the following core subject areas:

- World or American literature
- Writing, grammar and composition
- Children's literature
- American history (two courses)
- World history—ancient or modern
- World cultures, religions w/geography
- Science (two different sciences)

Also desirable:

- Music history
- Art history

2 Ferguson, R., & Ladd, H. (1991). How and why money matters: An analysis of Alabama schools. In H. Ladd (Ed.), *Holding schools accountable* (pp. 265-298). Washington, D.C.: Brookings Institution; Hanushek, E. (1971). Teacher characteristics and gains in student achievement: Estimation using micro-data. *The American Economic Review*, 61(2): 280-288; McLaughlin, M., & Marsh, D. (1978). Staff development and school change. *Teacher College Record*, 80(1): 69-94; Strauss, R., & Sawyer, E., (1986). Some new evidence on teacher and student competencies. *Economics of Education Review*, 5(1), 41-48; Wayne, A., & Youngs, P. (2003). Teacher characteristics and student achievement gains: A review. *Review of Educational Research*, 71(1): 89-122; Winkler, D. (1975). Educational achievement and school peer composition. *Journal of Human Resources*, 10, 189-204.

Programs that are adequately preparing elementary teacher candidates require one course (or ask for some sort of evidence of mastery from the candidate) in each of the key content areas (approximately 27 semester hours of coursework).

When evaluating coursework, determining whether such courses prepare teachers for the knowledge they need in the elementary classroom is the primary consideration. This question is posed: If a teacher candidate who has not demonstrated any mastery of world history, for example, is required to take a particular world history course or is given a choice of several such courses, would each course provide that candidate with a good share of the foundational knowledge that makes it possible to "add value" when a variety of world history topics arise in the elementary classroom? Alternatively, having taken any one of the courses, would the teacher candidate know little to nothing about world history, or little beyond what was available in the state or district's instructional materials and curriculum guides?

All such coursework was evaluated, whether designed for the general audience or only for the teacher audience, although in all but a few cases we endorse teacher candidates receiving content instruction designed for the general audience within the purview of liberal arts departments. In some areas, such as the standards for elementary mathematics preparation, there is some merit in coursework within the purview of liberal arts departments that is designed for teacher candidates.

Some courses were awarded only partial credit because they were too narrowly focused on a specific topic instead of the broader scope needed by elementary teachers. Allowing teacher candidates to select from a menu of course choices could also lower the rating if it meant that they could opt out of coursework that is considered essential or if one of the course selections was deemed inadequate. In other words, an option that allows a candidate to choose one of a number of courses from a menu might result in a lower rating if even one of the courses was too narrow in scope.

Section 15 of this appendix provides examples of the types of courses that received full credit, as well as examples of courses that might fulfill an institution's general education and/or teacher preparation requirements in a particular area such as world history or world geography for which no credit would be given.

In **graduate programs**, we determined if a transcript review process exists and, if so, evaluated its requirements the same way we did for an undergraduate program.

Note that an undergraduate or graduate program's requirements need not be fulfilled solely by college coursework. Any demonstration of content mastery will suffice, including a demonstration through an Advanced Placement examination or any other high school or college-level examination generally accepted as a substitute for college coursework.

Standard 27: Broad subject preparation

Score	Criteria	Special considerations
4	No full deficiencies* were noted in the nine elementary content areas examined.	For **graduate** programs, the transcript review should ensure that these requirements are met. If there is no transcript review process, the program earns a "0." If there is a transcript review process but its standards are unclear, it is assumed that the standards are identical to any analogous program at the UG level and rate accordingly. If no such analogous program exists, the rating is "CBD."
3	One full deficiency was noted in the nine elementary content areas examined.	
2	Two full deficiencies were noted in the nine elementary content areas examined.	
1	Three full deficiencies were noted in the nine elementary content areas examined.	
0	Four or more full deficiencies were noted in the nine elementary content areas examined.	

* The absence of either an art history course OR a music history course counts as only half a course deficiency.

FINDINGS

While Illinois requires that elementary teacher candidates take coursework that addresses content, the vast majority of **undergraduate** (70 percent) and **graduate** (90 percent) elementary programs we evaluated fail to meet this standard. The greatest deficiencies are in world/American literature, music history and art history.

Somewhat ironically, the institutions that had the greatest number of deficiencies were five liberal arts institutions, an outgrowth of the fact that institutions of this type tend to have either fewer general education requirements than other institutions of higher education or allow a wide variety of courses to satisfy their requirements. Nonetheless, there should not be an inherent contradiction in a liberal arts institution ensuring that prospective elementary teachers are well-equipped to teach the K-9 Illinois curriculum. A clear catalog statement to prospective teachers about the required areas of content mastery that must be demonstrated by coursework or testing and the rationale for the requirements could conciliate the liberal arts college's mission with the mission of the teacher preparation program on its campus.

Graduate elementary programs failed because they did not even conduct a review of candidates' undergraduate transcripts to assess broad content preparation (25 percent) or conducted an inadequate review. For example, the **University of Illinois at Chicago** indicated that its transcript review process required one course each in English, mathematics, science (no lab necessary) and social studies. Courses such as business writing or accounting could apparently satisfy, for example, the very general requirement in mathematics.

★ **Trinity Christian College**'s requirements ensure that its elementary teacher candidates are well prepared to teach all aspects of the Illinois K-9 curriculum. While not quite as comprehensive, the **University of Illinois at Urbana-Champaign**'s requirements are also commendable because they illustrate how an education school in an institution with broad guidelines for general education coursework can provide strong direction to teacher candidates about selection of courses, enabling them to best prepare themselves for the classroom as they fulfill those requirements.

How Illinois institutions fare on this standard

NCTQ STANDARD 27.

The institution requires that elementary teacher candidates receive a broad liberal arts education appropriately focused on the background knowledge relevant to elementary grades.

This standard only applies to early childhood and elementary teacher preparation programs.

★ Programs with Strong Design	**Trinity Christian College (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM)**
◕ Programs Nearly Meet Standard	Olivet Nazarene University (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM)
◑ Programs Partly Meet Standard	Southern Illinois University Edwardsville (UG-ELEM), University of St. Francis (UG-ELEM), Western Illinois University (UG-ELEM), University of St. Francis (GR-ELEM)
◔ Programs Meet Small Part of Standard	Judson University (UG-ELEM), Lake Forest College (UG-ELEM), Loyola University Chicago (UG-ELEM), MacMurray College (UG-ELEM), Millikin University (UG-ELEM), Quincy University (UG-ELEM), Wheaton College (UG-ELEM)
○ Programs Do Not Meet Standard	Columbia College (UG-EC), Dominican University (UG-EC), Kendall College (UG-EC), Augustana College (UG-ELEM), Aurora University (UG-ELEM), Blackburn College (UG-ELEM), Bradley University (UG-ELEM), Chicago State University (UG-ELEM), Concordia University Chicago (UG-ELEM), DePaul University (UG-ELEM), Eastern Illinois University (UG-ELEM), Elmhurst College (UG-ELEM), Eureka College (UG-ELEM), Governors State University (UG-ELEM), Greenville College (UG-ELEM), Illinois College (UG-ELEM), Illinois State University (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Knox College (UG-ELEM), Lewis University (UG-ELEM), McKendree University (UG-ELEM), Monmouth College (UG-ELEM), National-Louis University (UG-ELEM), North Central College (UG-ELEM), North Park University (UG-ELEM), Northeastern Illinois University (UG-ELEM), Northern Illinois University (UG-ELEM), Principia College (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), St. Xavier University (UG-ELEM), Trinity International University (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of Illinois Springfield (UG-ELEM), DePaul University (GR-EC), Dominican University (GR-EC), Benedictine University (GR-ELEM), Chicago State University (GR-ELEM), Greenville College (GR-ELEM), Lewis University (GR-ELEM), Loyola University Chicago (GR-ELEM), National-Louis University (GR-ELEM), Northern Illinois University (GR-ELEM), Olivet Nazarene University (GR-ELEM), Rockford College (GR-ELEM), Roosevelt University (GR-ELEM), St. Xavier University (GR-ELEM), The University of Chicago (GR-ELEM) Trinity International University (GR-ELEM),
? Programs Whose Performance Cannot be Determined	Erikson Institute (GR-EC)

STANDARDS 28A:
The institution prepares elementary teacher candidates in the essential components of effective reading instruction.

STANDARD 28B:
The institution ensures that all coursework adheres to the essential components of effective reading instruction.

RATIONALE

A major impediment to serving the needs of children who struggle with reading is current teacher preparation practices. Many teachers lack basic knowledge and understanding of reading development and the nature of reading difficulties. Education schools must commit to fostering the development of the necessary knowledge and skills at the preservice level so that teachers enter the classroom with expertise in this critical area.

America's failure to teach reading to so many children disproportionately affects children who are poor as well as children of color. "Only" 23 percent of White children scored below basic on the 2007 fourth grade NAEP assessment in reading, compared to 54 percent of African American children, 51 percent of Hispanic children and 50 percent of all children living in poverty.

This unacceptable rate of failure has been deemed a public health crisis by the National Institutes of Health (NIH). At 44 different sites with an annual research budget of $60 million, NIH has been studying how children learn how to read for nearly 40 years, with research focusing on nearly 60,000 children and adults.

This massive undertaking has led to a number of breakthroughs that can dramatically reduce the number of children destined to become functionally illiterate or barely literate adults. By routinely applying in the classroom the lessons learned from these scientific findings, *most reading failure could be avoided*. For 90 to 95 percent of poor readers, prevention and early intervention programs that combine instruction in phonemic awareness, phonics and reading comprehension strategies, provided by well trained teachers, can increase reading skills to average reading levels.

Illinois does not require that teacher preparation programs for elementary teacher candidates address effective reading instruction. The state has neither coursework requirements nor standards related to this critical area. Illinois does require that all teacher candidates meet a set of language arts standards; however, these standards do not explicitly require that teachers receive training in the five essential components of reading instruction.

METHODOLOGY

Evidence that the program fully incorporates the scientific findings culminating from NIH's research was sought both in course syllabi and in reviewing each of the required textbooks. When there was any sort of ambiguity, the school was always given the benefit of the doubt and given credit for coverage.

Specifically, in evaluating the training provided by the teacher preparation program, we sought evidence of coverage of the five essential components of reading instruction: phonemic awareness, phonics, fluency, vocabulary and comprehension.

For each of the components, scientific research has identified important principles upon which teacher preparation must focus and which distinguish between programs only paying lip service to the scientific findings and programs where the findings serve as the centerpiece of reading instruction. A few examples (but hardly an exhaustive list) for each component are presented here:[3]

Phonemic awareness.

- Before learning to read, children must understand that words are made of sounds and how these sounds work.
- Children must make explicit an implicit understanding that words have internal structures linked to sounds.
- Children vary considerably in how easily they master this principle.

Phonics.

- Children learn that print represents speech through the alphabet.
- Children are taught that there is a systematic and predictable relationship between the letters of written language and individual sounds (the alphabetic principle). Systematic and explicit phonics instruction is more effective than non-systematic or no phonics instruction, significantly improves reading comprehension and, although effective for children from all social and economic levels, is particularly beneficial for children who are having difficulty learning to read or are at risk for future reading problems.

Fluency.

- Fluency is the bridge between word recognition and comprehension.
- Children need to build speed or rate of reading to become fluent readers.
- Automaticity is the first step toward fluency—accurate, effortless word recognition.
- Fluent readers also read with expression.
- There is no research evidence that instructional time spent on silent, independent reading without guidance or feedback improves fluency or reading achievement.

Vocabulary.

- Children have both an oral and a reading vocabulary.
- To comprehend, a student must know the meanings of 90 to 95 percent of the words being read.
- Although children learn the meanings of most words indirectly, they also need explicit instruction in the meanings of individual words and word learning strategies.

Comprehension.

- Comprehension instruction helps students understand, remember and communicate with others about what they read.
- Effective instruction helps students use comprehension strategies flexibly and in combination.
- Motivation/student engagement improves comprehension.

This research, synthesized by the 2000 report of the National Reading Panel, forms the blueprint for this standard and informs our textbook and syllabi reviews to identify whether a program is providing strong reading instruction.

3 Armbruster, B., Lehr, F., & Osborn, J. (2001). *Put reading first: The research building blocks for teaching children to read.* (Available from National Institute for Literacy at ED Pubs, PO Box 1398, Jessup, MD 20794.)

Standard 28A: Reading instruction, extent

Score	Criteria
4	Coursework covers all five of the components of effective reading instruction: phonemic awareness, phonics, fluency, vocabulary and comprehension strategies.
3	Coursework covers four of the five components of effective reading instruction.
2	Coursework covers three of the five components of effective reading instruction.
1	Coursework covers two of the five components of effective reading instruction.
0	Coursework covers one or none of the five components of effective reading instruction.

A second rating on Standard 28 addresses the efficiency and coherence of an institution's reading courses across all of the required coursework relating to reading instruction. This rating captures those programs that cover effective reading instruction in one or more courses but also present other approaches that are contrary to effective reading instruction.

A program earns full credit on these two ratings if all five components of effective reading instruction are covered in the coursework and all relevant required courses address at least one of the five essential components. Ratings are lowered by neglecting to cover one or more components of effective reading instruction and/or by requiring one or more reading courses that have as their focus early reading instruction but that omit effective reading instruction.

Standard 28B: Reading instruction, adherence across courses

Score	Criteria
4	All required courses cover one or more components of effective reading instruction: phonemic awareness, phonics, fluency, vocabulary and comprehension strategies.
3	Nearly all required courses cover one or more components of effective reading instruction.
2	About half of the required reading courses cover one or more components of effective reading instruction.
1	Few of the required reading courses cover one or more components of the effective reading instruction.
0	Only one required reading course covers any aspect of effective reading instruction.
NA	Because no evidence of effective reading instruction was discerned in either a single comprehensive course or in a combination of multiple courses (see Standard 26, above), no rating was applicable for this part of the standard.

FINDINGS

A higher proportion of Illinois's undergraduate elementary programs evaluated teach the effective reading instruction than was found in NCTQ's 2006 national study (21 percent, as opposed to 15 percent), and a lower proportion fail this standard entirely (44 percent versus 55 percent).

In graduate elementary programs evaluated, the number of programs meeting the standard was lower than in undergraduate programs (17 percent), but the proportion failing entirely was lower as well (33 percent).

The results mean that fewer than one in five of the evaluated undergraduate and graduate elementary programs is arming future elementary teachers with a full arsenal for the most important job they have: teaching reading.

Of the five Illinois education schools whose undergraduate elementary preparation programs were included in that national study, one has maintained the strength of its excellent preparation (**Loyola University Chicago**), two have improved their preparation, one marginally and one substantially (**Northern Illinois University** and **Eastern Illinois University**, respectively), and two have stayed at rock bottom with preparation that entirely fails to prepare their very substantial numbers of elementary teacher candidates (**Illinois State University** and **Southern Illinois University Carbondale**).

Preparation is often inconsistent. For example, while **DePaul University** provides some preparation in reading for its undergraduate elementary teacher candidates, it does not provide any reading instruction whatsoever for graduate early childhood teacher candidates, who will certainly be teaching reading in grades K-3, the very time that children must learn how to read. (In fact, all three of the graduate early childhood preparation programs evaluated failed to meet the standard.)

General findings on the second reading standard are not meaningful since ratings are best evaluated in the context of an individual program's score on Standard 28A, that is, they indicate how programs that receive high ratings for reading may be diluting the value of that preparation because some courses teach effective reading while other courses provide contradictory instruction.

The reading preparation offered by **Loyola University Chicago**'s undergraduate elementary program fully met both reading standards. We found the same strong preparation in NCTQ's 2006 national study of reading preparation in which this university was one of five Illinois education schools included in the national sample.

How Illinois institutions fare on this standard

NCTQ STANDARD 28A.
The institution prepares elementary teacher candidates in the essential components of effective reading instruction.

This standard only applies to early childhood and elementary teacher preparation programs.

● Programs Meet Standard	Kendall College (UG-EC), Eastern Illinois University (UG-ELEM), Eureka College (UG-ELEM), Lake Forest College (UG-ELEM), Loyola University Chicago (UG-ELEM), Northern Illinois University (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), University of St. Francis (UG-ELEM), Western Illinois University (UG-ELEM), Northern Illinois University (GR-ELEM), Rockford College (GR-ELEM), Roosevelt University (GR-ELEM)
◕ Programs Nearly Meet Standard	Chicago State University (UG-ELEM), Quincy University (UG-ELEM), Trinity Christian College (UG-ELEM), Benedictine University (GR-ELEM), Chicago State University (GR-ELEM), University of St. Francis (GR-ELEM)
◑ Programs Partly Meet Standard	Columbia College (UG-EC), Augustana College (UG-ELEM), Bradley University (UG-ELEM), Concordia University Chicago (UG-ELEM), Elmhurst College (UG-ELEM), Governors State University (UG-ELEM), Illinois College (UG-ELEM), Knox College (UG-ELEM), North Central College (UG-ELEM), St. Xavier University (UG-ELEM), Lewis University (GR-ELEM), St. Xavier University (GR-ELEM)
◔ Programs Meet Small Part of Standard	Blackburn College (UG-ELEM), Greenville College (UG-ELEM), Trinity International University (UG-ELEM), Loyola University Chicago (GR-ELEM), National-Louis University (GR-ELEM)

○ Programs Do Not Meet Standard	Dominican University (UG-EC), Aurora University (UG-ELEM), DePaul University (UG-ELEM), Illinois State University (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Judson University (UG-ELEM), Lewis University (UG-ELEM), MacMurray College (UG-ELEM), McKendree University (UG-ELEM), Millikin University (UG-ELEM), Monmouth College (UG-ELEM), National-Louis University (UG-ELEM), North Park University (UG-ELEM), Northeastern Illinois University (UG-ELEM), Principia College (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), University of Illinois Springfield (UG-ELEM), Wheaton College (UG-ELEM), DePaul University (GR-EC), Dominican University (GR-EC), Erikson Institute (GR-EC), Greenville College (GR-ELEM), The University of Chicago (GR-ELEM) Trinity International University (GR-ELEM),
? Programs Whose Performance Cannot be Determined	Olivet Nazarene University (UG-ELEM), Olivet Nazarene University (GR-ELEM)

How Illinois institutions fare on this standard

NCTQ STANDARD 28B.
The institution ensures that all coursework adheres to the essential components of effective reading instruction.

This standard only applies to early childhood and elementary teacher preparation programs.

● Programs Meet Standard	Columbia College (UG-EC), Kendall College (UG-EC), Augustana College (UG-ELEM), Concordia University Chicago (UG-ELEM), Eastern Illinois University (UG-ELEM), Elmhurst College (UG-ELEM), Greenville College (UG-ELEM), Loyola University Chicago (UG-ELEM), North Central College (UG-ELEM), Roosevelt University (UG-ELEM), University of Illinois at Chicago (UG-ELEM), Western Illinois University (UG-ELEM), Benedictine University (GR-ELEM), National-Louis University (GR-ELEM), Roosevelt University (GR-ELEM)
◕ Programs Nearly Meet Standard	Chicago State University (UG-ELEM), Chicago State University (GR-ELEM)
○ Programs Do Not Meet Standard	Blackburn College (UG-ELEM), DePaul University (UG-ELEM), Governors State University (UG-ELEM), Illinois College (UG-ELEM), Lewis University (UG-ELEM), Northern Illinois University (UG-ELEM), Quincy University (UG-ELEM), St. Xavier University (UG-ELEM), Trinity International University (UG-ELEM), University of St. Francis (UG-ELEM), Loyola University Chicago (GR-ELEM), St. Xavier University (GR-ELEM), The University of Chicago (GR-ELEM)
? Programs Whose Performance Cannot be Determined	Olivet Nazarene University (UG-ELEM), Olivet Nazarene University (GR-ELEM)

NA Programs For Which Rating on This Standard Is Not Applicable	Dominican University (UG-EC), Aurora University (UG-ELEM), Bradley University (UG-ELEM), Eureka College (UG-ELEM), Illinois State University (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Judson University (UG-ELEM), Knox College (UG-ELEM), Lake Forest College (UG-ELEM), MacMurray College (UG-ELEM), McKendree University (UG-ELEM), Millikin University (UG-ELEM), Monmouth College (UG-ELEM), National-Louis University (UG-ELEM), North Park University (UG-ELEM), Northeastern Illinois University (UG-ELEM), Principia College (UG-ELEM), Rockford College (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), Trinity Christian College (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), University of Illinois Springfield (UG-ELEM), Wheaton College (UG-ELEM), DePaul University (GR-EC), Dominican University (GR-EC), Erikson Institute (GR-EC), Greenville College (GR-ELEM), Lewis University (GR-ELEM), Northern Illinois University (GR-ELEM), Rockford College (GR-ELEM), Trinity International University (GR-ELEM), University of St. Francis (GR-ELEM)

A last feature of reading preparation should be noted, and that is how negligence in reading instruction is compounded by the fact that only a small percentage of the 104 textbooks reviewed (12 percent) accurately and comprehensively address all five components of the science of reading, with an additional quarter that can be used to cover one or more, but not all, of the components of effective reading instruction. In fact, there were only four programs that steered entirely clear of unacceptable textbooks: **Bradley University**, **Kendall College**, **Knox College** and **Rockford College**. This was not a surprising finding. Of over 630 textbooks reviewed in a number of states, only a small number appropriately cover effective reading instruction.[4]

Quality of reading textbooks in Illinois

Category of textbooks (w/definition)	Percentage of textbooks
Acceptable core textbook The text accurately and thoroughly covers all five components of good reading instruction.	**12%**
Acceptable supplemental The text accurately and completely covers one or more, but not all, of the five components of good reading instruction and is suitable as a supplemental reading for a course.	**27%**
Not acceptable core textbook The text was intended to be a comprehensive source on good reading instruction but was inaccurate and/or incomplete.	**38%**
Not acceptable supplementary The text was intended to cover some aspect of reading instruction but did not cover even one component of good reading instruction in an accurate and complete manner.	**23%**

A complete list of ratings for required textbooks in Illinois' teacher preparation programs can be found in Section 16 of this appendix. This section of the appendix also provides information about the reading expert who served as the textbook reviewer.

4 Our tally used to be higher because it also included textbooks deemed irrelevant for instruction after a cursory review.

STANDARD 29:
The institution provides adequate preparation in the specific mathematics content needed by elementary teachers.

RATIONALE

Compared to their counterparts in other countries, the performance of American students in mathematics is mediocre. Since mathematics knowledge is cumulative, a critical step in improving this performance is the foundation laid throughout elementary school. Achieving results there is directly linked to the capability of elementary teachers to provide effective instruction in mathematics.

There is increasing consensus that prospective elementary teachers—who are notoriously weak in mathematical competency—are best trained by college mathematics courses that are designed specifically for teachers and that impart a deep understanding of elementary and middle school mathematics concepts. A calculus or statistics course is fine to take as an elective, but the National Council of Teachers of Mathematics (NCTM)[5] and the Conference Board of the Mathematical Sciences (CBMS)[6] recommend that aspiring elementary teachers take three semester courses in "elementary mathematics content."

These courses should cover four subject areas: numbers and operations, algebra, geometry and measurement, and—to a lesser degree—data analysis and probability. These recommendations, as well as those of mathematicians who advised NCTQ in our national study of the mathematics preparation of elementary teachers, form the rationale and methodology for the standard.[7] The standard evaluates programs on how well their coursework touches on topics that are similar to those recommended for teacher preparation by the National Mathematics Advisory Panel in its 2008 report.[8]

Despite this emerging consensus on how to prepare elementary teachers to be truly competent mathematics instructors, there is enormous variability in the nature of coursework requirements among education schools in the United States.

Illinois does not specify any coursework requirements regarding mathematics content. However, the state has articulated teaching standards that its approved teacher preparation programs must use to frame instruction in elementary mathematics content. Elementary teacher candidates must "demonstrate proficiency" in various mathematics concepts, including algebra, geometry and statistics. Unfortunately, these standards lack the specificity needed to ensure that teacher preparation programs deliver mathematics content of appropriate breadth and depth to elementary teacher candidates.

Mathematics results for the 2009 NAEP place Illinois' 4th graders slightly below the national average (238 vs. 239) and its 8th graders at the national average (282).[9] The highest state scores in mathematics are produced by Massachusetts students, whose 4th graders had an average score of 252 and whose 8th graders had an average score of 299.

5 Highly qualified teachers: A position of the National Council of Teachers of Mathematics (July 2005). *National Council of Teachers of Mathematics* <http://www.nctm.org/about/content.aspx?id=6364>.
6 The Mathematical Education of Teachers, Conference Board of the Mathematical Sciences: Issues in Mathematics, Vol. 11. (2001). *American Mathematical Society in Cooperation with the Mathematical Association of America*, p. 8.
7 http://www.nctq.org/p/publications/docs/nctq_ttmath_fullreport.pdf
8 U.S. Dept. of Education (2008). *The Final Report of the National Mathematics Advisory Panel* (p. xxi). Washington, DC: Author.
9 http://nces.ed.gov/nationsreportcard/states/

METHODOLOGY

NCTQ's rating of Illinois' teacher preparation programs on mathematics preparation is based on examination of syllabi and required primary textbooks in coursework designed for teacher audiences. These materials were used to assess whether the coursework covers essential topics in mathematics (the basis for an "instructional score") and devotes sufficient time to those topics.

Programs that required an eight- or nine-semester-hour sequence of required elementary mathematics coursework that adequately covers essential topics in numbers and operations, algebra, geometry and data analysis and that uses an adequate textbook received full credit. Ratings were lowered if some essential topics did not appear to be taught, poor textbook selections were made or coursework requirements were not sufficient (fewer than eight semester hours).

Standard 29: Elementary mathematics

Score	Criteria
4	Coursework addresses essential elementary mathematics topics adequately,* and eight to nine semester hours of coursework is required.**
3	There are minor deficiencies*** in either the adequacy with which elementary topics are addressed or the number of hours of required coursework.
2	This rating represents a combination of evaluations on the adequacy with which elementary topics are addressed and the number of hours of required coursework: a) a minor deficiency in both, or b) a major deficiency in one and a minor deficiency in the other, or 3) a very major deficiency in one and no deficiency in the other.
1	This rating represents a combination of evaluations on the adequacy with which elementary topics are addressed and the number of hours of required coursework: a) a major deficiency in both or b) a very major deficiency in one and a minor deficiency in the other.
0	There are very major deficiencies in both the adequacy with which elementary topics are addressed and the number of hours of required coursework, or there is no instruction at all on elementary mathematics content.

* An instructional score of 70-100 percent.

** Reduced to six semester hours for programs housed in institutions rated as "most selective."

*** A minor deficiency in the number of semester hours: 5-7 hours. A major deficiency in the number of semester hours: 4 hours. A very major deficiency in the number of semester hours: 3 or fewer. A minor deficiency in coverage: instructional score of 50-69%. A major deficiency in coverage: instructional score of 40-49%. A very major deficiency in coverage: instructional score below 40%

FINDINGS

Fully 31 percent of undergraduate and 72 percent of graduate programs evaluated fail to meet the standard, either because they require no elementary content coursework at all (26 programs) or require very little, and what they do require is poorly designed.

Boding particularly poorly for Illinois' global competitiveness in science, technology, engineering and mathematics (STEM), only two elementary programs of the 45 undergraduate programs reviewed in Illinois (four percent) require the amount and type of mathematics preparation widely recommended to prepare teachers to competently teach mathematics (with none of the fourteen graduate elementary programs doing so). This compares unfavorably with the findings in previous state reviews done in six other states in 2009-2010, as well as NCTQ's 2008 national study of mathematics preparation, in which approximately 13 percent of undergraduate programs met the standard.

The reason is that only three programs require eight to nine semester hours, the amount of coursework necessary to both adequately address the deficiencies in math typically found in elementary teacher candidates and develop conceptual—not mechanical—proficiency, and one of those programs still did not meet the standard because of the design of its coursework. At **The University of Chicago**, the one "most selective" program for which six credits of coursework would have been sufficient still only met a small part of the standard. The six credits of coursework required was more suitable for enrichment than systematic instruction in which the program ensured that all of the topics needing to be covered are in fact covered.

Two Illinois education schools were evaluated in NCTQ's national study of mathematics preparation in undergraduate elementary programs, **Benedictine University** and **MacMurray College**. **Benedictine University**'s undergraduate preparation program was not evaluated in this review, but the graduate elementary program was, and its mathematics preparation is nonexistent. In the 2008 review, **MacMurray College** failed to meet the standard established for the necessary breadth and depth of mathematics preparation; in this review it appears to provide slightly more adequate coverage of essential topics but still at very insufficient depth.

The **University of Illinois at Chicago**'s undergraduate elementary program is one of the only two elementary or special education programs at either the undergraduate or graduate level that we evaluated that is fully preparing teacher candidates in elementary mathematics, and the design of its preparation is top-notch.

A complete list of ratings for required mathematics textbooks in Illinois' teacher preparation programs can be found in Section 17 of this appendix. We also provide information about the mathematicians who served as textbook reviewers.

How Illinois teacher preparation programs fare on this standard

NCTQ STANDARD 29:
The institution provides adequate preparation in the specific mathematics content needed by elementary teachers.

This standard only applies to early childhood and elementary teacher preparation programs.

★ Programs with Strong Design	**University of Illinois at Chicago (UG-ELEM)**
● Programs Meet Standard	St. Xavier University (UG-ELEM)
◕ Programs Nearly Meet Standard	Aurora University (UG-ELEM), Chicago State University (UG-ELEM), DePaul University (UG-ELEM), Eastern Illinois University (UG-ELEM), Elmhurst College (UG-ELEM), Governors State University (UG-ELEM), Illinois College (UG-ELEM), National-Louis University (UG-ELEM), North Central College (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), Trinity Christian College (UG-ELEM), University of St. Francis (UG-ELEM), Western Illinois University (UG-ELEM), Chicago State University (GR-ELEM)
◑ Programs Partly Meet Standard	Augustana College (UG-ELEM), Blackburn College (UG-ELEM), Bradley University (UG-ELEM), Concordia University Chicago (UG-ELEM), Eureka College (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Lake Forest College (UG-ELEM), Loyola University Chicago (UG-ELEM), MacMurray College (UG-ELEM), Principia College (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), Roosevelt University (GR-ELEM), The University of Chicago (GR-ELEM), University of St. Francis (GR-ELEM)
◔ Programs Meet Small Part of Standard	Monmouth College (UG-ELEM), Northern Illinois University (UG-ELEM), Wheaton College (UG-ELEM), Loyola University Chicago (GR-ELEM)
○ Programs Do Not Meet Standard	Columbia College (UG-EC), Dominican University (UG-EC), Kendall College (UG-EC), Greenville College (UG-ELEM), Illinois State University (UG-ELEM), Judson University (UG-ELEM), Knox College (UG-ELEM), Lewis University (UG-ELEM), McKendree University (UG-ELEM), Millikin University (UG-ELEM), North Park University (UG-ELEM), Northeastern Illinois University (UG-ELEM), Quincy University (UG-ELEM), Trinity International University (UG-ELEM), University of Illinois Springfield (UG-ELEM), DePaul University (GR-EC), Dominican University (GR-EC), Erikson Institute (GR-EC), Benedictine University (GR-ELEM), Greenville College (GR-ELEM), Lewis University (GR-ELEM), National-Louis University (GR-ELEM), Northern Illinois University (GR-ELEM), Rockford College (GR-ELEM), St. Xavier University (GR-ELEM), Trinity International University (GR-ELEM)
? Programs Whose Performance Cannot be Determined	Olivet Nazarene University (UG-ELEM), Olivet Nazarene University (GR-ELEM)

STANDARD 30:
The institution provides appropriate preparation in elementary mathematics methods.

RATIONALE

Prospective teachers address issues such as analyzing data from student work, planning lessons (developing, differentiating, motivating) and devising ways to assess student learning in general methods courses. Beyond these universal elements of good teaching, mathematics methods coursework focuses on how to provide the child—whose maturity of mathematical thinking develops over time—the capacity for number sense, facility with complicated algorithms, geometric intuition and an understanding of how to translate quantities and relationships into symbols. None of these can be developed in a general methods class. Research, albeit limited, indicates the value of mathematics methods courses,[10] and mathematics-specific pedagogy is part of the preparation of mathematics teachers around the world, including in countries such as Singapore, Korea and Taiwan, whose students out-perform our own.[11]

METHODOLOGY

Course requirements and descriptions were examined to ascertain whether a course addressing mathematics methods was required and, if so, how much of it was devoted to elementary mathematics methods. In the case of mixed subjects (e.g., mathematics and science methods or mathematics content and methods) or grade spans (mathematics methods for both elementary and middle school), credit was apportioned appropriately. For example, a three-semester-hour course in mathematics methods in grades K-9 was credited with focusing on elementary mathematics methods for two semester hours.

Standard 30: Mathematics methods

Score	Criteria
4	The program requires that teacher candidates take at least a three-semester-hour course in elementary mathematics methods.
2	The program requires that teacher candidates take a mathematics methods course that represents at least two semester hours of instruction due to its coverage of more than one subject or mathematics topics in more than one grade span.
0	The program requires that teacher candidates take a mathematics methods course, but it represents fewer than two semester hours of instruction due to its coverage of more than one subject and/or mathematics topics in more than one grade span. OR The program does not require that teacher candidates take a mathematics methods course.

10 Begle. P. F., & Womack, S. (1993). The impact of subject matter and education coursework on teaching performance. *Journal of Teacher Education*, 44, N1. Guyton, E., & Farokhi, E. (1987). Relationships among academic performance, basic skills, subject matter knowledge, and teaching skills of teacher education graduates. *Journal of Teacher Education*, 38, N5. Monk, D. (1994). Subject area preparation of secondary mathematics and science teachers and student achievement. *Economics of Education Review*, 13, N2.

11 *Knowing Mathematics: What We Can Learn from Teachers* (2006) p. 3. Communications with Mdm Low Khah Gek, Deputy Director, Sciences, Curriculum Planning and Development Division, Ministry of Education, Singapore.

FINDINGS

The rating picture is brighter on mathematics methods than on mathematics content preparation: About 40 percent of undergraduate elementary programs evaluated fully met the standard, and about an equal share partially met it. Most programs that partially met this standard did so because they offer a three-semester-hour mathematics methods course, but it addresses mathematics methods for grades K-9 (due to Illinois' elementary certification grade span) and therefore cannot focus sufficiently on *elementary* math methods.

How Illinois institutions fare on this standard

NCTQ STANDARD 30.
The institution provides appropriate preparation in elementary mathematics methods.

This standard only applies to early childhood and elementary teacher preparation programs.

● Programs Meet Standard	Kendall College (UG-EC), Aurora University (UG-ELEM), Blackburn College (UG-ELEM), Chicago State University (UG-ELEM), DePaul University (UG-ELEM), Governors State University (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Judson University (UG-ELEM), Lake Forest College (UG-ELEM), MacMurray College (UG-ELEM), McKendree University (UG-ELEM), Millikin University (UG-ELEM), North Park University (UG-ELEM), Northern Illinois University (UG-ELEM), Principia College (UG-ELEM), Roosevelt University (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), St. Xavier University (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), University of Illinois Springfield (UG-ELEM), University of St. Francis (UG-ELEM), Western Illinois University (UG-ELEM), Wheaton College (UG-ELEM), Benedictine University (GR-ELEM), Chicago State University (GR-ELEM), Northern Illinois University (GR-ELEM), Roosevelt University (GR-ELEM), St. Xavier University (GR-ELEM), The University of Chicago (GR-ELEM), University of St. Francis (GR-ELEM)

◑ Programs Partly Meet Standard	Columbia College (UG-EC), Augustana College (UG-ELEM), Bradley University (UG-ELEM), Concordia University Chicago (UG-ELEM), Eastern Illinois University (UG-ELEM), Elmhurst College (UG-ELEM), Eureka College (UG-ELEM), Greenville College (UG-ELEM), Illinois State University (UG-ELEM), Lewis University (UG-ELEM), Monmouth College (UG-ELEM), National-Louis University (UG-ELEM), North Central College (UG-ELEM), Northeastern Illinois University (UG-ELEM), Quincy University (UG-ELEM), Rockford College (UG-ELEM), Trinity Christian College (UG-ELEM), Trinity International University (UG-ELEM), University of Illinois at Chicago (UG-ELEM), DePaul University (GR-EC), Erikson Institute (GR-EC), Greenville College (GR-ELEM), National-Louis University (GR-ELEM), Rockford College (GR-ELEM)
○ Programs Do Not Meet Standard	Dominican University (UG-EC), Illinois College (UG-ELEM), Knox College (UG-ELEM), Loyola University Chicago (UG-ELEM), Olivet Nazarene University (UG-ELEM), Dominican University (GR-EC), Lewis University (GR-ELEM), Loyola University Chicago (GR-ELEM), Olivet Nazarene University (GR-ELEM), Trinity International University (GR-ELEM)

STANDARD 31:
The institution provides appropriate preparation in methods in elementary science, social studies and language arts/writing.

RATIONALE

Early childhood and elementary teachers should know how to teach core subjects, including science, social studies and language arts/writing. (Reading and mathematics pedagogical preparation are addressed in other standards.) Adequate methods coursework is required so that teachers can learn the varied skills and approaches that are required to teach these very different subjects. Methods courses focused on specific content afford teacher candidates the valuable opportunity to learn and practice pedagogical techniques under the supervision of content experts.

METHODOLOGY

Course requirements and descriptions were reviewed to identify all methods courses and the subjects they addressed. Methods courses addressing more than two subject areas received no credit because it is unlikely that the instructor can be a subject-matter expert in three or more subjects. Semester hours for methods courses covering several topics (such as mathematics and science methods) were apportioned evenly between the two topics.

Standard 31: Other methods (science, social studies and language arts/writing)

Score	Criteria	Special considerations
4	Teacher candidates are required to take more than five semester hours of coursework that specifically addresses methods of teaching science, social studies and language arts/writing.	Coursework should not address more than two subjects.
2	Teacher candidates are required to take three to five semester hours of coursework that specifically addresses methods of teaching science, social studies and language arts/writing.	
0	Teacher candidates are required to take fewer than three semester hours of coursework that specifically addresses methods of teaching science, social studies and language arts/writing.	

FINDINGS

While the vast majority (89 percent) of undergraduate elementary programs evaluated met this standard, graduate elementary programs were evenly divided between meeting it and being deficient, in whole or in part.

How Illinois institutions fare on this standard

NCTQ STANDARD 31.
The institution provides appropriate preparation in methods in elementary science, social studies and language arts/writing.

This standard only applies to early childhood and elementary teacher preparation programs.

● Programs Meet Standard	Columbia College (UG-EC), Kendall College (UG-EC), Augustana College (UG-ELEM), Aurora University (UG-ELEM), Blackburn College (UG-ELEM), Bradley University (UG-ELEM), Chicago State University (UG-ELEM), DePaul University (UG-ELEM), Eastern Illinois University (UG-ELEM), Elmhurst College (UG-ELEM), Governors State University (UG-ELEM), Greenville College (UG-ELEM), Illinois College (UG-ELEM), Illinois State University (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Judson University (UG-ELEM), Knox College (UG-ELEM), Lake Forest College (UG-ELEM), Lewis University (UG-ELEM), Loyola University Chicago (UG-ELEM), MacMurray College (UG-ELEM), McKendree University (UG-ELEM), Millikin University (UG-ELEM), Monmouth College (UG-ELEM), National-Louis University (UG-ELEM), North Central College (UG-ELEM), Northeastern Illinois University (UG-ELEM), Northern Illinois University (UG-ELEM), Principia College (UG-ELEM), Quincy University (UG-ELEM), Roosevelt University (UG-ELEM), Southern Illinois University Carbondale (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), St. Xavier University (UG-ELEM), Trinity Christian College (UG-ELEM), Trinity International University (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM), University of Illinois Springfield (UG-ELEM), Western Illinois University (UG-ELEM), Wheaton College (UG-ELEM), DePaul University (GR-EC), Erikson Institute (GR-EC), Chicago State University (GR-ELEM), Greenville College (GR-ELEM), Lewis University (GR-ELEM), Loyola University Chicago (GR-ELEM), National-Louis University (GR-ELEM), Northern Illinois University (GR-ELEM), Roosevelt University (GR-ELEM), The University of Chicago (GR-ELEM)
◑ Programs Partly Meet Standard	Concordia University Chicago (UG-ELEM), North Park University (UG-ELEM), Olivet Nazarene University (UG-ELEM), Rockford College (UG-ELEM), University of St. Francis (UG-ELEM), Olivet Nazarene University (GR-ELEM), Rockford College (GR-ELEM), St. Xavier University (GR-ELEM), University of St. Francis (GR-ELEM)
○ Programs Do Not Meet Standard	Dominican University (UG-EC), Eureka College (UG-ELEM), Dominican University (GR-EC), Benedictine University (GR-ELEM), Trinity International University (GR-ELEM)

STANDARD 32:
The institution requires rigorous academic coursework of its middle school teacher candidates.

RATIONALE

Middle school teaching requires more advanced subject knowledge than elementary school teaching; consequently, those seeking middle school endorsement must have adequate subject preparation: a full academic major. The definition of a "highly qualified teacher" under the federal No Child Left Behind statute requires that all middle and high school teachers either major in the subject they teach or pass a rigorous test in that subject.

NCTQ has long endorsed an academic major for all secondary teachers, established by No Child Left Behind as the minimum credential that secondary teachers should have. For middle school teachers, NCTQ has endorsed an academic major for teachers of a single subject. However, recognizing the staffing needs of many schools, it is a viable option to require that middle school teachers who intend to teach two related subjects earn two minors instead of two majors.

There are both practical and substantive considerations at play here. On the practical side, unless a teacher candidate has fulfilled a very substantial part of the requirements for a college major outside of education or teacher-specific subjects such as social studies, one ramification of failing student teaching will be great: the withholding of a college degree. This provides a strong disincentive for the education program to fail candidates even in the face of poor performance.

On the substantive side, strong subject matter expertise makes for better teaching. However, while support for this principle is strong at the high school level, the evidence supporting how much expertise is enough is less clear at the middle school level.[12] There are few studies examining the effectiveness of a middle school teacher with a major versus one with only a minor. Only one study can be identified, and it points to a potential ceiling effect at six mathematics courses for middle school mathematics teachers, roughly equivalent to a minor.

METHODOLOGY

In Illinois, teachers who wish to teach middle school must add an endorsement to their elementary or secondary certification. For elementary teachers, the endorsement allows them to teach in grades 5 to 8, whereas for secondary teachers, the endorsement allows them to teach in grades 6 to 8.

12 Chaney, B. (1995). Student outcomes and the professional preparation of 8th grade teachers. *NSF/NELS: 88 Teacher transcript analysis*. Rockville, MD: Westat; Goldhaber, D., & Brewer, D. (1996). Why don't schools and teachers seem to matter? Assessing the impact of unobservables on educational productivity. *Journal of Human Resources*, 32, 503-23 ERIC: ED400237; Goldhaber, D., & Brewer, D. (October 1998). Why should we reward degrees for teachers? *Phi Delta Kappan*, 134-138; Goldhaber, D., & Brewer, D. (2000). Does teacher certification matter? High school certification status and student achievement. *Educational Evaluation and Policy Analysis*, 22, 129-145; Monk, D. (1994). Subject area preparation of secondary mathematics and science teachers and student achievement. *Economics of Education Review*, 12(2): 125-145; Rothman, A., (1969). Teacher characteristics and student learning. *Journal of Research in Science Teaching*, 6(4), 340-348; Rowan, B., Chiang, F., & Miller, R. J. (October 1997). Using research on employees' performance to study the effects of teachers on students' achievement. *Sociology of Education*, 70, 256-284; Wenglinsky, H. (2000). *How teaching matters: Bringing the classroom back into discussions of teacher quality*. Princeton, NJ: Educational Testing Service, www.ets.org/Media/Research/pdf/PICTEAMAT.pdf

Because secondary teacher candidates typically have a major in their subject, the only coursework entailed for the middle school endorsement is methods coursework. For elementary teachers, however, additional subject area coursework is required because endorsements require a minimum of 18 semester hours in the endorsement area.[13] The coursework requirements for a middle school endorsement in elementary programs in four core areas were examined: English, mathematics, science and social studies and awarded points as follows for majors (30 semester hours) and minors (15 semester hours):

Subject	Full points	Half points
English	Major	Minor
Mathematics	Major	Minor
Science/General Science/Life Science/ Physical Science	Major OR Minor in one of core sciences (biology, chemistry or physics) plus 15 science semester hours (biology, chemistry, physics, physical, life, environmental, earth, astronomy)	Minor in core sciences (biology, chemistry or physics)
History/Geography/ Social Science	Major OR Minor in history subjects (history, geography, government, political science) plus 15 semester hours (geography, history, government, political science)	Minor in history

Because all four types of endorsements are not offered at all Illinois programs, scores are scaled by summing the points awarded to each endorsement, dividing the result by the number of endorsements offered and multiplying the quotient by four. For example, a school that requires a minor for English and mathematics' middle grades candidates and requires a minor in general social science or science for middle grades candidates receiving endorsements in any social science or science would receive one point: a half point each in English and math, and no points for their generalist degrees (which do not provide the equivalent of a minor in history, biology, chemistry or physics, or a minor in history, geography, history, government or political science, respectively). Scaling this score by the number of endorsements offered (four), the institution would receive a score of "1" on the standard, which translates to a rating of "meets only a small part of standard."

In order to include in the rating some consideration of the rigor of coursework, the score is reduced by one point if one or more of the endorsement areas offered by the institution does not require any upper-level, general-audience coursework.

13 In addition, middle grades teachers must take an additional six hours of pedagogy coursework.

Standard 32: Middle school preparation

Score	Criteria
4	All or nearly all paths to middle school certification or endorsement require that teacher candidates have a major in their subject, and any that does not do so requires a minor.
3	The paths to middle school certification or endorsement require a mixture of majors and minors, with most paths requiring majors.
2	The paths to middle school certification or endorsement require a mixture of majors and minors, with few or none requiring majors.
1	The paths to middle school certification or endorsement require a mixture of majors and minors, with few or none requiring either majors or minors.
0	No paths to middle school certification or endorsement require that teacher candidates have a major or a minor in their subject.

FINDINGS

Because the vast majority of undergraduate and graduate elementary programs require only an 18-credit-hour concentration for those seeking a middle school endorsement (in keeping with Illinois regulations), they only met a small part or partially met this standard. In fact, no graduate elementary program met this standard by requiring a full major of a middle school endorsement candidate. On the undergraduate level, only **Principia College** fully met this standard, but it offers endorsements only in English and mathematics. Of programs offering a more complete set of endorsements, middle school endorsement requirements were closest to requiring a major at **Southern Illinois University Carbondale**.

How Illinois institutions fare on this standard

NCTQ STANDARD 32.
The institution requires rigorous academic coursework of its middle school teacher candidates.

This standard only applies to elementary teacher preparation programs.

● Programs Meet Standard	Principia College (UG-ELEM), University of Illinois at Urbana-Champaign (UG-ELEM)
◕ Programs Nearly Meet Standard	Southern Illinois University Carbondale (UG-ELEM)
◑ Programs Partly Meet Standard	DePaul University (UG-ELEM), Judson University (UG-ELEM), Loyola University Chicago (UG-ELEM), MacMurray College (UG-ELEM), Monmouth College (UG-ELEM), National-Louis University (UG-ELEM), Northeastern Illinois University (UG-ELEM), University of Illinois at Chicago (UG-ELEM), University of St. Francis (UG-ELEM), Loyola University Chicago (GR-ELEM), University of St. Francis (GR-ELEM)
◔ Programs Meet Small Part of Standard	Augustana College (UG-ELEM), Aurora University (UG-ELEM), Blackburn College (UG-ELEM), Bradley University (UG-ELEM), Chicago State University (UG-ELEM), Concordia University Chicago (UG-ELEM), Eastern Illinois University (UG-ELEM), Elmhurst College (UG-ELEM), Eureka College (UG-ELEM), Governors State University (UG-ELEM), Illinois College (UG-ELEM), Illinois State University (UG-ELEM), Illinois Wesleyan University (UG-ELEM), Lewis University (UG-ELEM), McKendree University (UG-ELEM), Millikin University (UG-ELEM), North Central College (UG-ELEM), North Park University (UG-ELEM), Northern Illinois University (UG-ELEM), Quincy University (UG-ELEM), Rockford College (UG-ELEM), Roosevelt University (UG-ELEM), Southern Illinois University Edwardsville (UG-ELEM), St. Xavier University (UG-ELEM), Trinity Christian College (UG-ELEM), Trinity International University (UG-ELEM), Western Illinois University (UG-ELEM), Wheaton College (UG-ELEM), Benedictine University (GR-ELEM), Chicago State University (GR-ELEM), Lewis University (GR-ELEM), National-Louis University (GR-ELEM), Northern Illinois University (GR-ELEM), Rockford College (GR-ELEM), Roosevelt University (GR-ELEM), The University of Chicago (GR-ELEM) Trinity International University (GR-ELEM)
? Programs Whose Performance Cannot be Determined	Greenville College (UG-ELEM), Knox College (UG-ELEM), Lake Forest College (UG-ELEM), Olivet Nazarene University (UG-ELEM), University of Illinois Springfield (UG-ELEM), Greenville College (GR-ELEM), Olivet Nazarene University (GR-ELEM), St. Xavier University (GR-ELEM)

SECTION 9:
Preparation Specific to Secondary Teachers

The two standards in this section address whether secondary teacher candidates are well-versed in both their subject area and in the methods of teaching that subject area. Analyzing whether secondary teacher candidates have solid preparation would seem to be a simple exercise that involves merely checking for a major, but it is actually quite difficult. Complexities arise, particularly in the sciences and social sciences. For example, a prospective teacher may major in biology, seeking certification in that subject, but may also be able to teach physics, chemistry and environmental science, under a broader "general science" certification that many states (including Illinois) offer. Preparation programs face a challenge in ensuring that Illinois high school students who are taking a physics or chemistry course from this biology major will have a knowledgeable instructor, without piling on an unrealistic number of course requirements. The way forward on this issue of adequate preparation of secondary teachers in the sciences and social sciences is a combination of changes in preparation and certification requirements and in licensing tests.

STANDARD 33:
The institution requires an academic major of its high school teacher candidates that is equivalent in rigor to that of non-education majors.

RATIONALE

For decades, teacher preparation and higher education reformers have been attempting to improve the rigor of undergraduate teacher preparation programs by promoting the requirement of full academic majors for prospective teachers. For example, the Holmes Group of the mid-1980s, a group of education school deans, advocated for teachers capping the solid preparation represented by an academic major with professional preparation.

A full academic major should not be a difficult proposition for the preparation of secondary teachers. Candidates for secondary certification at the master's degree level earn full academic majors before they enter education programs, as do most certification candidates in five-year teacher preparation programs. Moreover, the definition of a "highly qualified teacher" under the federal No Child Left Behind statute requires that all secondary teachers either major in the subject they teach or pass a rigorous test in that subject.

NCTQ has long endorsed an academic major for all secondary teachers. While there is little or no research on subject areas such as English or the social sciences that provides confirmation of any connection between subject

matter preparation and instructional efficacy, there is direct research indicating that sufficient coursework preparation in mathematics and science makes high school teachers more effective.[1]

METHODOLOGY

On the face of it, evaluating teacher preparation at the secondary level relative to this standard would seem fairly straightforward because subject matter preparation and professional preparation are more compartmentalized than in elementary programs. Indeed, when considering certification in English and mathematics, evaluating preparation is straightforward. We evaluated each Illinois secondary preparation program that offered certification in English and mathematics by a simple standard: evidence that the program requires at least 30 credit hours (the commonly accepted definition of a major) in English or mathematics coursework, respectively.

The complications in evaluating subject matter preparation for secondary teachers arise because the large majority of states, Illinois included, offer certification in the sciences and social sciences such that teachers with specialization in one subject area may also teach other subject areas.[2] Secondary teacher candidates in Illinois who wish to teach in the social sciences can select any one of a number of social science majors (history, government, economics, geography, psychology, or anthropology and sociology). Then—simply by passing a licensing test on which about one half of the questions focus on their area of specialization but which covers all the other subjects as well—they can be certified to teach their area of specialization at the honors or Advanced Placement (AP) level and any of the other social sciences at the general level. To receive a "designation" that allows them to instruct above the general level in another area of the social sciences, these teachers simply need to pass the licensing test in that new area, a test that focuses on the area of the social sciences in question. The situation is analogous in the sciences.[3]

Leaving aside the obvious problems with and possible alternatives to this approach to certification, the relevant issue for this standard is how to evaluate teacher preparation for the social sciences and sciences. Certainly requiring a major (30 semester hours) in each of the subjects for which certification will be granted by licensing examination is unrealistic, but requiring anything less than at least four minors (15 semester hours each) for social studies and science certifications is clearly inadequate. NCTQ's standard calls for secondary certification programs preparing a teacher to teach four or more subjects to require at least a minor in at least four subjects. While this sounds daunting, it is in fact only the credit equivalent of a double major.

1 Chaney, B. (1995). Student outcomes and the professional preparation of 8th grade teachers. *NSF/NELS: 88 Teacher transcript analysis.* Rockville, MD: Westat; Goldhaber, D., & Brewer, D. (1996). Why don't schools and teachers seem to matter? Assessing the impact of unobservables on educational productivity. *Journal of Human Resources*, 32, 503-23 ERIC: ED400237; Goldhaber, D., & Brewer, D. (October 1998). Why should we reward degrees for teachers? *Phi Delta Kappan*, 134-138; Goldhaber, D., & Brewer, D. (2000). Does teacher certification matter? High school certification status and student achievement. *Educational Evaluation and Policy Analysis*, 22, 129-145; Monk, D. (1994). Subject area preparation of secondary mathematics and science teachers and student achievement. *Economics of Education Review*, 12(2):125-145; Rothman, A., (1969). Teacher characteristics and student learning. *Journal of Research in Science Teaching*, 6(4), 340-348; Rowan, B., Chiang, F., & Miller, R.J. (October 1997). Using research on employees' performance to study the effects of teachers on students' achievement. *Sociology of Education*, 70, 256-284; Wenglinsky, H. (2000). *How teaching matters: Bringing the classroom back into discussions of teacher quality*. Princeton, NJ: Educational Testing Service, http://www.ets.org/Media/Research/pdf/PICTEAMAT.pdf

2 National Council on Teacher Quality, *The All-Purpose Science Teacher: An Analysis of Loopholes in State Requirements for High School Science Teachers.* September 2010: http://www.nctq.org/p/publications/docs/NCTQ_All_Purpose_Science_Teacher.pdf

3 Regulations regarding subject matter preparation for certification in the social sciences and sciences are slated to become more rigorous in 2012, and they will require at least 12 semester credit hours of preparation in any area in which a "designation" is sought that allows teaching a subject at the honors or AP level. The structure of the general social sciences and sciences licensing tests will not change.

Subject	Full points	Half points
English	Major	Minor
Mathematics	Major	Minor
Sciences	At least a minor in any four relevant fields (in Illinois these are biology, chemistry, environmental science, earth and space science, physics)	At least two minors in these subjects
Social sciences	At least a minor in any four relevant fields (in Illinois these are economics, history, geography, psychology, political science, sociology and anthropology)	At least two minors in these subjects

Because all four types of certification are not offered at all Illinois programs, scores are scaled by summing the points awarded to each certification, dividing the result by the number of certifications offered and multiplying the quotient by four.

Requirements for secondary teacher candidates at graduate programs were evaluated for this standard on the basis of their transcript review process.

Standard 33: High school preparation

Score	Criteria	Special considerations
4	All or nearly all paths to secondary certification require that teacher candidates have a major in their subject or an appropriate combination of minors.	For **graduate** programs, a transcript review and the creation of a plan to remedy deficiencies must be part of admissions requirements. If they are not, the institution receives a score of zero. The requirements for any review process will be evaluated by the same criteria used for undergraduate secondary programs.
3	Paths to secondary certification require a mixture of majors and minors, with most paths requiring majors and an appropriate combination of minors.	
2	Paths to secondary certification require a mixture of majors and minors, with few or none requiring majors or an appropriate combination of minors.	
1	Paths to secondary certification require a mixture of majors and minors, with few or none requiring either majors or an appropriate combination of minors.	
0	No paths to secondary certification require that teacher candidates have a major or an appropriate combination of minors in their subject.	

FINDINGS

In general, Illinois' current regulatory structure for the preparation of secondary teachers requires adequate preparation for teachers in English and math but highly inadequate preparation for teachers in the sciences and social sciences.

For example, secondary candidates at **Eastern Illinois University** can earn a "science certificate with earth sciences" specialization in preparation to teach biology, chemistry, physics or earth science with three biology courses, three chemistry courses and five earth sciences courses. This total of 11 courses includes no physics, inadequate preparation in biology and chemistry, and only a minor in earth science. **Greenville College**'s social science track preparing candidates to teach history, government, economics, geography or psychology entails eight history courses, one political science course, one economics course, one geography course, two sociology courses and one psychology course. The total is 14 courses, but preparation in no subject except history even approaches adequacy.

Only one of the reviewed undergraduate secondary programs (**Northwestern University**) met our standard. It did so by requiring majors and nearly two additional minors in the sciences and social sciences as well as having adequate preparation requirements in English and mathematics. (**Principia College** also met the standard, but only by virtue of the fact that it offers secondary certification just in English and math.) Two graduate secondary programs (**Illinois Institute of Technology** and **Roosevelt University**) did so as well.

★ **Northwestern University**'s requirements for secondary teacher candidates in both the sciences and social sciences offer a strong model for what it takes to adequately prepare candidates in these areas given the nature of Illinois certification standards.

How Illinois institutions fare on this standard

NCTQ STANDARD 33.
The institution requires an academic major of its high school teacher candidates that is equivalent in rigor to that of non-education majors.

This standard only applies to secondary teacher preparation programs.

★ Programs with Strong Design	**Northwestern University (UG-SEC)**
● Programs Meet Standard	Principia College (UG-SEC), Illinois Institute of Technology (GR-SEC), Roosevelt University (GR-SEC)
◑ Programs Partly Meet Standard	Augustana College (UG-SEC), Eastern Illinois University (UG-SEC), Eureka College (UG-SEC), Greenville College (UG-SEC), Illinois State University (UG-SEC), Judson University (UG-SEC), Knox College (UG-SEC), Lake Forest College (UG-SEC), Loyola University Chicago (UG-SEC), McKendree University (UG-SEC), Millikin University (UG-SEC), University of Illinois Springfield (UG-SEC), Loyola University Chicago (GR-SEC), National-Louis University (GR-SEC), St. Xavier University (GR-SEC), University of Illinois at Urbana-Champaign (GR-SEC)
○ Programs Do Not Meet Standard	Chicago State University (GR-SEC), Concordia University Chicago (GR-SEC), Olivet Nazarene University (GR-SEC)

STANDARD 34:
The institution provides appropriate preparation for secondary teacher candidates in content area methods.

RATIONALE

Secondary teachers should take a course that addresses pedagogy in their field.

While there are some elements of instruction that are common to all subjects, there are also important distinctions. The progression of student knowledge, instructional strategies and common student misconceptions are not the same, for example, for English and mathematics.

METHODOLOGY

We examined course requirements and descriptions to determine whether secondary teacher candidates in the four core subject areas were required to take a methods course specific to their subject area.

We also noted, but did not rate, whether the institution requires secondary teacher candidates to take any coursework in reading pedagogy. All secondary teachers should be prepared to support the literacy skills of their students. This includes helping students to access multiple types of text in their subject area, as well as understanding the impact on instruction of the wide range of reading levels commonly found in a secondary classroom. This coursework is not rated, however, because a methodology for a more comprehensive review of syllabi and textbooks has not yet been developed. Without such an analysis, a rating might be interpreted as an endorsement of courses that address comprehension strategies regardless of the effectiveness of those strategies.

Standard 34: Secondary methods

Score	Criteria
4	The institution requires a subject-specific methods course for each type of secondary certification offered.
3	The institution requires a subject-specific methods course for more than half of the secondary certifications offered.
2	The institution requires a subject-specific methods course for no more than half of the secondary certifications offered.
1	The institution requires a subject-specific methods course in only one area of certification or combines methods for two subjects in one course.
0	Either a general methods course addressing all subjects is required or no secondary methods classes of any kind are required.

FINDINGS

In both the undergraduate and graduate programs evaluated, the majority of programs (93 percent of undergraduate and 70 percent of graduate) require that all secondary teacher candidates take subject-specific methods coursework.

How Illinois institutions fare on this standard

NCTQ STANDARD 34.
The institution provides appropriate preparation for secondary teacher candidates in content area methods.

This standard only applies to secondary teacher preparation programs.

● Programs Meet Standard	Augustana College (UG-SEC), Eastern Illinois University (UG-SEC), Eureka College (UG-SEC), Illinois State University (UG-SEC), Judson University (UG-SEC), Knox College (UG-SEC), Lake Forest College (UG-SEC), Loyola University Chicago (UG-SEC), McKendree University (UG-SEC), Millikin University (UG-SEC), Northwestern University (UG-SEC), Principia College (UG-SEC), University of Illinois Springfield (UG-SEC), Illinois Institute of Technology (GR-SEC), Loyola University Chicago (GR-SEC), National-Louis University (GR-SEC), Roosevelt University (GR-SEC), St. Xavier University (GR-SEC), University of Illinois at Urbana-Champaign (GR-SEC)

◕ Programs Nearly Meet Standard	Concordia University Chicago (GR-SEC)
◑ Programs Partly Meet Standard	Greenville College (UG-SEC)
◔ Programs Meet Small Part of Standard	Chicago State University (GR-SEC)
○ Programs Do Not Meet Standard	Olivet Nazarene University (GR-SEC)

SECTION 10: Preparation Specific to Special Education Teachers

As we discuss in our *State Teacher Policy Yearbook* 2009,[1] any teacher receiving certification to teach special education must have content expertise in addition to specialized training in teaching students with disabilities. Both state and federal requirements expect special education students to meet the same high standards as other students; thus, special education teachers must have content preparation. Because special education teachers in Illinois are certified to teach at both the elementary and secondary grade levels, they need to be prepared in content at both levels. At the elementary level, special education teacher candidates should meet the same content coursework requirements as general education elementary teachers do. At the secondary level, a special education teacher candidate should graduate "highly qualified" in at least two subjects, and the most efficient route to doing so is for teacher candidates to take the equivalent of two subject area minors and pass tests in those areas.[2]

The impracticality of requiring this level of content preparation is only one of the many reasons that NCTQ advocates for state special education certification for high incidence disabilities at either the elementary level or the secondary level, but not for both. Eleven states do not have K-12 special education certification and instead organize certification so that special education teachers are certified to instruct students over a reduced gradespan.

This review addresses content preparation of special education teacher candidates for the elementary grades in Standard 35. It does not address content preparation for the secondary grades.

Although content preparation should be similar, the professional preparation of special education teachers should not be identical to general education teachers.[3] The array of professional coursework specific to special education should cover design of instruction, methods, educational psychology, assessment, behavior management, and law, policy and communications. This review addresses only design of instruction, in Standard 38, and then only in the context of a pilot review. While recognizing their critical importance, we have yet to include in our current evaluation of special education teacher preparation any consideration of the other necessary areas of professional preparation. Other areas of preparation will be addressed in future reviews.

1 http://www.nctq.org/stpy09/reports/stpy_illinois.pdf, p. 28
2 http://www.nctq.org/stpy09/reports/stpy_national.pdf, p. 135
3 One study has found that pre-service preparation in special education may correlate with gains in achievement of students with disabilities, especially in reading: http://www.urban.org/uploadedpdf/1001435-what-makes-special.pdf

STANDARD 35:
The institution ensures that special education teacher candidates receive a broad liberal arts education.

Mathematics coursework is not included in this evaluation, since elementary mathematics coursework is evaluated under the mathematics preparation standard (Standard 37), and we do not evaluate the same program feature twice under two different standards.

RATIONALE

Both state and federal requirements expect special education students to meet the same high standards as other students; therefore, special education teachers must have adequate content preparation for the core subjects they will teach. This preparation should not be different from the general content preparation for elementary teachers described in Standard 27, and it should enable the special education teacher to deliver instruction in the language arts, social studies, the fine arts and science.

Teacher preparation programs in Illinois are required to provide a broad liberal arts program to teacher candidates for elementary special education. The state articulates general curricular standards for special education teachers that include academic proficiencies in mathematics, reading, and natural science and social sciences.

METHODOLOGY

In **undergraduate programs**, our evaluation of this standard begins with the identification of all the content coursework that institutions require students to take in order to meet general education requirements and/or education program requirements. We then use catalog course descriptions to evaluate whether the courses sufficiently focus on the following core subject areas:

- World or American literature
- Writing, grammar and composition
- Children's literature
- American history (two courses)
- World history—ancient or modern
- World cultures, religions w/geography
- Science (two different sciences)

Also desirable:

- Music history
- Art history

Programs that are adequately preparing special education teacher candidates require one course (or ask for some sort of evidence of mastery from the candidate) in each of the key content areas (approximately 27 semester hours of coursework).

When evaluating coursework, determining whether such courses prepare teachers for the knowledge they need to assist in teaching in the elementary classroom is the primary consideration. This question is posed: If a teacher candidate who has not demonstrated any mastery of world history, for example, is required to take a particular world history course or is given a choice of several such courses, would each course provide that candidate with a good share of the foundational knowledge that makes it possible to "add value" when a variety of world history topics arise in the elementary classroom? Alternatively, having taken any one of the courses, would the teacher candidate know little to nothing about world history, or little beyond what was available in the state or district's instructional materials and curriculum guides?

All such coursework was evaluated, whether designed for the general audience or only for the teacher audience, although in all but a few cases we endorse teacher candidates receiving content instruction designed for the general audience within the purview of liberal arts departments. In some areas, such as the standards for elementary mathematics preparation, there is some merit in coursework within the purview of liberal arts departments that is designed for teacher candidates.

Some courses were awarded only partial credit because they were too narrowly focused on a specific topic instead of the broader scope needed by special education teachers. Allowing teacher candidates to select from a menu of course choices could also lower the rating if it meant that they could opt out of coursework that is considered essential or if one of the course selections was deemed inadequate. In other words, an option that allows a candidate to choose one of a number of courses from a menu might result in a lower rating if even one of the courses was too narrow in scope.

Section 15 of this appendix provides examples of the types of courses that received full credit, as well as examples of courses that might fulfill an institution's general education and/or teacher preparation requirements in a particular area such as world history or world geography for which no credit would be given.

In **graduate programs**, we determined if a transcript review process exists and, if so, evaluated its requirements the same way we did for an undergraduate program.

Note that an undergraduate or graduate program's requirements need not be fulfilled solely by college coursework. Any demonstration of content mastery will suffice, including a demonstration through an Advanced Placement examination or any other high school or college-level examination generally accepted as a substitute for college coursework.

Standard 35: Broad subject preparation

Score	Criteria	Special considerations
4	No full deficiencies* were noted in the nine elementary content areas examined.	For **graduate** programs, the transcript review should ensure that these requirements are met. If there is no transcript review process, the program earns a "0." If there is a transcript review process but its standards are unclear, we will assume that the standards are identical to any analogous program at the UG level and rate accordingly. If no such analogous program exists, the rating is "CBD."
3	One full deficiency was noted in the nine elementary content areas examined.	
2	Two full deficiencies were noted in the nine elementary content areas examined.	
1	Three full deficiencies were noted in the nine elementary content areas examined.	
0	Four or more full deficiencies were noted in the nine elementary content areas examined.	

* The absence of either an art history course OR a music history course counts as only half a course deficiency.

FINDINGS

The impact of Illinois' regulations on the content preparation of special education teacher candidates is not evident in our findings: Eighty percent of both undergraduate and graduate special education programs that we evaluated failed to meet this standard. In all but one of the few education schools whose preparation of undergraduate elementary teachers was relatively strong (**MacMurray College**, **Trinity Christian College**, **Southern Illinois University Carbondale**, **Southern Illinois University Edwardsville**, **Western Illinois University** and the **University of St. Francis**), ratings were much lower on the standard pertaining to the analogous preparation for special education teacher candidates. The sole exception to this pattern was the **University of St. Francis**.

While not covering all the bases, the **University of St. Francis** does a commendable job with regard to the preparation of undergraduate special education teacher candidates for the Illinois K-9 curriculum.

How Illinois institutions fare on this standard

NCTQ STANDARD 35.
The institution provides adequate preparation in the specific mathematics content needed by elementary teachers.

This standard only applies to special education teacher preparation programs.

★ Programs with Strong Design	**University of St. Francis (UG-SPED)**
◔ Programs Meet Small Part of Standard	Southern Illinois University Edwardsville (UG-SPED), Trinity Christian College (UG-SPED)
○ Programs Do Not Meet Standard	Bradley University (UG-SPED), Concordia University Chicago (UG-SPED), Eastern Illinois University (UG-SPED), Elmhurst College (UG-SPED), Illinois State University (UG-SPED), Lewis University (UG-SPED), MacMurray College (UG-SPED), Northeastern Illinois University (UG-SPED), Northern Illinois University (UG-SPED), Southern Illinois University Carbondale (UG-SPED), Western Illinois University (UG-SPED), Benedictine University (GR-SPED), Chicago State University (GR-SPED), Dominican University (GR-SPED), Governors State University (GR-SPED), Northeastern Illinois University (GR-SPED), Northern Illinois University (GR-SPED), University of Illinois at Chicago (GR-SPED)

? Programs Whose Performance Cannot be Determined	National-Louis University (GR-SPED), University of Illinois at Urbana-Champaign (GR-SPED)

STANDARD 36A:
The institution prepares special education teacher candidates in the essential components of effective reading instruction.

STANDARD 36B:
The institution ensures that all coursework adheres to the essential components of effective reading instruction.

RATIONALE

As important as it is for every elementary teacher to know the most effective strategies for teaching children to read, expertise in this area is of paramount importance for special education teachers, since reading disabilities account for about 80 percent of all learning disabilities.

A major impediment to serving the needs of children who struggle with reading is current teacher preparation practices. Many teachers lack basic knowledge and understanding of reading development and the nature of reading difficulties. Education schools must commit to fostering the development of the necessary knowledge and skills at the preservice level so that teachers enter the classroom with expertise in this critical area.

America's failure to teach reading to so many children disproportionately affects children who are poor as well as children of color. "Only" 23 percent of White children scored below basic on the 2007 fourth grade NAEP assessment in reading, compared to 54 percent of African American children, 51 percent of Hispanic children and 50 percent of all children living in poverty.

This unacceptable rate of failure has been deemed a public health crisis by the National Institutes of Health (NIH). At 44 different sites with an annual research budget of $60 million, NIH has been studying how children learn how to read for nearly 40 years, with research focusing on nearly 60,000 children and adults.

This massive undertaking has led to a number of breakthroughs that can dramatically reduce the number of children destined to become functionally illiterate or barely literate adults. By routinely applying in the classroom the lessons learned from these scientific findings, *most reading failure could be avoided*. We have learned that for 90 to 95 percent of poor readers, prevention and early intervention programs that combine instruction in phonemic awareness, phonics and reading comprehension strategies, provided by well trained teachers, can increase reading skills to average reading levels.

Illinois does not require that teacher preparation programs for special education teacher candidates address effective reading instruction. The state has neither coursework requirements nor standards related to this critical area.

METHODOLOGY

Evidence that the program fully incorporates the scientific findings culminating from NIH's research was sought both in course syllabi and in reviewing each of the required textbooks. When there was any sort of ambiguity, we always gave the school the benefit of the doubt and gave credit for coverage.

Specifically, in evaluating the training provided by the teacher preparation program, we sought evidence of coverage of the five essential components of reading instruction: phonemic awareness, phonics, fluency, vocabulary and comprehension.

For each of the components, scientific research has identified important principles upon which teacher preparation must focus and which distinguish between programs only paying lip service to the scientific findings and programs where the findings serve as the centerpiece of reading instruction. A few examples (but hardly an exhaustive list) for each component are presented here:[4]

Phonemic awareness.

- Before learning to read, children must understand that words are made of sounds and how these sounds work.
- Children must make explicit an implicit understanding that words have internal structures linked to sounds.
- Children vary considerably in how easily they master this principle.

Phonics.

- Children learn that print represents speech through the alphabet.
- Children are taught that there is a systematic and predictable relationship between the letters of written language and individual sounds (the alphabetic principle). Systematic and explicit phonics instruction is more effective than non-systematic or no phonics instruction, significantly improves reading comprehension and, although effective for children from all social and economic levels, is particularly beneficial for children who are having difficulty learning to read or are at risk for future reading problems.

Fluency.

- Fluency is the bridge between word recognition and comprehension.
- Children need to build speed or rate of reading to become fluent readers.
- Automaticity is the first step toward fluency—accurate, effortless word recognition.
- Fluent readers also read with expression.
- There is no research evidence that instructional time spent on silent, independent reading without guidance or feedback improves fluency or reading achievement.

Vocabulary.

- Children have both an oral and a reading vocabulary.
- To comprehend, a student must know the meanings of 90 to 95 percent of the words being read.
- Although children learn the meanings of most words indirectly, they also need explicit instruction in the meanings of individual words and word learning strategies.

Comprehension.

- Comprehension instruction helps students understand, remember and communicate with others about what they read.
- Effective instruction helps students use comprehension strategies flexibly and in combination.
- Motivation/student engagement improves comprehension.

This research, synthesized by the 2000 report of the National Reading Panel, forms the blueprint for this standard and informs our textbook and syllabi reviews to identify whether a program is providing strong reading instruction.

4 Armbruster, B., Lehr, F., & Osborn, J. (2001). *Put reading first: The research building blocks for teaching children to read.* (Available from National Institute for Literacy at ED Pubs, PO Box 1398, Jessup, MD 20794.)

The scope of our analysis does not involve more reading instruction relevant to older students, which special education teachers working in a secondary school may also find necessary.

Standard 36A: Reading instruction, extent

Score	Criteria
4	Coursework covers all five of the components of effective reading instruction: phonemic awareness, phonics, fluency, vocabulary and comprehension strategies.
3	Coursework covers four of the five components of effective reading instruction.
2	Coursework covers three of the five components of effective reading instruction.
1	Coursework covers two of the five components of effective reading instruction.
0	Coursework covers one or none of the five components of effective reading instruction.

A second rating on Standard 36 addressed the efficiency and coherence of an institution's reading courses across all of the required coursework relating to reading instruction. This rating captured those programs that cover effective reading instruction in one or more courses but also present other approaches that are contrary to effective reading instruction.

A program earned full credit on these two ratings if all five components of effective reading instruction were covered in the coursework and all relevant required courses addressed at least one of the five essential components. Ratings were lowered by an institution neglecting to cover one or more components of effective reading instruction and/or requiring one or more reading courses that focus on early reading instruction but omit effective reading instruction.

Standard 36B: Reading instruction, adherence across courses

Score	Criteria
4	All required courses cover one or more components of effective reading instruction: phonemic awareness, phonics, fluency, vocabulary and comprehension strategies.
3	Nearly all required courses cover one or more components of effective reading instruction.
2	Nearly all required courses cover one or more components of effective reading instruction.
1	Few of the required reading courses cover one or more components of the effective reading instruction.
0	Only one required reading course covers any aspect of effective reading instruction.
NA	Because no evidence of effective reading instruction was discerned in either a single comprehensive course or in a combination of multiple courses (see Standard 26, above), no rating was applicable for this part of the standard.

FINDINGS

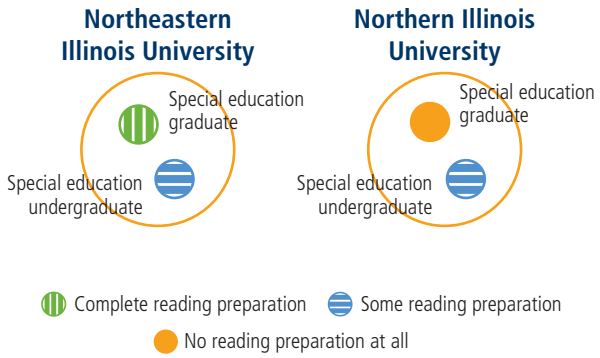
In the programs evaluated, the percentage of undergraduate and graduate special education programs that met our first reading standard was significantly higher than undergraduate and graduate elementary programs, respectively, but that was still well below the majority: one-third of undergraduate programs met the standard and about 40 percent of graduate programs did so.

The second reading standard must be considered in the context of an individual program's score on Standard 36A because it indicates whether programs that receive high ratings for reading may be diluting the value of that preparation because some courses teach effective reading while other courses provide contradictory instruction.

☆ Undergraduate special education teacher candidates at **Southern Illinois University Edwardsville** receive fully adequate preparation in reading. (Note that the preparation of their undergraduate elementary teacher candidate counterparts is completely inadequate.)

In addition, while this review only examined both undergraduate and graduate special education at two institutions, preparation was inconsistent in both, as indicated in the graphic below. **Northeastern Illinois University**'s preparation is complete only at the graduate level whereas **Northern Illinois University**'s is completely absent at the graduate level.

Inconsistency in elementary reading preparation



A final noteworthy feature of reading preparation is that the weaknesses are compounded by the fact that only a small percentage of the 104 textbooks we reviewed (12 percent) accurately and comprehensively address all five components of the science of reading, with an additional quarter that can be used to cover one or more, but not all, of the components of effective reading instruction. In fact, only five institutions steered entirely clear of inappropriate textbooks: **Bradley University**, **Dominican University**, **Eureka College**, **Southern Illinois University Edwardsville**, and the **University of Illinois at Chicago**. This was not a surprising finding. Of over 630 textbooks in use in a number of states, only a small number appropriately cover effective reading instruction.[5]

Quality of reading textbooks in Illinois

Category of textbooks (w/definition)	Percentage of textbooks
Acceptable core textbook The text accurately and thoroughly covers all five components of good reading instruction.	**12%**
Acceptable supplemental The text accurately and completely covers one or more, but not all, of the five components of good reading instruction and is suitable as a supplemental reading for a course.	**27%**
Not acceptable core textbook The text was intended to be a comprehensive source on good reading instruction but was inaccurate and/or incomplete.	**38%**
Not acceptable supplementary The text was intended to cover some aspect of reading instruction but did not cover even one component of good reading instruction in an accurate and complete manner.	**23%**

A complete list of ratings for required textbooks in Illinois' teacher preparation programs can be found in Section 16 of this appendix. In addition, more extensive reviews on 14 textbooks are provided, six of which are "acceptable core" textbooks. This section of the appendix also provides information about the reading expert who served as the textbook reviewer.

5 Our tally used to be higher because it also included textbooks deemed irrelevant for instruction after a cursory review.

How Illinois institutions fare on this standard

NCTQ STANDARD 36A.
The institution prepares elementary teacher candidates in the essential components of effective reading instruction.

This standard only applies to special education teacher preparation programs.

★ Programs with Strong Design	**Southern Illinois University Edwardsville (UG-SPED)**
● Programs Meet Standard	Eastern Illinois University (UG-SPED), Lewis University (UG-SPED), University of St. Francis (UG-SPED), Western Illinois University (UG-SPED), Dominican University (GR-SPED), Governors State University (GR-SPED), Northeastern Illinois University (GR-SPED), University of Illinois at Chicago (GR-SPED)
◕ Programs Nearly Meet Standard	Elmhurst College (UG-SPED), Northern Illinois University (UG-SPED), Trinity Christian College (UG-SPED), Benedictine University (GR-SPED)

◑ Programs Partly Meet Standard	Bradley University (UG-SPED), Concordia University Chicago (UG-SPED), National-Louis University (GR-SPED)
○ Programs Do Not Meet Standard	Illinois State University (UG-SPED), MacMurray College (UG-SPED), Northeastern Illinois University (UG-SPED), Southern Illinois University Carbondale (UG-SPED), Chicago State University (GR-SPED), Northern Illinois University (GR-SPED), University of Illinois at Urbana-Champaign (GR-SPED)

How Illinois institutions fare on this standard

NCTQ STANDARD 36B.
The institution ensures that all coursework adheres to the essential components of effective reading instruction.

This standard only applies to special education teacher preparation programs.

● Programs Meet Standard	Concordia University Chicago (UG-SPED), Trinity Christian College (UG-SPED), Western Illinois University (UG-SPED), Benedictine University (GR-SPED)
○ Programs Do Not Meet Standard	Illinois Wesleyan University (UG-ELEM), Millikin University (UG-ELEM), Rockford College (GR-ELEM), University of Illinois at Chicago (UG-ELEM), University of St. Francis (UG-ELEM), Greenville College (GR-ELEM), Illinois State University (UG-SEC)

NA Programs For Which Rating on This Standard Is Not Applicable	Bradley University (UG-SPED), Eastern Illinois University (UG-SPED), Elmhurst College (UG-SPED), Lewis University (UG-SPED), Northern Illinois University (UG-SPED), National-Louis University (GR-SPED), University of Illinois at Chicago (GR-SPED), Bradley University (UG-SPED), Eastern Illinois University (UG-SPED), Elmhurst College (UG-SPED), Lewis University (UG-SPED), Northern Illinois University (UG-SPED)

STANDARD 37

The institution provides adequate preparation in the specific elementary mathematics content needed by special education teachers.

RATIONALE

While not as commonly discussed as the prevalence of reading disabilities, sizeable numbers of students with learning disabilities perform below their grade-level counterparts in mathematics. This is the case for significant numbers of Illinois students with learning disabilities, and by high school the achievement gap in mathematics between students with and without IEPs is just as large as the gap in reading scores.[6] Special education teachers require the same foundation in elementary mathematics concepts as general elementary teachers.

METHODOLOGY

The rating of special education programs on mathematics preparation uses the same methodology employed in Standard 29, elementary mathematics content. The scope of our analysis does not involve more advanced mathematics instruction, which special education teachers working in a secondary school may also find necessary.

NCTQ's rating of Illinois' teacher preparation programs on mathematics preparation is based on examination of syllabi and required primary textbooks in coursework designed for teacher audiences. These materials were used to assess whether the coursework covers essential topics in mathematics (the basis for an "instructional score") and devotes sufficient time to those topics.

Programs that required an eight- or nine-semester-hour sequence of required elementary mathematics coursework that adequately covers essential topics in numbers and operations, algebra, geometry and data analysis and that uses an adequate textbook received full credit. Ratings were lowered if some essential topics did not appear to be taught, poor textbook selections were made or coursework requirements were not sufficient (fewer than eight semester hours).

Standard 37: Mathematics content

Score	Criteria
4	Coursework addresses essential elementary mathematics topics adequately,* and eight to nine semester hours of coursework is required.**
3	There are minor deficiencies*** in either the adequacy with which elementary topics are addressed or the number of hours of required coursework.
2	This rating represents a combination of evaluations on the adequacy with which elementary topics are addressed and the number of hours of required coursework: 1) a minor deficiency in both, or 2) a major deficiency in one and a minor deficiency in the other, or 3) a very major deficiency in one and no deficiency in the other.
1	This rating represents a combination of evaluations on the adequacy with which elementary topics are addressed and the number of hours of required coursework: 1) a major deficiency in both or 2) a very major deficiency in one and a minor deficiency in the other.

6 The 2001-2009 11th grade PSAE scores are provided by the Interactive Illinois Report Card (http://iirc.niu.edu/Default.aspx) Achievement gaps are evident on: http://iirc.niu.edu/State.aspx?source=Test_Results&source2=Achievement_Gap

0	There are very major deficiencies in both the adequacy with which elementary topics are addressed and the number of hours of required coursework, or there is no instruction at all on elementary mathematics content.

* An instructional score of 70-100 percent.

** Reduced to six semester hours for programs housed in institutions rated as "most selective."

*** A minor deficiency in the number of semester hours: 5-7 hours. A major deficiency in the number of semester hours: 4 hours. A very major deficiency in the number of semester hours: 3 or fewer. A minor deficiency in coverage: instructional score of 50-69%. A major deficiency in coverage: instructional score of 40-49%. A very major deficiency in coverage: instructional score below 40%

FINDINGS

None of the special education programs that we evaluated—undergraduate or graduate—met our standard. The reason is that no program requires at least eight semester hours, the amount of coursework necessary both to adequately address the deficiencies in math typically found in elementary teacher candidates and to develop conceptual—not mechanical—proficiency. However, commendably, a higher percentage of undergraduate special education programs nearly meet the standard when compared to undergraduate elementary programs (38 percent compared to 31 percent). Given this fact, it is surprising that nearly every graduate special education program except **Chicago State University** failed to meet the standard because they require no elementary content coursework at all (eight programs).

How Illinois teacher preparation programs fare on this standard

NCTQ STANDARD 37:
The institution provides adequate preparation in the specific elementary mathematics content needed by special education teachers.

This standard only applies to special education teacher preparation programs.

◕ Programs Nearly Meet Standard	Eastern Illinois University (UG-SPED), Southern Illinois University Edwardsville (UG-SPED), Trinity Christian College (UG-SPED), University of St. Francis (UG-SPED), Western Illinois University (UG-SPED), Chicago State University (GR-SPED)
◑ Programs Partly Meet Standard	Bradley University (UG-SPED), Concordia University Chicago (UG-SPED)
◔ Programs Meet Small Part of Standard	Northern Illinois University (UG-SPED), Southern Illinois University Carbondale (UG-SPED)

○ Programs Do Not Meet Standard	Illinois State University (UG-SPED), Lewis University (UG-SPED), MacMurray College (UG-SPED), Northeastern Illinois University (UG-SPED), Benedictine University (GR-SPED), Dominican University (GR-SPED), Governors State University (GR-SPED), National-Louis University (GR-SPED), Northeastern Illinois University (GR-SPED), Northern Illinois University (GR-SPED), University of Illinois at Chicago (GR-SPED), University of Illinois at Urbana-Champaign (GR-SPED)
? Programs Whose Performance Cannot be Determined	Elmhurst College (UG-SPED)

STANDARD 38:
The institution gears pedagogical training for special education teacher candidates to the specific knowledge and skills that they need for teaching.

RATIONALE

This standard evaluates whether professional preparation addresses the fundamental concept of special education as defined in federal law (IDEA), "specially designed instruction," which evaluates whether coursework is preparing teacher candidates to design instruction for students with learning disabilities. The standard requires that a good share of at least one course be dedicated to this topic. No other aspect of the pedagogical preparation of special education teachers is addressed by the standard.

METHODOLOGY

This evaluation is in a preliminary stage and has only been applied to four Illinois special education programs with findings noted here but not on the institutional rating sheets. Evaluation is based on a double screening of all professional coursework in special education programs:

Screen 1: Determine through the review of lecture topics and required reading that the course has a strong focus on instruction in a particular content area (e.g., reading, mathematics, science, social studies) or in multiple content areas.

For those courses that pass the first screen:

Screen 2: Determine that several significant assignments in such a course require that students design instruction. The requirements should cover:

a. appropriate development of a curriculum feature (e.g., develop a new task or lesson that explicitly teaches a new concept or a prerequisite concept),
b. modification (i.e., curriculum architecture remains intact but a feature is changed; for example, adding more positive examples of a concept),
c. major adaptations (i.e., the architectural structure of an existing curriculum is changed significantly; for example, the teaching of a rule relationship is changed entirely to include a revised rule, teacher wording, and teacher presentation and practice examples), or
d. major enhancement (i.e., a template involving an entirely new curriculum architecture is used to teach the content of an existing lesson of a curriculum program).

A **top rating** on this standard reflects at least one course with a strong focus on instruction, with all such courses containing several significant assignments requiring that students design instruction. (All courses pass both screens.)

A **middle rating** reflects at least one course with a strong instructional focus but an adequate number of relevant assignments in only some such courses. (One or more courses, but not all courses, pass the first and second screens.)

A **low rating** reflects at least one course with a strong instructional focus but an adequate number of relevant assignments in none of such coursework. (All courses pass the first but not the second screen.)

A **failing rating** reflects no course with a strong instructional focus, or a number of courses that address content instruction, but only as a minor topic. (All courses fail both screens.)

FINDINGS

Because this standard is still in a pilot phase, we use it to provide only preliminary findings for four special education programs. These four special education programs—two undergraduate and two graduate—were selected randomly from the 14 undergraduate and nine graduate special education programs included in our review. The sample includes the undergraduate special education program at **Illinois State University**, whose education school website claims that it is the largest producer of special education teachers in the country.[7]

All four programs passed the first screen, meaning that they had at least one course that had a strong focus on instruction. (All, in fact, had more than one such course.)

The results for the programs differed on the second screen:

Dominican University (graduate): Three courses focus on instruction, but only one of the three courses appears to have an adequate number of relevant assignments. Preliminary rating: MIDDLE RATING

Illinois State University (undergraduate): Two courses focus on instruction, but both are field-based and neither appears to have adequate relevant assignments. Preliminary rating: LOW RATING

Northern Illinois University (undergraduate): Three courses focus on instruction and all three appear to have an adequate number of relevant assignments. Preliminary rating: HIGH RATING

Northern Illinois University (graduate): Three courses focus on instruction and all three appear to have an adequate number of relevant assignments. Preliminary rating: HIGH RATING

STANDARD 39

The institution is attentive to the numbers of special education and general education teachers it graduates, striving to achieve production in some proportional relationship to the state's demand for such teachers.

RATIONALE

Special education teachers are chronically in short supply. The most recent Illinois State Board of Education report on educator shortages states that "The under-production of special education teachers continues to be a concern." Yet the state has a surplus of other types of teachers, such as early childhood and elementary teachers.[8] This standard recognizes that institutions that graduate significant numbers of teachers of all types should graduate a proportional number of special education teachers.

7 http://www.specialeducation.ilstu.edu/undergrad/
8 http://www.isbe.state.il.us/research/pdfs/ed_supply_demand08.pdf, 10.

METHODOLOGY

There is no rating associated with this standard, merely the development of some proportions for comparison. We calculated the proportion of the state's special education teachers produced by a given institution as well as the proportion of the state's teachers produced by the institution in the combination of all other preparation programs offered.[9]

FINDINGS

We conducted an analysis of these two proportions at the 21 institutions at which we evaluated an undergraduate special education program, a graduate special education program or both. The analysis indicated only marginal differences between the proportion of the state's special education teachers produced and the proportion of the state's teachers produced by the institution in the combination of all other preparation programs offered. *No conclusions relevant to the standard can be drawn from the analysis*.

Stepping back from the standard, however, there may be implications from our evaluations of special education programs relative to Illinois' efforts to increase the number of certified special education teachers.

The 21 education schools included in our evaluation produce 78 percent of the state's special education teachers.[10] While no special education program received a grade higher than a C in our evaluation, 10 institutions had programs in the C range, whereas eleven had programs with grades in the D-F range. It should be noted that the eleven low-performing programs produce a disproportionate number of elementary teachers—three teachers for every two produced by the programs that rated higher. This means that if all programs were to respond to shortages by ramping up their production of special education teachers and did so in proportion to their current production, a disproportionate share of the special education teachers would graduate from programs with weak or failing design. This conclusion argues against an indiscriminate initiative to increase special education production and for one that is targeted to encourage increased production from programs with stronger design.

9 For all calculations we relied on production numbers available from the Illinois State Board of Education (ISBE) because self-reports on production from the 53 education schools in the study were too incomplete for analysis. These reports provide the number of "special teaching" certificates, which cannot be defined by the ISBE staff but which we presume to pertain to or include the LBS 1 certified teachers whose preparation we evaluated.

10 Of the 32 remaining institutions, seven do not certify special education teachers. This means that the 25 whose special education programs we did not evaluate produce the remaining 22 percent of special education teachers.

SECTION 11:
Which standards are evaluated by school, which by degree level, which by program?

This chart provides information on the applicability of standards either to provide a rating or information. Several examples will serve to explain the chart's meaning.

Consider first that applicants to all undergraduate teacher preparation programs at any given education school must meet the same admissions requirements. This implies that if our review includes both an undergraduate elementary program and an undergraduate secondary program at that school, the evaluation of both programs relative to our "selective admissions standard" (Standard 1) need not be specific to either program but can apply to both. This means that the standard is applied at the degree level. Likewise, the general organization of student teaching is uniform across all preparation programs at an education school, which implies that if our review includes both an undergraduate and graduate special education program at that school, the evaluation of both programs relative to "aligned student teaching" (Standard 14) need not be specific to either program, but can apply to both. This means that the standard is applied at the school level.

You will notice that the vast majority of the standards (30 out of 39) are applied at the program level, providing either a rating or information specific to a program.

Standards that are not rated (NR) may still be evaluated by school, degree level or program, but only to provide general information. Cells that are shaded reflect no evaluation at all because the standard is not relevant to the program type.

		Programs					
Standard Number	**Standard**	Elem/EC UG	Sec UG	SpEd UG	Elem/EC Grad	Sec Grad	SpEd Grad
	Selectivity						
1	Selective admissions	✓(UG)			✓(G)		
2	Serious coursework	✓(UG)			✓(G)		
3	Exit exams	✓	✓	✓	✓	✓	✓
	Preparation for the 21st Century Classroom						
4	Diversity	NR					
5	Learning Standards	✓			✓		
6	English Language Learners	✓			✓		
7	Education Issues	NR	NR	NR	NR	NR	NR

Standard Number	Standard	Programs					
		Elem/EC UG	Sec UG	SpEd UG	Elem/EC Grad	Sec Grad	SpEd Grad
8	Integrating Technology	✓			✓		
9	Assistive Technology			✓			✓
10	Global Perspective	NR					
	Practice Teaching						
11	Training Model	NR					
12	Early Field Work	✓	✓	✓	✓	✓	✓
13	Full-time student teaching	✓ (School)					
14	Aligned student teaching	✓ (School)					
15	Student teaching placements	✓ (School)					
16	Back-up degree	✓					
	Professional Training						
17	Classroom Assessments	✓	✓		✓	✓	
18	Special Education Assessments			✓			✓
19	Cognitive psychology	NR	NR	NR	NR	NR	NR
20	Classroom Management	✓	✓	✓	✓	✓	✓
21	Special Education	✓	✓		✓	✓	
22	Preparation Efficiency	✓	✓	✓	✓	✓	✓
23	Course Frequency	✓	✓	✓	✓	✓	✓
	Program Evaluation						
24	Graduate Outcomes	✓ (School)					
25	Graduates' Effectiveness	✓ (School)					
	Faculty						
26	Faculty Expertise	✓ (School)					
	Preparation Specific to Early Childhood/Elementary Teachers						
27	Broad Subject Preparation	✓			✓		
28A	Reading Instruction	✓			✓		
28B	Reading Instruction	✓			✓		
29	Elementary Math	✓			✓		
30	Math Methods	✓			✓		
31	Other Methods	✓			✓		
32	Middle School Preparation	✓			✓		

Standard Number	Standard	Programs					
		Elem/EC UG	Sec UG	SpEd UG	Elem/EC Grad	Sec Grad	SpEd Grad
	Preparation Specific to Secondary Teachers						
33	High School Preparation		✓			✓	
34	Secondary Methods		✓			✓	
	Preparation Specific to Special Education Teachers						
35	Broad Subject Preparation			✓			✓
36A	Reading Instruction			✓			✓
36B	Reading Instruction			✓			✓
37	Elementary Math			✓			✓
38	Special Education Pedagogy			NR			NR
39	Teacher Production			NR			NR

SECTION 12:
Review Chronology

The National Council on Teacher Quality's review of Illinois' 53 education schools and three independent providers was conducted in just over a year. Over that time period, 3,205 files were sent by the schools' staffs and analyzed by NCTQ. Education school staff sent NCTQ over 2,500 emails. NCTQ responded with well over 1,900 emails. Here are the review's most significant milestones:

October 23, 2009

An introductory joint letter from the National Council on Teacher Quality (NCTQ) and Advance Illinois (AI) is sent to the presidents of the colleges and universities whose education schools were to be reviewed.

December 16, 2009

A request letter is sent to presidents asking for materials necessary for the review.

January 21, 2010

The request letter is sent to deans of the education schools in the review.

January 27, 2010

NCTQ provides update at the advisory council AI has established for the review.

March 16 & 31, 2010

An email is sent to nearly 500 Illinois superintendents of public school districts describing the project and asking permission to contact specific principals within the district regarding an online survey of student teaching arrangements.

April 7 & 21 and May 5, 2010

Nearly one thousand email messages are sent to principals in K-12 schools across Illinois asking them to complete a short online survey characterizing student teaching arrangements with local education schools.

April 7, 2010

A letter to 267 superintendents is sent to survey them on the nature of the information requests regarding the performance of graduates that the district receives from local education schools.

May 24, 2010

NCTQ provides update at AI advisory council meeting.

June 2, 2010

Part 1 of preliminary findings of fact sent via email and regular mail to education school deans detailing the conclusions and sources NCTQ will use to evaluate standards for each program. The deans are invited to correct or augment these findings via email, fax, a secure upload site, regular mail, and phone conversation.

June 22 through July 8, 2010

Part 2 of preliminary findings of fact sent to education school deans on a rolling basis (as the responses to the Part 1 report are submitted).

June 30, July 6, and July 8, 2010

A scheduled conference call is conducted on each of these days with any education school dean wishing to discuss NCTQ standards and preliminary findings of fact.

September 9 to 27, 2010

Draft rating reports sent to education schools on a rolling basis.

September 20 to 24, 2010

NCTQ staff visits Chicago area schools to gather principal surveys from schools for which no survey information has been received.

October 4, 2010

NCTQ provides updates and discusses initial high-level findings at AI's advisory council meeting. The advisory council and NCTQ decide to provide the opportunity for all education school deans to participate in 30 minute individual conference calls to clarify remaining issues.

October 6, 7, 8, and 11, 2010

Deans of 26 education schools participate in individual conference calls with NCTQ's senior policy director to clarify any remaining questions regarding analysis, source documents, and ratings.

November 9, 2010

Report released.

SECTION 13:
Review Communications

Subsequent to collection of syllabi and other materials, NCTQ solicited questions and comments from institutions on three separate occasions: 1) in response to our preliminary findings of fact, 2) in response to our preliminary ratings, and 3) to request a 500-word comment for publication.

Only **Olivet Nazarene University** did not respond to our request for syllabi and did not provide any comments to any solicitation.

The information provided by institutions that participated also varied. One institution sent 88 e-mail attachments in response to our first report to institutions. Other institutions provided cryptic responses similar to the hand-written one shown below.

Program: College of Education Undergraduate and Graduate Divisions
Program Evaluation: Outcomes

Standard 14: The institution tracks graduate outcomes such as employment and retention.

Analysis at school level: **Our review could not determine whether data on graduate is systemically obtained from hiring school districts. These data could include, for example, information on performance evaluations or retention rates.**

The analysis applies to all undergraduate and graduate preparation programs at [redacted] included in our review.

Source: Could not be found.

IT IS.

To give some idea of the nature of the communications surrounding our evaluation, the table below provides eight of the comments we received to our preliminary ratings and how we responded:

Education School Dean Comment (edited to remove identifying information)	**NCTQ Response**
Standard 1 (undergraduate admissions): *NCTQ claims that the entrance requirements for [our institution] result in candidates being admitted to the institution be limited to those who are in the top 50% of the college-going population. One of [our institution]'s admissions requirements is that admitted students be from the top 50% of their graduating class. It is not possible to know, at the time students are accepted into [our institution], what percent of their class actually go to college. Our local public schools provide us with data on college-going rates of their graduates long after students have started college. If NCTQ has a mechanism for predicting who will go to college prior to their actually going to college, we would be pleased to examine your methodology for possible use in admissions.*	*Our standard for undergraduate admissions does not presuppose extrasensory powers. Standardized test data that compare an applicant's academic proficiency to that of the general college-going population will suffice to meet the standard.*
Standard 1 (graduate admissions): *We fail to understand the criteria that a candidate must be in the top 50% of his or her graduating class for graduate students. The candidate has already proved that he or she can graduate from college.*	*Graduation from college cannot be deemed a sufficient criterion for admission to a graduate teacher preparation program.*
Standard 2: *The initial finding was that "62% of course assignments represented graded evaluations of student work that are designed to assess mastery of course content" and identified exceptions in the three courses. Instructors from all three courses responded, resulting in the inclusion of one assignment from a course that had not been counted in the initial finding. Instructors refuted several of the initial findings in their response, but none were changed in the final analysis.*	*The rating for the course on which the rating as refuted was not changed based on information presented by instructors because it did not demonstrate that the assignments met the standard of requiring individual accountability for content mastery. In the case of the two group assignments, the information submitted indicated that the teacher candidates were "accountable to each other" and were monitored through "self-evaluation that includes documentation of their work," not a sufficient standard for individual accountability and for which no evaluation rubrics were provided in any case. In the case of the assignment for which there was a reflective exercise assigned (one of the two group projects), the apparent goal of the reflection process is "that students recognize their own cultural assumptions in relation to those of other societal groups." The reflection exercise does not appear to require any consideration of the relevance of the assignment to the task of teaching and therefore does not meet the standard for mastery of the content of a social studies methods course—namely, how to teach social studies.*

Education School Dean Comment (edited to remove identifying information)	**NCTQ Response**
Standard 16: *NCTQ raters incorrectly concluded that a non-education related concentration allowable for elementary education majors.*	*Your response to our finding of fact on this standard indicated that a "bilingual/bicultural" concentration was permitted. Our attempt to identify the requirements for the "bilingual/bicultural" concentration option located this information in the catalog (p. 309). Since this coursework is not focused on "language and culture" and is entirely education-related, we noted in our rating that an education concentration is allowed. If this is not the relevant coursework, we would be happy to review the rating.* *EDFN 305 Philosophical & Historical Foundations of Public Education* *EDFN 307 Psychology of Instruction and Learning* *BLBC 301* Curriculum in Elementary School.* *BLBC 302* Methods of Teaching Language Arts* *ELED/BLBC-304* Methods of Teaching Social Studies* *ELED/BLBC-305* Methods of Teaching Science.* *BLBC 306A* Methods of Teaching Reading* *ELED/BLBC 310 Methods of Teaching Mathematics* *BLBC 328 Clinical Experience in Elementary Education* *BLBC 329 Student Teaching in Elementary Education* *Elective Courses (Choose one):* *EDFN 313 Problems, Issues & Practices in Education* *Or ECED 312 Teaching Strategies with Multicultural Groups* *Or ELED 319 Classroom Management* *Or ELED 330 Creating and Using Puppetry in the Classroom*
Standard 24: *We provided complete access to our Teacher Graduate Survey, a survey given to our graduates and their school supervisors (i.e., building principal, department chair) at the end of the first and fifth years of teaching. [Our institution] "nearly" met this standard. We have no idea what "nearly" met means. We were not provided with information on what is missing. This comprehensive survey asks our graduates and their supervisors to rate us on preparation for teaching core content standards, instructional planning and delivery, assessment, classroom management, technology, school-community relations, the ability to work with diverse learners, and the ability to help all children achieve. In the first round of paper collection by NCTQ, we submitted the entire survey.*	*A review of this material indicates that the data collected meets the standard and our original analysis was mistaken. We have corrected the rating.*

Education School Dean Comment (edited to remove identifying information)	**NCTQ Response**
Standard 26: *I laid out a chart that indicated where, in the two courses where the essential components of reading instruction are taught, the five research-based components are taught. We cannot understand NCTQ's response to this issue. The standard reads, "in all courses related to reading instruction." Our candidates get double coverage of the essential components in the target courses provided. Perhaps it is that the reviewers did not understand our translation of the syllabi (i.e., "Unlocking the alphabetic code" = phonemic awareness).*	*Our reading evaluations are based on more than the presence of a simple phrase in a syllabus. Reviewers look for classroom instruction and accountability (tests, practice, assignments), as well as textbook support. While lectures in one of the two courses do provide partial coverage of most of the components of effective reading instruction, all four of the textbooks used are unacceptable for instruction on all five components.*
Standard 27: *We fail to see how the 14+ Philosophy and Religion courses [we offer] do not meet [the "world geography" requirement]. The NCTQ standard states: "teacher candidates receive a broad liberal arts education." Given this definition, the NCTQ analysis of our course offerings which that states "course options are too broad and diverse to meet our standards" is simply illogical.*	*The institution's "Philosophy and Religion" requirement was too broad to meet this requirement, including courses such as:* **Work Ethics** Business practices, economic trends and policies, personal deportment and interpersonal relations in the workplace invite many moral questions. A combined application of the study of moral theories and applied ethics will address contemporary issues related to work. *An elementary teacher candidate choosing this course will not prepare herself for teaching the K-9 Illinois curriculum in world cultures and geography. The same is true for many other course choices in Philosophy and Religion.*
Standards 29 and 37: *Findings do not take into account the additional mathematics coursework required to fulfill the quantitative reasoning general education requirement, or the undergraduate mathematics coursework completed by students in the graduate special education program. Findings also discount mathematics methods courses, despite the fact that several math content topics are indicated in the course syllabi.*	*Our standards for mathematics preparation of elementary and special education teacher candidates are not based on the general audience coursework noted. We do not discount the importance of mathematics methods coursework—it is separately evaluated in Standard 27B.*

SECTION 14:
Calculating program grades

The process by which ratings on standards were used to determine program grades is described below:

Design grades were computed for each type of program: elementary, secondary, special education:

Elementary Undergraduate and Graduate Program Design Grade

Area Category	Proportion of Program Grade
Selectivity	**27%**
Preparation for the 21st Century Classroom	**6%**
Practice Teaching	**15%**
Professional Training	**10%**
Program Evaluation	**3%**
Faculty	**3%**
Preparation Specific to Elementary Teacher Candidates	**36%**

Secondary Undergraduate and Graduate Program Design Grade

Area Category	Proportion of Program Grade
Selectivity	**27%**
Practice Teaching	**15%**
Professional Training	**10%**
Program Evaluation	**3%**
Faculty	**3%**
Preparation Specific to Secondary Teacher Candidates	**42%**

Special Education Undergraduate and Graduate Program Design Grade

Area Category	Proportion of Program Grade
Selectivity	**27%**
Preparation for the 21st Century Classroom	**5%**
Practice Teaching	**15%**
Professional Training	**8%**
Program Evaluation	**3%**
Faculty	**3%**
Preparation Specific to Special Education Teacher Candidates	**39%**

Conversion of Numeric Scores to Letter Grades

A four-point rating scale was used to evaluate programs on all relevant standards. After calculation of the program's numeric score on this same scale using the weightings indicated above, the following scale was used for conversion to letter grades:

Letter grade ranges (each range is further divided in plus and minus scores):

A - 3.55 or higher
B - 2.86 to 3.54
C - 2.18 to 2.85
D - 1.50 to 2.17
F - 1.49 or lower

Additional notes are provided below. Standards whose numbers are indicated in ***bold and underlined italicized text*** are the most heavily weighted standards in their category. A full list of standards follows the additional notes.

- Within the "Selectivity" area category, ratings on two standards were taken into account in the calculation of the partial score: Standard ***1*** and Standard 2. Ratings are provided on Standard 3, but were not included in calculation of the program grade.
- The set of standards included in elementary, secondary and special education programs in the area category of "Preparation for the 21st Century Classroom" differs between programs and within program by degree level. The set for the undergraduate elementary program includes Standards 4, 5, 6, 7, 8 and 10; the set for graduate elementary programs includes Standards 4, 5, 6, 7 and 8; the set for the undergraduate secondary program includes Standards 4, 7 and 10; the set for graduate secondary programs includes Standards 4 and 7; the set for undergraduate special education programs includes Standards 4, 7, 9 and 10; the set for graduate special education programs includes Standards 4, 7 and ***9***. In all cases, rather than ratings, information found on program ratings sheets and in section 3 of this appendix is provided on Standards 4 and 10 (were relevant).
- Within the "Practice Teaching" area category, ratings on five standards are taken into account in the calculation of the partial score: Standards 12, 13, 14, and ***15***. Rather than ratings, Information found on program rating sheets and in section 4 of this appendix is provided on Standard 11.

- The set of standards included in elementary, secondary and special education programs in the area category of "Professional Training" differs. The set for elementary and secondary programs includes Standards 17, 19, 20, 21, 22 and 23. The set for special education programs includes Standards 18, 19, 20, 22 and 23. In all cases, rather than ratings, information found on program ratings sheets and in section 5 of this appendix is provided on Standard 19.
- Within the "Program Evaluation" area category, the rating on only one standard was taken into account in the calculation of the partial score: Standards 24.
- Only Standard 26 is included in the "Faculty" area category.
- Within the area category of "Preparation specific to elementary teacher candidates," the partial score calculation includes ratings for undergraduate elementary programs on Standards ***27***, ***28*** (***A***&B), ***29***, 30, 31, 16 and 32, and for graduate elementary programs on Standards 27, 28 (A&B), 29 ,30, 31 and 32. Calculations for partial scores in this area for early childhood programs at both the undergraduate and graduate level were analogous except that neither included ratings on Standard 32.
- Within the area category of "Preparation specific to secondary candidates," the partial score calculation includes ratings for both undergraduate and graduate programs on Standards ***33*** and ***34***.
- Within the area category of "Preparation specific to special education teacher candidates," the partial score calculation includes ratings for undergraduate programs on Standards ***35***, ***36*** (***A***&B) and ***37***. In both cases, rather than ratings, information found on program ratings sheets and in section 10 of this appendix is provided on Standards 38 and 39.

SECTION 15: Evaluation of elementary content coursework (Standards 27 and 35)

Ideally, all prospective elementary teachers would graduate from high school with ample content knowledge to prepare them to teach the Illinois K-9 curriculum with real expertise and not just the superficial understanding that comes from a quick review of instructional materials the night before a topic is introduced in the classroom. For the sake of their own educations, they would ideally also arrive prepared for non-survey coursework that explores a particular topic at the level of depth traditionally associated with higher-level education. This would enable them, for example, to demonstrate mastery of the biology covered in a freshman biology course and allow them to select a biology elective if they cared to do further study in the area. Unfortunately, this is not the case with many prospective elementary teachers and the coursework they take in their first two years of college represents the last opportunity to augment their content knowledge to ensure that they are competent and confident in the classroom.

On the other hand, with the advent of Advanced Placement and International Baccalaureate programs in high schools, many students graduate with the content knowledge normally associated with high school as well as demonstrated mastery of the content in introductory college coursework.

How should education programs fairly handle the content preparation of prospective teachers at both ends of this spectrum? The most sensible approach for an education program is to ensure that the combination of general education and education program requirements ensure that prospective elementary teachers are enrolled in the appropriate coursework with provision made for placing out of such requirements with appropriately focused assessments, and selection among related courses (for example, ancient and modern world history) with an eye to remedying areas of the greatest deficiency.

Evaluating elementary content coursework

We looked for coursework in the following areas:

- **World or American literature:** A survey course that focuses on a substantial collection of recognized masterpieces of the world, British or American literary heritage.
- **Writing, grammar, and composition:** A course addressing the composing process in expository, argumentative, descriptive and narrative modes in writing paragraphs and essays. The course should include review of the rules of traditional grammar.
- **Children's literature:** A course addressing the origins and development of literature for children, major works and illustrators, distinctive genres, social issues addressed in children's literature today, and uses of children's literature in the elementary curriculum.

- **American history:** Two courses, one course typically covering American history either up to the Civil War or up to Reconstruction, and the second a post-bellum course, or alternatively, an American government course.
- **World history—ancient or modern:** A course providing general narratives of all major civilizations in either ancient or modern times.
- **World cultures, religions w/geography:** A course that analyzes the world from a geographic perspective emphasizing the unique qualities of world regions, the spatial interaction of people, elements and regions, and major regional and global problems and prospects. The course should address languages, religions, customs, cultural diffusion, geography and related topics.
- **Music history:** A course that addresses specific terminology in describing musical parameters such as melody, rhythm, harmony and form, and musical characteristics of each historical style period in Western classical music, as well as several popular and world music styles.
- **Art history:** A course covering the basic terms, facts, and concepts in art history; comprehension of the progress of art as fluid development of a series of styles and trends that overlap and react to each other as well as to historical events; and recognition of the basic concepts inherent in each style and the outstanding exemplars of each.
- **Science:** Full credit is awarded for two courses in the fundamentals of physics, chemistry, biology and/or geology or for survey courses such as "Physical Science," "Life Science," or "Earth Science." Ideally the courses should be in different subjects and include labs.

The coursework examples that follow were drawn from the many evaluated in the course of this review of Illinois teacher preparation programs. We provide an example in each of the areas listed above of a required course for which full credit was given and one for which no credit was given. (The fact that ratings on this standard are generally so low would suggest that full credit was awarded only for coursework that fit the descriptions above in all respects, but these examples demonstrate that this is not the case and that our evaluation follows our general approach to give every benefit of the doubt.) Of course, no credit could also be given if no coursework was required at all in a particular area. In some cases, we gave credit for a combination of coursework that covered several areas.

While our preliminary finding of fact regarding whether a course met the standard in any area was based on course descriptions alone, institutions were invited to provide us with syllabi if they took issue with our finding.

Sample course descriptions:

World or American literature

Sample description for course that would **fully** meet our standard:

- **Studies in Literature**
  An introduction to literature, including the imaginative genres of poetry, fiction, and drama. Selections include works from around the world, including those from non-western and third-world cultures, writers of both genders, and writers of various philosophical stances. Focuses on the interplay of individual talent, artistic tradition, and historical context.
  - Rationale for rating: While not a "recognized masterpieces" survey course, this course does cover broad topics in literature and focuses on works from around the world.

Sample description for course that would **fail** to meet our standard:

- **Literature and the Human**
  In this course we will investigate how the concepts of Love, Hate, and Obsession are related in complex, dynamic ways, and how these concepts provide the basis for some of the most challenging and provocative stories and human events. In short, we'll be investigating the extreme, and we'll do so in short stories, novels, non-fiction, and film.
  - Rationale for rating: This course has a narrow theme, covers many genres (some of which do not fall within the literary realm) and does not focus on works from various regions of the world.

Writing, Grammar, and Composition
Sample description for course that would **fully** meet our standard:

- **Composition and Language**
  A course in the reading and writing of expressive, expository, and persuasive essays. Attention is given to effective expression, clear structure, adequate development, and documentation of sources.
  - Rationale for rating: This course covers basic components of writing and composition.

Sample description for course that would **fail** to meet our standard:

- **Critical Thinking and Writing**
  Application of the principles of clear thinking and effective writing to expository and argumentative essays.
  - Rationale for rating: The course does not appear to address specific components of composition.

Children's Literature
Sample description for course that would **fully** meet our standard:

- **Children's Literature**
  Types, genres, authors, and illustrators of books for children from birth through middle school. Emphasis on literature response activities; planning and assessing a literature-based curriculum. Analysis of current trends, issues, and the impact of children's literature.
  - Rationale for rating: This course offers a comprehensive survey of children's literature relevant to the elementary and middle school years.

Sample description for course that would **fail** to meet our standard:

- Institutions generally failed to meet our standard in this area because they have no children's literature requirement.

U.S. History I
Sample description for course that would **fully** meet our standard:

- **History of the United States to 1877**
  The colonial period; the independence movement; framing and adoption of the Constitution; growth of American nationality; Manifest Destiny; the Civil War and Reconstruction.
  - Rationale for rating: This course devotes a full semester to U.S. History before 1877.

Sample description for course that would **fail** to meet our standard:

- **History of American Education**
  A study of the evolution of the public schools and higher education emphasizing problems of the twentieth century.
  - Rationale for rating: While potentially valuable as professional coursework, this course addresses too narrow a topic in American history to meet an elementary content standard in the area of American history or government.

U.S. History II or American Government

Sample description for course that would **fully** meet our standard:

- **History of the United States since 1877**
  The new industrial society; agrarian movement; the United States as a world power through two world wars, depression and after.
  - Rationale for rating: This course covers the entirety of post-bellum American history (to the present).

Sample description for course that would **fail** to meet our standard:

- **Individuals and Civic Life**
  Examines the sources and effects of practices and institutions of participation, influence and cleavages in U.S. politics.
  - Rationale for rating: This course has a narrow focus within political science.

World History

Sample description for course that would **fully** meet our standard:

- **History of Civilization II**
  Continues the study of Western and non-Western cultures from the 16th century through the contemporary era.
  - Rationale for rating: This course addresses major historical events in Western and non-Western civilizations.

Sample description for course that would **fail** to meet our standard:

- **Understanding the Past Elective**
  Courses in the Understanding the Past domain study human life in past societies (primarily pre-1945) as a process of continuity and change over time. Many of the documents that mediate the past to us have considerable aesthetic or intellectual value in and of themselves. However, courses in this learning domain examine texts, art works, and other forms of evidence less for their aesthetic or intellectual value than for their usefulness as tools for reconstructing aspects of the past and building sensible, defensible, and well-informed historical interpretations about the past and about causation in the past.
  - Rationale for rating: Because each of the courses listed to fulfill this requirement pertains to a specific geographic area, none has adequate scope.

World Cultures and Religions (w/ Geography)
Sample description for course that would **fully** meet our standard:

- **Cultural Geography**
  The geographic (spatial) approach to the study of cultures; global distribution patterns of cultures and culture traits, including population, language, religion, ethnicity, folk and popular culture, political organization and forms of livelihood; the importance of the diffusion process of people, goods and ideas and the impacts of globalization trends; analysis of dynamic relationships between cultures and nature; and reading of cultural landscapes in many parts of the world.
  - Rationale for rating: This course covers topics related to cultures, languages, religions, and peoples in geographic context.

Sample description for course that would **fail** to meet our standard:

- **Perspectives on Human Existence & Values Elective**
  Courses that consider those broad questions of human existence that have been given religious, philosophical or literary expression of enduring importance, but inevitably take on different meanings for individuals whose values and cultural traditions differ.
  - Rationale for rating: This course has a philosophical rather than a cultural emphasis.

Biology
Sample description for course that would **fully** meet our standard:

- **Biological Principles and Issues**
  An introduction to the study of living organisms with emphasis upon an appreciation for their behavioral, functional, and structural adaptations, their diversity and relationship to the environment. In addition, strong emphasis on current issues dealing with the field of biology.
  - Rationale for rating: This course addresses major topics in biology.

Sample description for course that would **fail** to meet our standard:

- Institutions generally failed to meet our standard in this area because they have no requirement for coursework in biology.

Chemistry
Sample description for course that would **fully** meet our standard:

- **Practical Chemistry I**
  Fundamentals of chemistry are applied to everyday life. Basic principles such as atoms, molecules, periodic properties, and organic chemistry are applied to consumer products, soaps, polymers, viscosity, and water.
  - Rationale for rating: This course addresses major topics in chemistry, albeit in a practical context.

Sample description for course that would **fail** to meet our standard:

- Institutions generally failed to meet our standard in this area because they have no requirement for coursework in chemistry.

Physics

Sample description for course that would **fully** meet our standard:

- **Concepts in Physics and Earth Science**
  A study of fundamental concepts shared by physics, earth and space science. Not intended for majors or minors in physics or earth science.
  - This course covers major topics in physics.

Sample description for course that would **fail** to meet our standard:

- Institutions generally failed to meet our standard in this area because they have no requirement for coursework in physics.

Music History

Sample description for course that would **fully** meet our standard:

- **Music Understanding**
  A study of the historical development of Western Music and the listening skills necessary to perceive the expressive aspects of each style.
  - Rationale for rating: This course focuses on the history of music.

Sample description for course that would **fail** to meet our standard:

- **Introduction to Fine Arts**
  A general education course designed to give the student an understanding of the basic structural similarities in the aural art of music and the visual arts of painting, sculpture, and architecture.
  - Rationale for rating: This course provides too broad an overview of the fine arts and does not appear to provide any historical context.

Art History

Sample description for course that would **fully** meet our standard:

- **Art History II**
  Surveys the painting, sculpture and architecture of the Western world from the Renaissance to the present. While the focus of the course is on Western traditions, issues and works from non-Western cultures are also treated. The course aims to develop a sense of visual literacy and an iconographic knowledge of art while examining key works in various historical, religious, political, philosophical and sociocultural contexts.
  - Rationale for rating: This course provides a good grounding in art history.

Sample description for course that would **fail** to meet our standard:

- **Integrating the Arts in the Learning Process**
  This course focuses on the integration of the fine arts in the elementary school curriculum. Students will learn how to meaningfully incorporate the visual arts, drama, music, and dance across the natural sciences, social sciences, and humanities in K-8 classrooms to enrich the learning process.
  - Rationale for rating: This is a methods course and is not designed to deliver art history content.

SECTION 16:
Ratings for required reading textbooks, reviews of selected reading textbooks and information on reading textbook reviewer

Textbook Ratings

The following table summarizes the scores of textbooks used in Illinois' teacher preparation programs.

Author(s)	Title	Rating
Alvermann, Donna ; Montero, M. Kristina ; Swafford, Jeanne	*Content Area Literacy Instruction for the Elementary Grades*	Acceptable Supplemental
Armbruster, Bonnie	*Put Reading First: The Research Building Blocks for Teaching Children to Read*	Acceptable Supplemental
Barone, Diane; Hardman, Darrin; and, Taylor, Joan	*Reading first in the classroom*	Acceptable Supplemental
Bear, Donald.; Invernizzi, Marcia; Templeton, Shane; Johnston, Francine	*Words Their Way: Word Study for Phonics, Vocabulary, and Spelling Instruction (4th ed)*	Acceptable Supplemental
Blachowicz, Camille; Fisher, Peter J.	*Teaching Vocabulary for All Classrooms (3rd ed)*	Acceptable Supplemental
Boushey, Gail; Moser, Jogan	*The Daily Five: Fostering Literacy Independence in the Elementary Grade*	Acceptable Supplemental
Bredekamp, Susan; Copple, Carol; Neuman, Susan	*Learning to Read and Write: Developmentally Appropriate Practices for Young Children*	Not Acceptable Supplemental
Buehl, Doug	*Classroom Strategies for Interactive Learning (3rd ed)*	Acceptable Supplemental
Bursuck, William D.; Damer, Mary	*Reading Instruction for Students Who Are at Risk or Have Disabilities (Paperback ed)*	Acceptable Core
Caldwell, JoAnne S.; Leslie, Lauren	*Intervention Strategies to Follow Informal Reading Inventory Assessment: So What Do I Do Now?*	Acceptable Supplemental
Carnine, Douglas W.; Silbert, Jerry; Kame'Enui, Edward J.; Tarver, Sara	*Direct Instruction Reading (4th ed)*	Acceptable Core
Carnine, Douglas W.; Silbert, Jerry; Kame'enui, Edward J.; Tarver, Sara.; Jungjohann, Kathleen	*Teaching Struggling and At-Risk Readers: A Direct Instruction Approach*	Acceptable Core
Cecil, Nancy L	*Activities for A Comprehensive Approach to Literacy*	Not Acceptable Supplemental
Cecil, Nancy L.; Gipe, Joan P.	*Literacy in Grades 4-8: Best Practices for a Comprehensive Program (2nd ed)*	Acceptable Core

Chen, Linda; Mora-Flore, Eugenia	*Balanced literacy for English language learners (Paperback ed)*	Not Acceptable Core
Clay, Marie M.	*Running Records for Classroom Teachers*	Not Acceptable Supplemental
Clay, Marie M.	Reading Recovery: A Guidebook for Teachers in Training	Not Acceptable Supplemental
Combs, Martha	*Readers and Writers in the Primary Grades (4th ed)*	Not Acceptable Core
Cooper, J. David; Kiger, Nancy D.	*Handbook Resource: Word Skills (7th ed)*	Acceptable Supplemental
Cooper, J. David; Kiger, Nancy D.	*Literacy: Helping Children Construct Meaning (7th ed)*	Not Acceptable Core
Cooter, Robert B.; Reutzel, D. Ray	*The Essentials of Teaching Children to Read (2nd ed)*	Acceptable Supplemental
Cooter, Robert B.; Flynt, E. Sutton; Cooter, Kathleeen Spencer	*Comprehensive Reading Inventory: Measuring Reading Development in Regular and Special Education Classrooms*	Acceptable Supplemental
Cunningham, Patricia M.	*Phonics They Use: Words for Reading and Writing (5th ed)*	Acceptable Supplemental
Cunningham, Patricia M.; Moore, Sharon Arthur; Cunningham, James W.; Moore, David W.	*Reading and Writing in Elementary Classrooms: Research-Based K-4 Instruction (5th ed)*	Not Acceptable Core
Cunningham, Patricia M.; Allington, Richard L.	*Classrooms that work: They can all read and write (5th ed)*	Not Acceptable Core
Cunningham, Patricia; Hall, Dorothy; Cunningham, James	*Guided Reading the Four-Blocks Way (Paperback ed)*	Not Acceptable Core
DeVries, Beverly A.	*Literacy Assessment and Intervention for the Elementary Classroom (Paperback ed)*	Acceptable Supplemental
DeVries, Beverly A.	*Literacy Assessment and Intervention for K-6 Classrooms (2nd ed)*	Not Acceptable Core
Diamond, Linda; Thorsnes, B.J.	*Assessing Reading: Multiple Measures (2nd ed)*	Acceptable Supplemental
Diller, Debbie	*Literacy Work Stations: Making Centers Work*	Not Acceptable Supplemental
Dow, Roger S.; Baer, G. Thomas	*Self-Paced Phonics: A Text for Educators (4th ed)*	Not Acceptable Supplemental
Fletcher, Ralph; Portalupi, JoAnn	*Writing Workshop: The Essential Guide*	Not Acceptable Supplemental
Fletcher, Ralph; Portalupi, JoAnn	*Craft Lessons (2nd ed)*	Not Acceptable Supplemental
Flint, Amy S.	*Literate Lives: Teaching Reading and Writing in Elementary Classrooms*	Not Acceptable Core
Fountas, Irene C.; Pinnell, Gay S.	*Teaching for Comprehending and Fluency: Thinking, Talking, and Writing About Reading, K-8 (Paperback ed)*	Not Acceptable Core
Fountas, Irene C.; Pinnell, Gay S.	*Guided Reading: Good First Teaching for All Children*	Not Acceptable Supplemental
Fountas, Irene C.; Pinnell, Gay S.	*Guiding Readers and Writers, Grades 3-6: Teaching Comprehension, Genre, and Content Literacy (Paperback ed)*	Not Acceptable Core
Fox, Barbara J.	*Phonics for the Teacher of Reading (9th ed)*	Acceptable Supplemental
Fuchs, Douglas, Fuchs, Lynn; Vaughn, Sharon	*Response to Intervention: A Framework for Reading Educators*	Acceptable Supplemental
Gambrell, Linda B.; Morrow, Lesley Mandel; Pressley, Michael	*Best Practices in Literacy Instruction (3rd ed)*	Acceptable Supplemental
Gillet, Jean Wallace.; Temple, Charles A.; Crawford, Alan N.	*Understanding Reading Problems: Assessment and Instruction (7th ed)*	Acceptable Core
Goodman, Yetta M.; Watson, Dorothy J.; Burke, Carolyn L.; Cambourne, Brian	*Reading miscue inventory: From evaluation to instruction (2nd ed)*	Not Acceptable Core

Goudvis, Anne; Harvey, Stephanie	*Strategies that Work: Teaching Comprehension to Enhance Understanding*	Acceptable Supplemental
Graves, Michael F.; Juel, Connie; Graves, Bonnie B.; Dewitz, Peter	*Teaching Reading in the 21st Century (4th ed)*	Acceptable Core
Gunning, Thomas G.	*Assessing and correcting reading and writing difficulties (4th ed)*	Acceptable Core
Gunning, Thomas G.	*Creating Literacy Instruction for All Students (7th ed)*	Acceptable Core
Hancock, Marjorie R.	*Language Arts: Extending the Possibilities (Paperback ed)*	Not Acceptable Core
Harris Linda; Pearson, David; Taylor, Barbara	*Reading Difficulties: Instruction and Assessment (2nd ed)*	Not Acceptable Supplemental
Harvey, Stephanie; Goudvis, Anne	*Strategies That Work: Teaching Comprehension for Understanding and Engagement (2nd ed)*	Acceptable Supplemental
Honig, Bill; Diamond, Linda; Gutlohn, Linda; Mahler, Jacalyn	*Teaching Reading Sourcebook (2nd ed)*	Acceptable Core
Hults, Alaska	*Reading First: Unlocking the Secrets to Reading Success with Research-Based Strategies*	Not Acceptable Supplemental
Johns, Jerry L.	*Basic Reading Inventory: Pre-Primer Through Grade Twelve and Early Literacy Assessments with Student Word Lists, Passages, and Early Literacy Assessments (10th ed)*	Not Acceptable Supplemental
Johns, Jerry L.	*Basic Reading Inventory: Pre-Primer Through Grade Twelve and Early Literacy Assessments (9th ed)*	Not Acceptable Supplemental
Johns, Jerry L.; Lenski, Susan	*Improving reading: Strategies and resources (5th ed)*	Not Acceptable Core
Johnston, Peter H.	*Knowing Literacy: Constructive Literacy Assessment*	Not Acceptable Supplemental
Keene, Ellin Oliver; Zimmermann, Susan	*Mosaic of Thought: The Power of Comprehension Strategy Instruction (2nd ed)*	Acceptable Supplemental
Kuder, S. Jay; Hasit, Cindi	*Enhancing Literacy for All Students*	Not Acceptable Core
Langenberg, Donald et al.	*Report of the National Reading Panel: Teaching Children to Read*	Acceptable Core
Lenski, Susan D.; Nierstheimer, Susan L.	*Becoming a Teacher of Reading: A Developmental Approach*	Not Acceptable Core
Leslie, Leslie; Caldwell, JoAnne	*Qualitative Reading Inventory (4th ed)*	Acceptable Supplemental
Leu, D.J.; Kinzer, C.K.; Wilson, R.M.; Hall, M.A.	*Phonics, Phonemic Awareness, and Word Analysis for Teachers: An Interactive Tutorial (8th ed)*	Not Acceptable Supplemental
Shearer, Arleen P.; Homan, Susan P.; Mariotti, Arleen Shearer	*Linking Reading Assessment to Instruction (4th ed)*	Not Acceptable Supplemental
McAndrews, Stephanie L.	*Diagnostic Literacy Assessments and Instructional Strategies (Paperback ed)*	Not Acceptable Supplemental
McKenna, Michael C.; Dougherty Stahl, Katherine A.	*Assessment for reading instruction (2nd ed)*	Acceptable Supplemental
Meier, Daniel R	*The Young Child's Memory for Words: Developing First and Second Language and Literacy (Paperback ed)*	Not Acceptable Supplemental
Mercer, Cecil; Mercer, Ann; Pallen, Paige	*Teaching Students with Learning Problems (8th ed)*	Acceptable Core
Miller, Debbie	*Reading with Meaning: Teaching Comprehension in the Primary Grades*	Not Acceptable Supplemental
Miller, William H	*Alternative assessment techniques for reading & writing*	Not Acceptable Supplemental
Miller, Wilma H.	*The Reading Teacher's Survival Kit*	Not Acceptable Core

Montgomery, Judy K	*The Bridge of Vocabulary: Evidence-based Activities for Academic Success*	Acceptable Supplemental
Moore, David W.; Moore, Sharon Arthur; Cunningham, Patrica M.; Cunningham, James W.	*Developing Readers and Writers in the Content Areas K-12 (5th ed)*	Not Acceptable Supplemental
Morrow, Lesley	*Literacy Development in the Early Years: Helping Children Read and Write (6th ed)*	Not Acceptable Core
Opitz, Michael; Rasinski, Timothy	*Good-bye Round Robin: 25 Effective Oral Reading Strategies (2nd ed)*	Not Acceptable Supplemental
Owocki, Gretchen	*Literacy Through Play*	Not Acceptable Supplemental
Owocki, Gretchen; Goodman, Yetta M.	*Kidwatching: Documenting Children's Literacy Development*	Not Acceptable Supplemental
Paley, Vivian Gussin	*The Girl with the Brown Crayon: How Children Use Stories to Shape Their Lives (Paperback ed)*	Not Acceptable Supplemental
Pinnell, Gay Su; Fountas, Irene C.	*The Continuum of Literacy Learning, Grades K-8*	Not Acceptable Core
Rasinski, Timothy; Padak, Nancy; Fawcett, Gay	*Teaching Children Who Find Reading Difficult (4th ed)*	Not Acceptable Core
Resnick, Lauren B.; Hampton, Sally	*Reading and Writing Grade by Grade (2nd ed)*	Not Acceptable Core
Reutzel, D. Ray; Cooter, Robert B.	*Teaching Children to Read: The Teacher Makes the Difference (5th ed)*	Not Acceptable Supplemental
Reutzel, D. Ray; Cooter, Robert B.	*Strategies for Reading Assessment and Instruction: Helping Every Child Succeed (3rd ed)*	Acceptable Supplemental
Richardson, Judy S.; Morgan, Raymond F.; Fleener, Charlene	*Reading to Learn in the Content Areas (7th ed)*	Acceptable Supplemental
Roe, Betty; Burns, Paul C.	*Informal Reading Inventory: Preprimer to Twelfth Grade (7th ed)*	Not Acceptable Supplemental
Roe, Betty D; Smith, Sandy H; Burns, Paul C	*Teaching Reading in Today's Elementary Schools (10th ed)*	Not Acceptable Core
Routman, Regie	*Writing Essentials (Paperback ed)*	Not Acceptable Core
Routman, Regie	*Reading Essentials: The Specifics You Need to Teach Reading Well*	Not Acceptable Core
Rubin, Dorothy; Opitz, Michael F.	*Diagnosis and Improvement in Reading Instruction (5th ed)*	Not Acceptable Supplemental
Ruddell, Robert B.	*Teaching Children to Read and Write: Becoming an Effective Literacy Teacher (4th ed)*	Not Acceptable Core
Ruddell, Robert B.	*How to Teach Reading to Elementary and Middle School Students: Practical Ideas from Highly Effective Teachers (1st ed)*	Not Acceptable Core
Schulman, Mary B.; Payne, Carleen D.	*Guided Reading: Making it Work (Grades K-3)*	Not Acceptable Supplemental
Shanker, James L.; Cockrum, Ward	*Ekwall/Shanker Reading Inventory (5th ed)*	Acceptable Supplemental
Shea, Mary	*Taking Running Records*	Not Acceptable Supplemental
Silvaroli, Nicholas J.; Wheelock, Warren H.; Campbell, Connie	*Classroom Reading Inventory (9th ed)*	Not Acceptable Core
Temple, Charles A.; Ogle, Donna; Crawford, Alan N.; Freppon, Penny	*All Children Read: Teaching for Literacy in Today's Diverse Classrooms (2nd ed)*	Not Acceptable Core
Thompkins, Gail E.	*Literacy in the Middle Grades—Teaching Reading and Writing To Fourth through Eighth Graders (2nd ed)*	Acceptable Supplemental

Thompkins, Gail E.	*Literacy for the 21st Century: Teaching Reading & Writing in Pre-Kindergarten Thru Grade 4 (2nd ed)*	Not Acceptable Core
Thompkins, Gail E.	*Literacy for the 21st Century: A Balanced Approach (5th ed)*	Not Acceptable Core
Thompkins, Gail E.	*Language Arts: Patterns of Practice (7th ed)*	Not Acceptable Core
Thompkins, Gail E.	*50 Literacy Strategies: Step by Step (3rd ed)*	Acceptable Supplemental
Vacca, JoAnne L.; Vacca, Richard T.; Gove, Mary K.; Burkey, Linda C.; Lenhart, Lisa A.; McKeon, Christine A.	*Reading and Learning to Read (7th ed)*	Not Acceptable Core
Vacca, Richard T.; Vacca, JoAnne L.	*Content Area Reading: Literacy and Learning Across the Curriculum (9th ed)*	Not Acceptable Core
Vukelich, Carol; Christie, James; Enz, Billie Jean	*Helping Young Children Learn Language and Literacy: Birth Through Kindergarten (2nd ed) (2nd ed)*	Acceptable Supplemental
Woods, Mary Lynn; Moe, Alden J.	*Analytical Reading Inventory (8th ed)*	Acceptable Supplemental
Yopp, Ruth Helen; Yopp, Hallie Kay	*Literature-Based Reading Activities (5th ed)*	Acceptable Supplemental
Zemelman, Steven; Daniels, Harvey; Hyde, Arthur	*Best Practice: Today's Standards for Teaching and Learning in America's Schools (3rd ed)*	Not Acceptable Supplemental

Illinois Reading Textbook Reviewer

Deborah R. Glaser, Ed.D., received her doctorate in Curriculum and Instruction with specific focus on reading and school reform from Boise State University. She is an educational consultant and professional development provider with expertise in reading assessment and a vast knowledge of instructional methods derived from trusted research. During Dr. Glaser's many varied years in education she has experienced both elemenraty and middle school classroom and learning disability instruction and served as Director of Education of the Lee Pesky Learning Center, in Boise, Idaho, where she oversaw the development of remedial programs for individuals with dyslexia. She has assisted universities with the development of research based reading curricula and established training and consultation programs to support the success of state and National reading initiatives. Deborah was advisor to Idaho's Legislative Reading Committee and a principal author of Idaho's Reading Initiative. Dr. Glaser is a National Trainer of the distinguished teacher curriculum Language Essentials for Teachers of Reading and Spelling. She consults with national policy institutes regarding quality reading instruction and teacher preparation, and assists schools and districts with the implementation of scientifically based reading programs and strengthening practitioners' collaborative efforts toward improved instruction and student reading abilities. Dr. Glaser is author of ParaReading: A Training Guide for Tutors and LETRS Foundations: An Introduction to Language and Literacy coauthored with Louisa Moats, Ed.D. Her most recent publication is Next STEPS in Literacy Instruction published by Paul Brookes Publishing Company.

Section 17: Ratings for the required mathematics texts and information on mathematics textbook reviewers

Textbook Scores

The following table summarizes the scores of textbooks used in Illinois' undergraduate teacher preparation programs and the number of courses in which each is used. The last line (highlighted) of the table show the ratings of a highly recommended textbook that is not used in the state.

Author	Textbook	Course use	Number & Operations (54 points possible)	Algebra (39 points possible)	Geometry (54 points possible)	Data Analysis & Probability (19 points possible)	**Total Score** (166 points possible)
Bassarear, Tom	*Mathematics for Elementary School Teachers (8th edition)*	9	21*	3*	33	19	**76**
Beckmann, Sybilla	*Mathematics for Elementary Teachers (2nd edition)*	10	54*	29	48	19	**150**
Bennett, Albert; Nelson, Ted	*Mathematics for Elementary Teachers: A Conceptual Approach (8th edition)*	4	33	15	41	19	**108**
Billstein, Rick; Libeskind, Shlomo; Lott, Johnny	*A Problem Solving Approach to Mathematics for Elementary School Teachers (9th and 10th editions)*	10	35	33*[1]	50	19	**137**
Long, Calvin; DeTemple, Duane	*Mathematical Reasoning for Elementary Teachers (5th edition)*	0	29	5	47	19	**100**
Miller, Charles; Heeren, Vern; Hornsby, John	*Mathematical Ideas (11th edition)*	2	23	19	7*	19	**68***
Musser, Gary; Burger, William; Peterson, Blake	*Mathematics for Elementary Teachers: A Contemporary Approach (8th edition)*	5	45	16	45	19	**125**
O'Daffer, Phares; Charles, Randall; Cooney, Thomas; Schielack, Jane	*Mathematics for Elementary School Teachers (4th edition)*	4	36	5	44	19	**104**
Rubenstein, Rheta; Beckmann, Charlene; Thompson, Denisse	*Teaching and Learning Middle Grade Mathematics*	0	NA	16	NA	NA	**NA**

1 This score was misprinted in reports of earlier NCTQ studies as "38," but a score of 33 has been used in all studies for the purpose of rating coursework.

Sonnabend, Thomas	*Mathematics for Teachers: An Interactive Approach for Grades K-8 (3rd edition)*	0	33	0	44	19	**96**
Sowder, Judith; Larry, Sowder; Nickerson, Susan	*Reconceptualizing Mathematics*	1	23	9	30	19	**81**
Van de Walle, John[2]	*Elementary and Middle School Mathematics: Teaching Developmentally (7th edition)*	6	16	2	5	11	**34**
Wheeler, R.E; Wheeler, E.R.	*Modern Mathematics for Elementary Educators(11th edition)*	0	53	12	20	19	**104**
Parker, Tom; Baldridge, Scott	*Elementary Mathematics for Teachers and Elementary Geometry for Teachers*	0	54*	24	54*	19	**151**

* Appendix D of our national report on mathematics preparation comments extensively on the section of this textbook that is indicated.

Mathematics Textbook Reviewers

Richard Askey, PhD, is an emeritus professor at the University of Wisconsin, where he has taught since 1963. He is a Fellow of the American Academy of Arts and Sciences and an Honorary Fellow of the Indian Academy of Sciences. He was elected to the National Academy of Sciences in 1999.

Professor Askey's research has primarily been in special functions, which are extensions of the functions studied in high school. In addition to many research papers, he coauthored what is now one of the standard books on special functions. More recently he has become involved in issues regarding mathematics education, and was on a plenary panel at the 10th International Congress on Mathematics Education.

He has reviewed many mathematics education reports both nationally and for various states. He was an Edyth May Sliffe Award winner for his work with high school students.

Dr. Askey received his undergraduate degree from Washington University, his master's degree from Harvard University, and his PhD from Princeton University.

Andrew Chen, PhD, is the President of EduTron Corporation. Before founding EduTron he was a physics professor and a principal research scientist at the Massachusetts Institute of Technology. He currently serves on the Mathematics and Science Advisory Council for the Massachusetts Board of Education.

Dr. Chen provides high quality professional development in mathematics and science to teachers at all levels in Intensive Immersion Institutes. He works with school districts and school administrators to increase their capacity to support excellent mathematics and science instruction. He also works with higher education institutions to develop rigorous and effective pre-service and in-service preparation in mathematics and science. He leads a group working closely with teachers and college professors to develop CLEAR Math, intelligent courseware now in use with very positive outcomes in more than 35 school districts in Massachusetts.

2 This is a methods textbook evaluated for content.

Dr. Chen continues to teach and do research in physics, He received a BA in physics from National Taiwan University, and a PhD in physics from Columbia University.

Mikhail Goldenberg, PhD, graduated from Odessa State University in 1961 with a master's degree in mathematics and mathematics education. He was a middle school and high school mathematics teacher for three years in Ukraine. He then moved to Russia where he received his PhD in Mathematics (Group Theory) in 1970 from Ural State University (Ekaterinburg). For many years (1964-1997) he was a professor of mathematics in South Ural State University (Chelyabinsk, Russia). His worked with advanced high school students (Chelyabinsk Litseum) and mathematics teachers (Institute for Teachers Advance).

Dr. Goldenberg came to the United States in 1997 and became a mathematics teacher for the Ingenuity Project sponsored by the Abell Foundation. He is now the mathematics department head and teaches all the high school mathematics courses. He has led the Ingenuity Math Club for 10 years, and is a part-time lecturer at Morgan State University.

Roger Howe, PhD, has been teaching and conducting research in the Mathematics Department at Yale University for over 30 years. He is currently the William Kenan Jr. Professor of Mathematics. His mathematical research concerns symmetry and its applications. He has held visiting positions at many universities and research institutes in the U.S., Europe and Asia. He is a member of the American Academy of Arts and Sciences and the National Academy of Sciences.

Dr. Howe devotes substantial attention to issues of mathematics education. He has served on a multitude of committees, including those for several of the major reports on mathematics education of the past decade. He has reviewed mathematics texts and other instructional materials at all levels, from first grade through college. He has served as a member and as chair of the Committee on Education of the American Mathematical Society. He served on the Steering Committee of the /Institute of Advanced Study/Park City Mathematics Institute, and has helped to organize a series of meetings at Park City devoted to increasing the contribution of mathematicians in mathematics education, especially refining understanding of the mathematical issues in K-12 mathematics curricula. He is currently a member of the U.S. National Committee on Mathematics Instruction. In 2006, he received the Award for Distinguished Public Service from the American Mathematical Society.

James Milgram, PhD, is an emeritus professor of mathematics at Stanford University where he has taught since 1970. He is a member of the National Board of Education Sciences—the presidential board that oversees the Institute for Education Research at the U.S. Department of Education. He is also a member of the NASA Advisory Council, and is a member of the Achieve Mathematics Advisory Panel as well as a number of other advisory boards. He was one of the members of the Common Ground Project that included Deborah Loewenberg Ball, Joan Ferrini-Mundy, Jeremy Kilpatrick, Richard Schaar, and Wilfried Schmid.

From 2002 to 2005, Dr. Milgram headed a project funded by the U.S. Department of Education that identified and described the key mathematics that K-8 teachers need to know. He also helped to direct a project partially funded by the Thomas B. Fordham Foundation that evaluated state mathematics assessments. He is one of the four main authors of the California mathematics standards, as well as one of the two main authors of the California Mathematics Framework. He is one of the main authors of the new Michigan and Georgia K-8 mathematics standards.

Among other honors, Dr. Milgram has held the Gauss Professorship at the University of Goettingen and the Regents Professorship at the University of New Mexico. He has published over 100 research papers and four books, as well as serving as an editor of many others. His main area of research is algebraic and geometric topology, and he currently works on questions in robotics and protein folding. He received his undergraduate and master's degrees in mathematics from the University of Chicago, and his PhD in mathematics from the University of Minnesota.

Yoram Sagher, PhD, is professor of mathematics at Florida Atlantic University and emeritus professor of mathematics at the University of Illinois, Chicago. He has written more than 55 research papers in Harmonic Analysis, Real Analysis, and Interpolation Theory. He has also written three research papers in mathematics education. Dr. Sagher directed ten doctoral dissertations in mathematics and one in mathematics education.

Dr. Sagher co-organized two international conferences in mathematics education: Numeracy and Beyond I, Pacific Institute for the Mathematical Sciences at the University of British Columbia, Vancouver, Canada, July 2003, and a follow-up conference, Numeracy and Beyond II, Banff, Canada, December 2004.

Dr. Sagher taught numerous continuing education courses for in-service elementary school and high school teachers in Chicago. He also created the course "Methods of Teaching High School Mathematics" at the University of Illinois, Chicago. The course serves as the capstone course for students preparing to become high school mathematics teachers.

Dr. Sagher developed highly effective teaching methods that, in combination with the Singapore mathematics textbooks, have produced outstanding results in elementary and middle schools from Boston to Los Angeles, including the Ingenuity Project in Baltimore and Ramona Elementary in Los Angeles.

Dr. Sagher is also interested in remedial mathematics education at the college level. He directed the doctoral dissertation of M.V. Siadat: "Building Study and Work Skills in a College Mathematics Classroom." For his work implementing the methods developed in that paper, Dr. Siadat was named "Illinois Professor of the Year" in 2005 by the Carnegie Foundation.

Dr. Sagher received his BS degree from the Technion, Israel Institute of Technology, and his PhD from the University of Chicago.

SECTION 18: Findings from NCTQ's *State Teacher Policy Yearbook* 2009

Illinois' regulatory framework for teacher preparation programs provides important context for the focus of this review. Most of the state's regulatory weaknesses discussed in this report are explored in more detail in NCTQ's *State Teacher Policy Yearbook* 2009 (www.nctq.org/stpy09/reports/stpy_illinois.pdf). The following summarizes *Yearbook* findings relevant to this review:

- Illinois mandates that teacher preparation programs only accept candidates who have passed the Illinois Basic Skills Test. There is no exemption for students who perform to a satisfactory level on college entrance exams such as the SAT or ACT.
- The state's requirements regarding liberal arts preparation for elementary teacher candidates lack specificity, and are therefore unreliable as a blueprint for instruction. The state requires 32 semester hours in liberal arts subjects, with no specification that such coursework must be relevant to the subjects and topics taught in the elementary classroom. Additionally, there is no requirement that liberal arts courses are taught by arts and science faculty.
- Illinois does not require that teacher preparation programs address the science of reading. The state has neither standards nor coursework requirements related to the five essential components of effective reading instruction. Illinois does set standards related to language arts instruction, but these do not address the science of reading.
- Mathematics content preparation for elementary teachers could also be strengthened in Illinois. While the state's licensing test does require some knowledge of algebra, geometry and statistics, the state does not insist that teacher candidates learn mathematics content that is directly tied to the needs of elementary students. Of even greater concern is that the state does not articulate a specific passing score for the mathematics portion of the licensing exam, and as a result, a teacher candidate can fail the mathematics portion but still pass the generalist licensing exam.
- Illinois allows middle school teachers to teach on a generalist K-9 license This means that there is no differentiation between the preparation of elementary and middle school teachers. In addition, because teacher candidates may take the generalist exam (for which teachers may fail portions of the exam but still receive licensure with an overall passing grade), there is no guarantee that middle school teachers will have sufficient knowledge in the subject areas they teach.
- Commendably, Illinois requires that teacher preparation programs prepare elementary special education candidates in appropriate content areas. Further, the state also demands that those candidates pass a subject-matter test for licensure. The state's requirements for secondary special education candidates, however, are problematic. These candidates are not required to complete a subject-matter major or exam, meaning there is no way to ensure that those candidates have adequate knowledge of the content they may be teaching.

- Illinois appropriately requires that all teacher candidates pass a pedagogy licensing test to ensure they meet the state's professional standards.
- The state does not evaluate its teacher preparation programs adequately or ensure that they are held accountable for candidate performance. While Illinois does collect data on licensure pass rates , the 80 percent pass-rate requirement the state sets is far too low to provide any significant evaluation of a program's performance.
- Commendably, Illinois does not require its programs to attain national accreditation in order to receive state approval. However, the state does insist that all institutions meet NCATE standards (either through an NCATE review or one conducted by the state). Illinois, therefore, does not exercise full authority over its process for approving teacher preparation programs.
- Illinois does not ensure that programs deliver professional coursework in an efficient manner, with no monitoring of the number of professional semester hours that a program can require teacher candidates to take. The lack of guidance from the state allows for very disparate requirements in preparation hours for professional coursework.
- Lastly, Illinois does not have a state data system that can be utilized to assess teacher effectiveness, although it does have two of the three necessary elements for such a system. The state has assigned unique student identifiers that connect student data across key databases across years, and the state can match student test records from year to year in order to measure academic growth. However, although Illinois has a unique teacher identifier system, it cannot match individual teacher records with individual student records, a necessary perquisite for value-added analysis.

SECTION 19:
Glossary of terms used to describe teacher preparation coursework and programs

The following terms are used in this report to describe coursework, making their definitions useful:

Academic subject area coursework: Coursework offered by the colleges of arts and sciences rather than the education school (or in the case of institutions with an education department, by subject area departments).

Clinical coursework: Also known as "field work," it is coursework in which teacher candidates observe, tutor or teach in a K-12 classroom.

Composite certification area: Certification to teach any subject in a group of related disciplines. For example, composite certification in "science" encompasses biology, chemistry, physics and earth sciences.

Content coursework: Coursework in academic disciplines that comprise the K-12 curriculum, such as mathematics and social studies.

Dual endorsement: Endorsement to teach either of two different subjects, such as mathematics and computer science.

General audience coursework: Coursework whose audience is both teacher candidates and non-teacher candidates.

General education coursework: Coursework satisfying college or university core curriculum requirements.

Methods coursework: Coursework on instructional strategies, techniques and materials.

Professional coursework: Any coursework required by a teacher preparation program except for teacher audience content courses, e.g., "Mathematics for Elementary Teachers

Single subject certification area: Certification to teach only one subject.

Teacher audience coursework: Coursework intended only to be taken by teacher candidates.

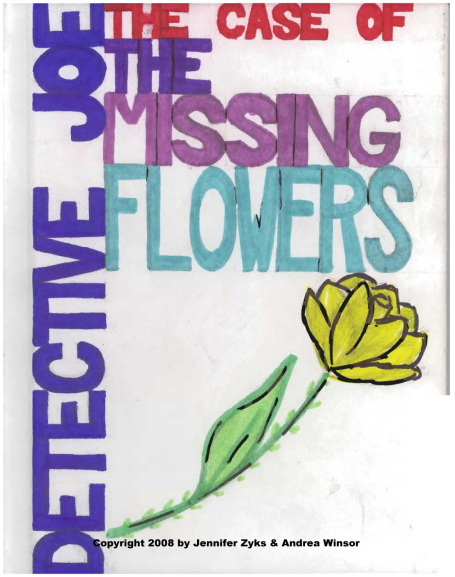
SECTION 20: Sample elementary teacher candidate work product: Children's story from a mathematics methods course

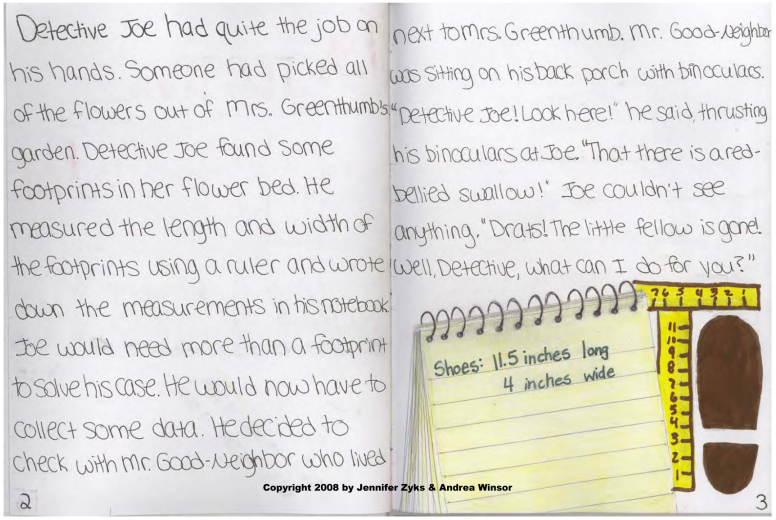
At one institution our evaluation of undergraduate coursework for its "seriousness of purpose" (Standard 2) included review of assignments in a mathematics methods course for elementary teacher candidates. One assignment in the course was noted as group work that required no individual accountability, "individual accountability" being one of the four aspects of assignments that is deemed to contribute to the "seriousness of purpose" of coursework. Our findings of fact regarding this evaluation were provided to the institution and staff submitted the following response regarding the assignment so noted:

> **The Collaborative writing project** *requires both individual and collaborative work. Preliminary work requires candidates to individually read and review three math and literature books. They then choose one book from the three, share the story in class while leading discussion of how mathematics and literature are integrated in the texts. Once familiar with published mathematics and literature books, they draft the first five sentences of their own individual math story, using Wiki technology. Each writer receives individual feedback from the instructor regarding his or her work. In teams of two, candidates then exchange and discuss their stories. Then they decide which story to revise and develop for an exercise in interdisciplinary curriculum in reading, writing, and mathematics—through mathematical story building. The instructor electronically tracks and assesses each candidate's individual contributions—who writes what part of the story and what revisions are made, as Wiki technology allows her to view the work of each, provide ongoing feedback, and to determine the equity of each student's contribution to the final assignment. Criteria for assessing the final project includes (1) accuracy of mathematics applications, (2) quality of writing (literary style) and visual representations, and (3)effectiveness of the connection between story and mathematics. It is understood that each student's contributions to the final story must be equal, and thus their contributions are monitored by the instructor, as noted above. This monitoring is made possible by small class sizes (N~15).*

Access to a children's story that was turned in to complete this assignment, presumably a project that the instructor deemed exemplary, was provided in the response. We accessed the completed project, although doing so was not part of our formal evaluation of this coursework against Standard 2. What we found is so instructive that an excerpt from the story follows. We note that the pages that are excerpted are the ones in the story that contain the *most* mathematic content.

The fact that this project was deemed to have merit in indicating mathematical understanding or understanding of mathematics pedagogy is quite revealing. In our view it could as easily be the story turned in by a fifth grader as by a prospective teacher of fifth graders. In fact, it reveals something often found in teacher preparation coursework: little more is expected of teacher candidates than what they would expect from the students they will soon teach.


DETECTIVE JOE
THE CASE OF THE MISSING FLOWERS
Copyright 2008 by Jennifer Zyks & Andrea Winsor


Detective Joe had quite the job on his hands. Someone had picked all of the flowers out of Mrs. Greenthumb's garden. Detective Joe found some footprints in her flower bed. He measured the length and width of the footprints using a ruler and wrote down the measurements in his notebook. Joe would need more than a footprint to solve his case. He would now have to collect some data. He decided to check with Mr. Good-Neighbor who lived
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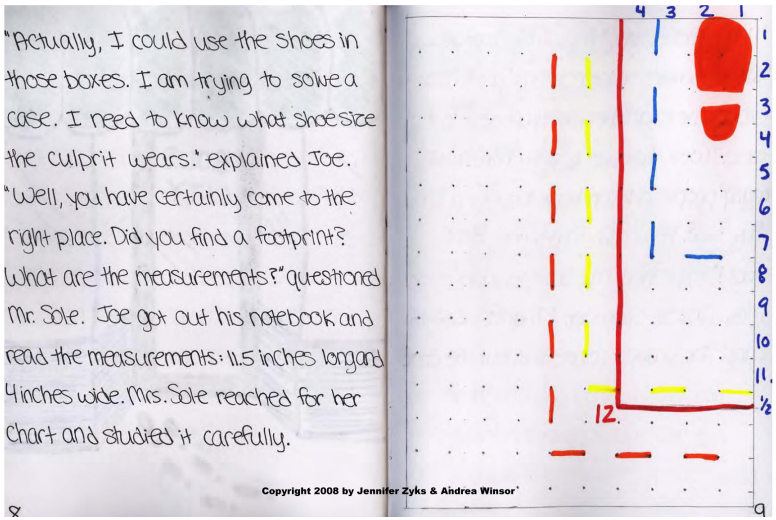
2
next to Mrs. Greenthumb. Mr. Good-Neighbor was sitting on his back porch with binoculars. "Detective Joe! Look here!" he said, thrusting his binoculars at Joe. "That there is a red-bellied swallow!" Joe couldn't see anything. "Drats! The little fellow is gone! Well, Detective, what can I do for you?"
Shoes: 11.5 inches long
4 inches wide
3


"Actually, I could use the shoes in those boxes. I am trying to solve a case. I need to know what shoe size the culprit wears." explained Joe. "Well, you have certainly come to the right place. Did you find a footprint? What are the measurements?" questioned Mr. Sole. Joe got out his notebook and read the measurements: 11.5 inches long and 4 inches wide. Mrs. Sole reached for her chart and studied it carefully.
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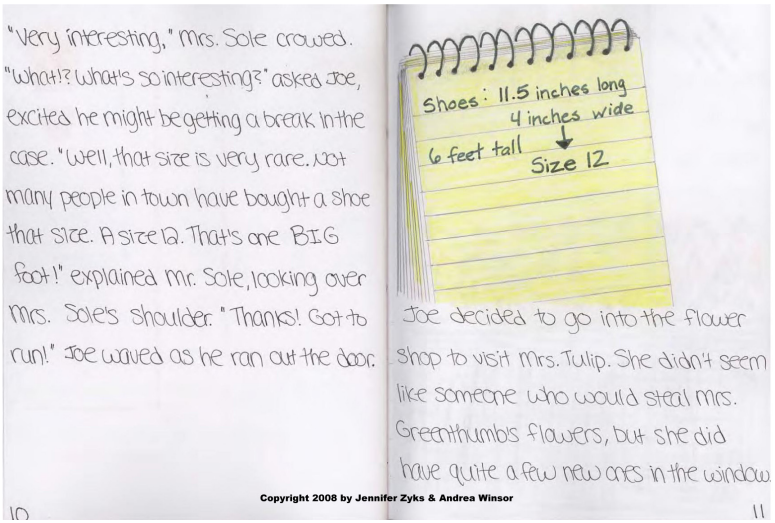
8
4 3 2 1
12
9


"Very interesting," Mrs. Sole crowed. "What!? What's so interesting?" asked Joe, excited he might be getting a break in the case. "Well, that size is very rare. Not many people in town have bought a shoe that size. A size 12. That's one BIG foot!" explained Mr. Sole, looking over Mrs. Sole's shoulder. "Thanks! Got to run!" Joe waved as he ran out the door.
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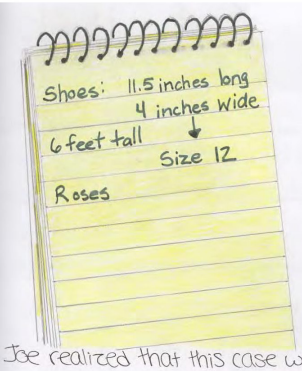
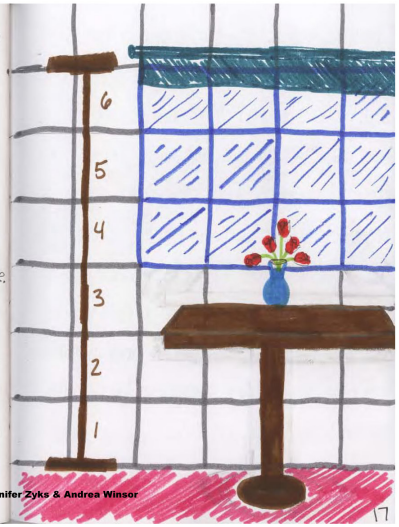
10
Shoes: 11.5 inches long
4 inches wide
6 feet tall
Size 12.
Joe decided to go into the flower shop to visit Mrs. Tulip. She didn't seem like someone who would steal Mrs. Greenthumb's flowers, but she did have quite a few new ones in the window.
11

"I'm on a case! Mrs. Greenthumb's flowers were picked out of her garden," Joe said. "Oh my! How awful! She's such a fine gardener and those roses were one-of-a kind!" exclaimed Mrs. Tulip. "What do you mean?" Joe asked. "Well, as you can see, I sell every flower but roses. They just don't seem to take to my garden, but they sure grow great with all of the love Mrs. Greenthumb gives them! I sure hope you find the criminal!" She carefully pinned a daisy on Detective Joe's jacket and wished him luck.

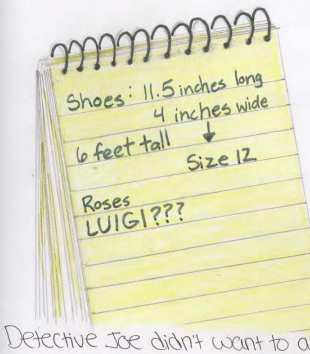


Joe realized that this case was going to need some thinking, so he decided to go to his favorite thinking spot, Lotsa Pasta, for a big plate of spaghetti.

"On a big case?" asked Luigi. Luigi knew that when Detective Joe ordered spaghetti he was trying to solve a difficult case. "Yes. this one is extra tough. Can I have some meatballs?" asked Joe. "Anything for you!" Luigi said as he ran off to the kitchen. Just then, Joe noticed red roses in the vase on the table. As Luigi returned Joe asked, "Can you please close the shades?" Each tile on the wall was 1 foot tall. As Luigi stood by the wall to close the shade, Joe counted the tiles. 1, 2, 3, 4, 5, 6 tiles to the top of Luigi's head. He was 6 ft. tall.

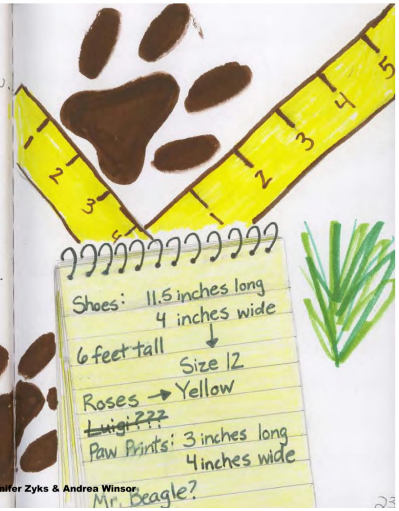


"Thanks, Luigi. Hey, those are some nice shoes. What size do you wear?" questioned Joe. He was hoping his friend would not be a size 12. "12! Mr. and Mrs. Sole say it's very rare," answered Luigi. Joe was very disappointed. He couldn't believe Luigi stole Mrs. Greenthumb's flowers. As Joe got ready to leave, he slipped a rose inside his trenchcoat. He then paid and grabbed his box of leftover spaghetti. He would never leave that behind.



Detective Joe didn't want to accuse Luigi without being 100% sure. He decided to take the rose to Mrs. Greenthumb to see if it was hers.

There in the mud by the flower bed were more prints. Not footprints like he saw earlier. These were BIG paw prints. "Mrs. Greenthumb, do you know anyone with a pet?" Joe asked while measuring the prints. "My neighbor, Mr. Beagle, just got a puppy! It's cute, but a little wild. Why?" Mrs. Greenthumb asked. "I'll explain later!" Joe exclaimed as he ran off.



SECTION 21:
Summary results

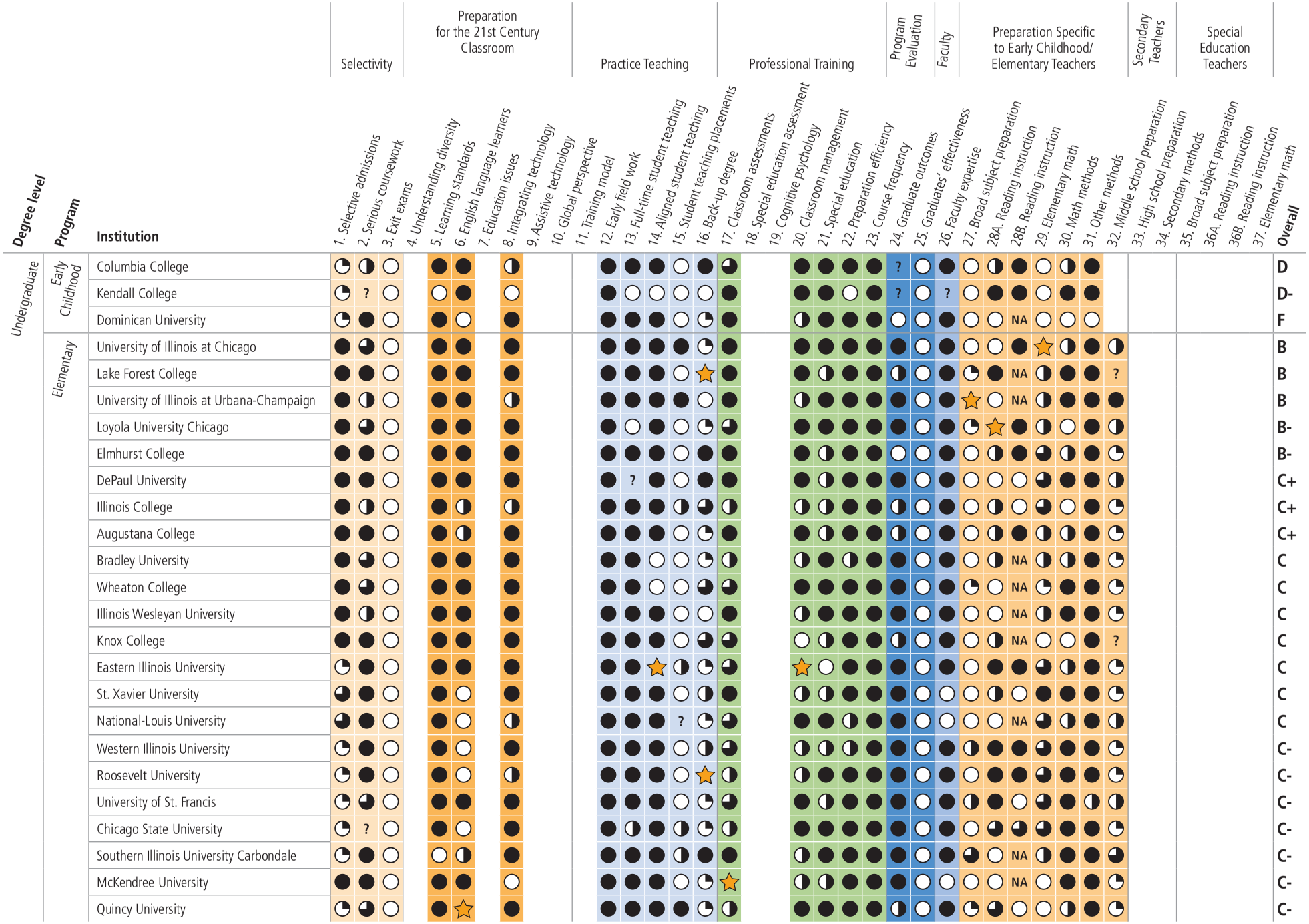
Two tables of summary results follow. The first table categorizes the 111 programs we evaluated by type (undergraduate elementary, and so on), with the programs organized within each category by highest to lowest program grade. Ratings on all standards relevant to the program type are provided for each program. Note that all standards do not apply to every program type, hence the columns for which no rating is provided.

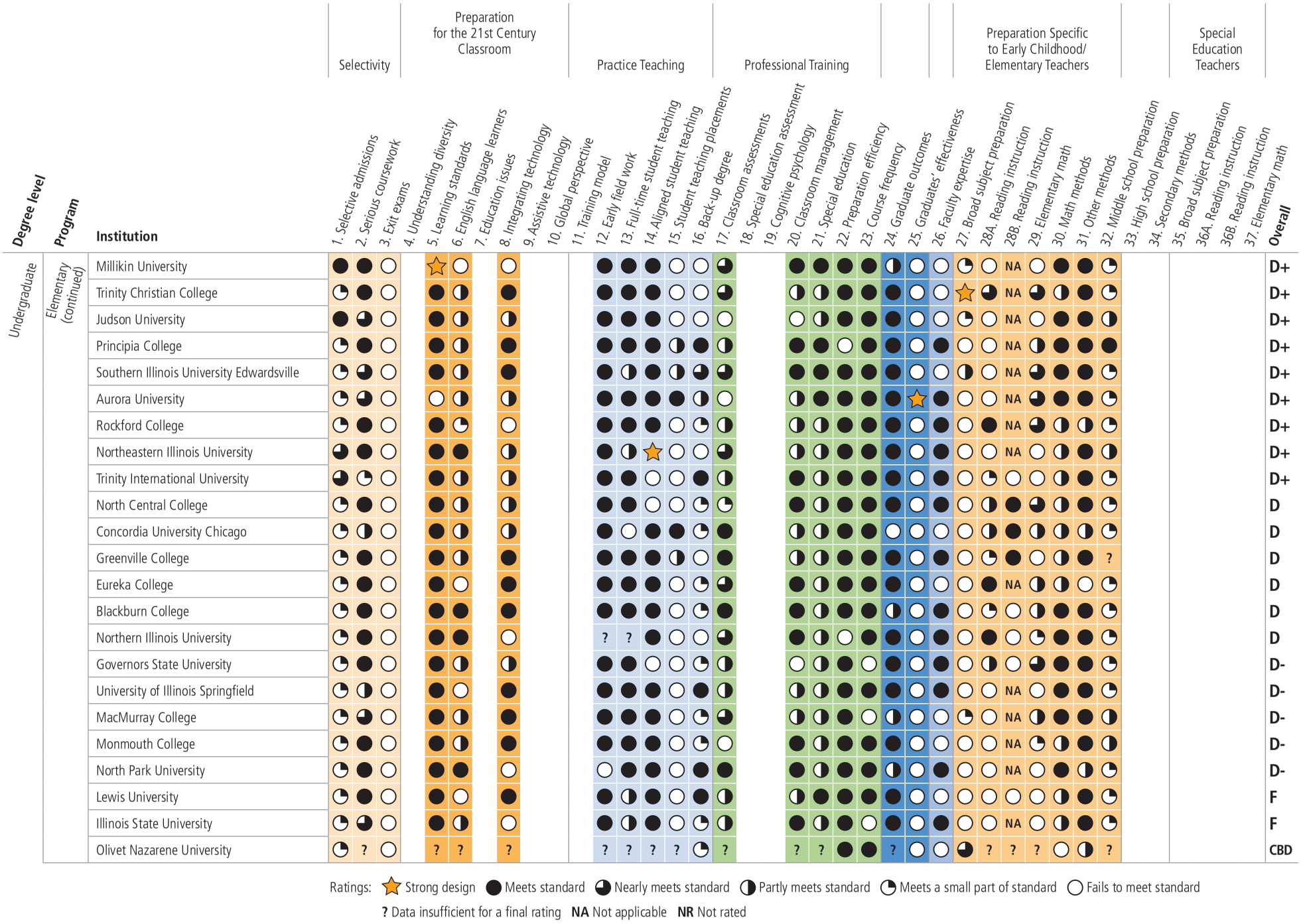
All standards' ratings were not weighted equally in calculating a program's grade. A chart that follows the second table provides information on how categories of standards were weighted and which standards, in turn, were most heavily weighted within categories.

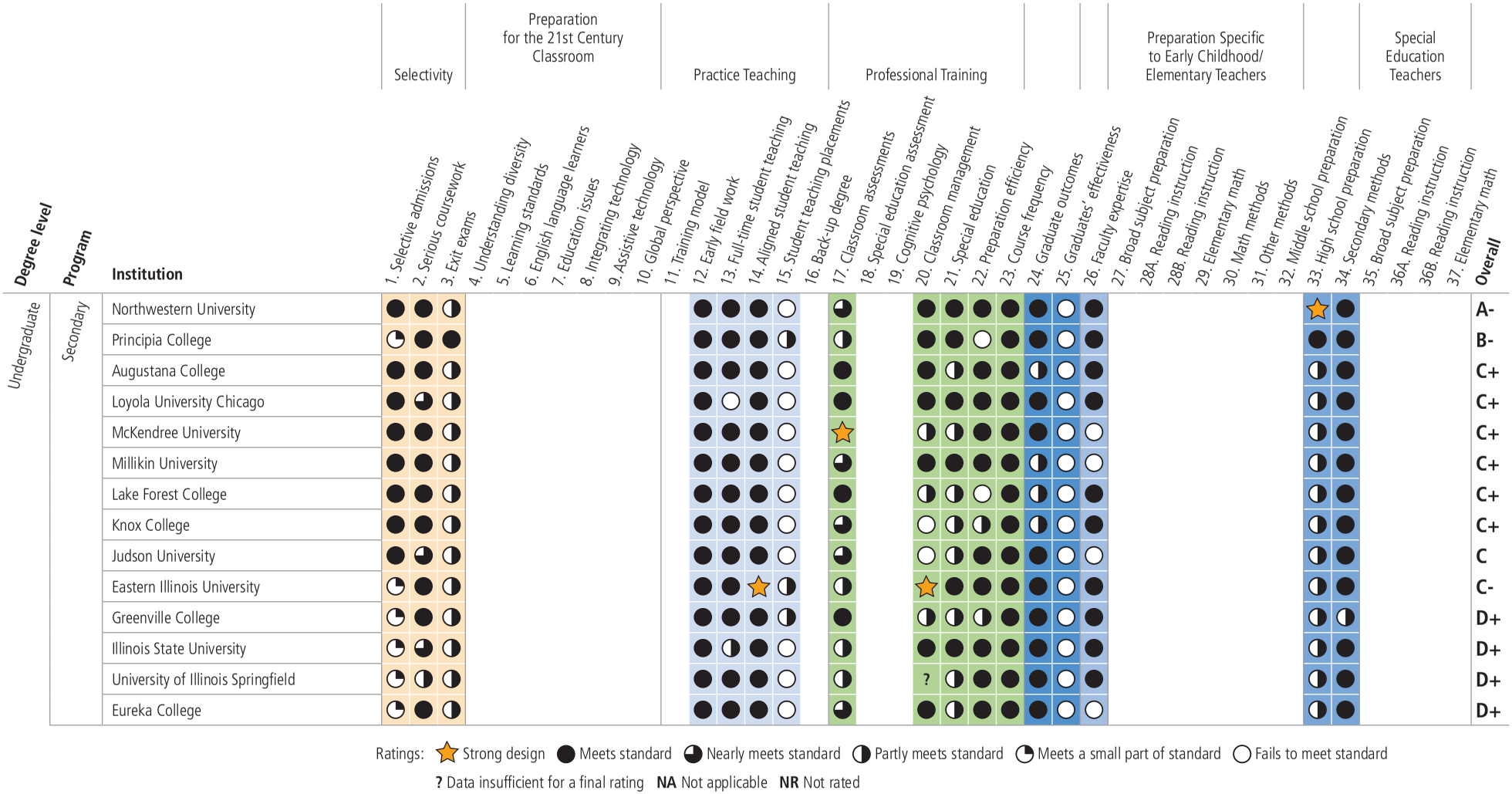
The second table lists the 53 education schools in Illinois alphabetically, identifies the program or programs at each that were part of this review, and provides a grade for each reviewed program.

Note that no one program grade can serve as an overall grade for most education schools, nor can an overall education school grade be calculated by simple averaging of the grades of two or more programs at any given education school.

Illinois teacher preparation programs' ratings by standard and overall grade




Selectivity
Preparation for the 21st Century Classroom
Practice Teaching
Professional Training
Preparation Specific to Early Childhood/ Elementary Teachers
Special Education Teachers
Degree level
Program
Institution
1. Selective admissions
2. Serious coursework
3. Exit exams
4. Understanding diversity
5. Learning standards
6. English language learners
7. Education issues
8. Integrating technology
9. Assistive technology
10. Global perspective
11. Training model
12. Early field work
13. Full-time student teaching
14. Aligned student teaching
15. Student teaching placements
16. Back-up degree
17. Classroom assessments
18. Special education assessment
19. Cognitive psychology
20. Classroom management
21. Special education
22. Preparation efficiency
23. Course frequency
24. Graduate outcomes
25. Graduates' effectiveness
26. Faculty expertise
27. Broad subject preparation
28A. Reading instruction
28B. Reading instruction
29. Elementary math
30. Math methods
31. Other methods
32. Middle school preparation
33. High school preparation
34. Secondary methods
35. Broad subject preparation
36A. Reading instruction
36B. Reading instruction
37. Elementary math
Overall
Undergraduate
Elementary (continued)
Millikin University D+
Trinity Christian College D+
Judson University D+
Principia College D+
Southern Illinois University Edwardsville D+
Aurora University D+
Rockford College D+
Northeastern Illinois University D+
Trinity International University D+
North Central College D
Concordia University Chicago D
Greenville College D
Eureka College D
Blackburn College D
Northern Illinois University D
Governors State University D-
University of Illinois Springfield D-
MacMurray College D-
Monmouth College D-
North Park University D-
Lewis University F
Illinois State University F
Olivet Nazarene University CBD
Ratings: Strong design Meets standard Nearly meets standard Partly meets standard Meets a small part of standard Fails to meet standard
? Data insufficient for a final rating NA Not applicable NR Not rated


Selectivity
Preparation for the 21st Century Classroom
Practice Teaching
Professional Training
Preparation Specific to Early Childhood/ Elementary Teachers
Special Education Teachers
Degree level
Program
Institution
1. Selective admissions
2. Serious coursework
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6. English language learners
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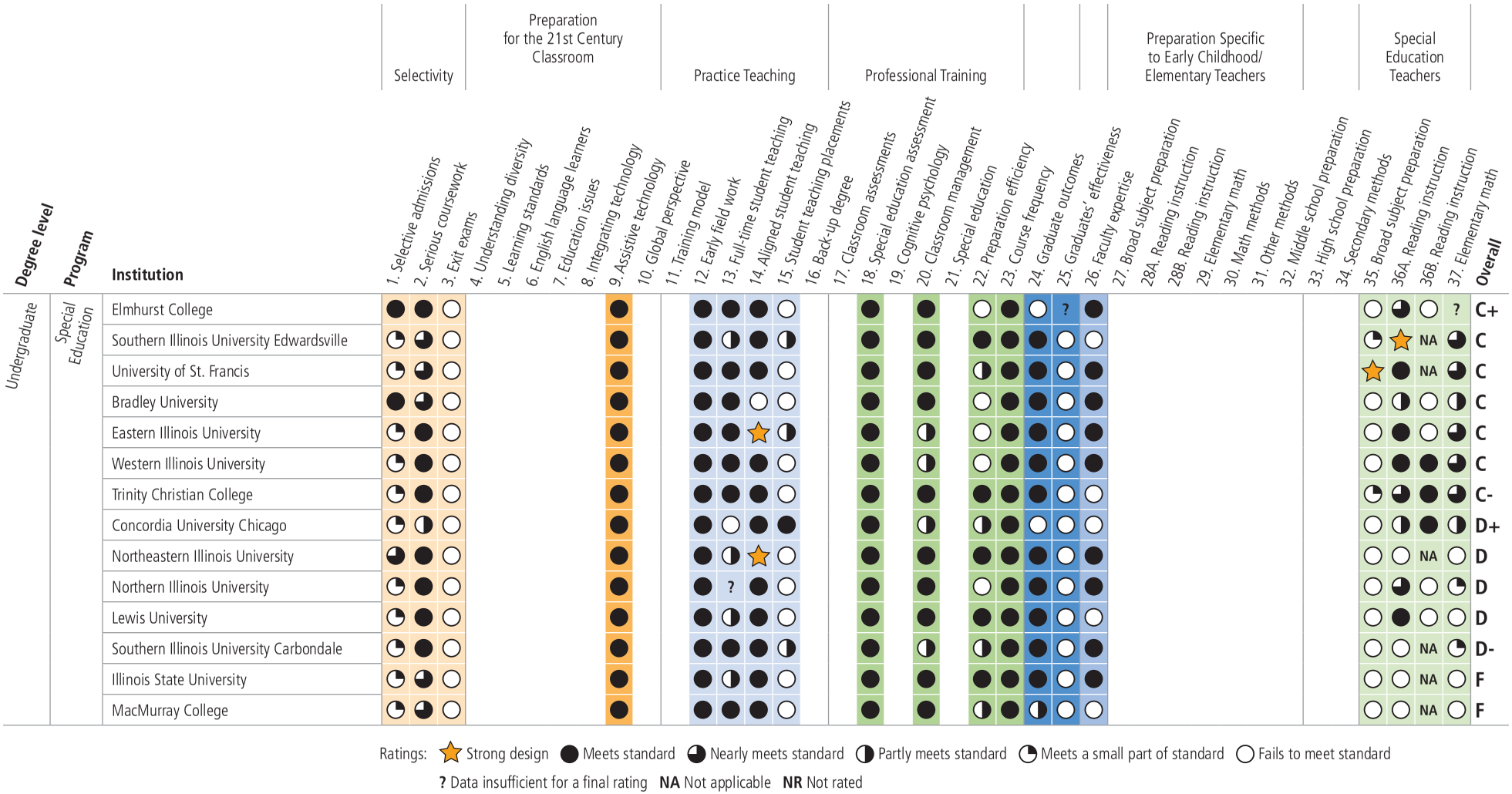
29. Elementary math
30. Math methods
31. Other methods
32. Middle school preparation
33. High school preparation
34. Secondary methods
35. Broad subject preparation
36A. Reading instruction
36B. Reading instruction
37. Elementary math
Overall
Undergraduate
Secondary
Northwestern University A-
Principia College B-
Augustana College C+
Loyola University Chicago C+
McKendree University C+
Millikin University C+
Lake Forest College C+
Knox College C+
Judson University C
Eastern Illinois University C-
Greenville College D+
Illinois State University D+
University of Illinois Springfield D+
Eureka College D+
Ratings: Strong design Meets standard Nearly meets standard Partly meets standard Meets a small part of standard Fails to meet standard
? Data insufficient for a final rating NA Not applicable NR Not rated


Selectivity
Preparation for the 21st Century Classroom
Practice Teaching
Professional Training
Preparation Specific to Early Childhood/ Elementary Teachers
Special Education Teachers
Degree level
Program
Institution
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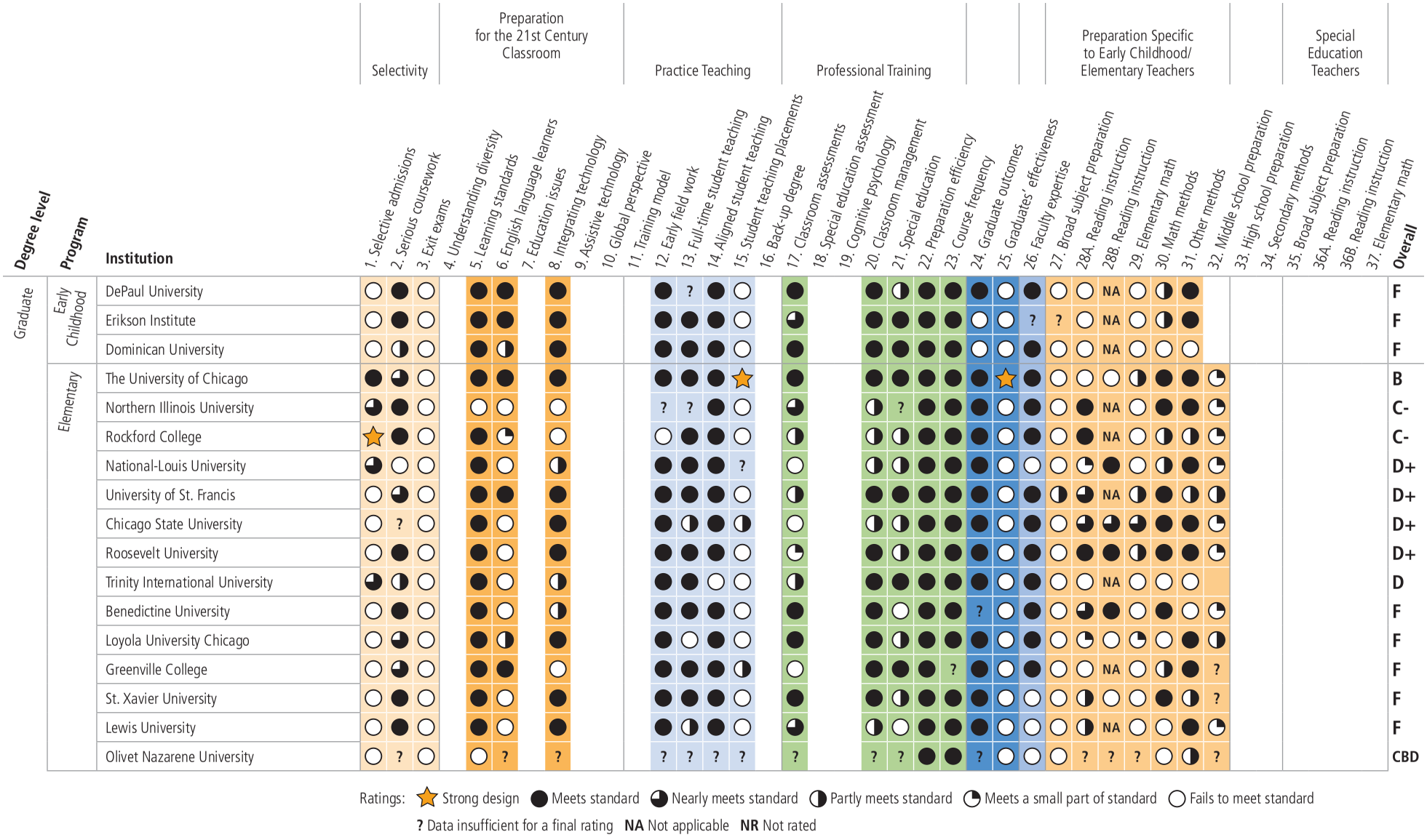
33. High school preparation
34. Secondary methods
35. Broad subject preparation
36A. Reading instruction
36B. Reading instruction
37. Elementary math
Overall
Undergraduate
Special Education
Elmhurst College C+
Southern Illinois University Edwardsville C
University of St. Francis C
Bradley University C
Eastern Illinois University C
Western Illinois University C
Trinity Christian College C-
Concordia University Chicago D+
Northeastern Illinois University D
Northern Illinois University D
Lewis University D
Southern Illinois University Carbondale D-
Illinois State University F
MacMurray College F
Ratings: Strong design Meets standard Nearly meets standard Partly meets standard Meets a small part of standard Fails to meet standard
? Data insufficient for a final rating NA Not applicable NR Not rated


Selectivity
Preparation for the 21st Century Classroom
Practice Teaching
Professional Training
Preparation Specific to Early Childhood/ Elementary Teachers
Special Education Teachers
Degree level
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Overall
Graduate
Early Childhood
DePaul University F
Erikson Institute F
Dominican University F
Elementary
The University of Chicago B
Northern Illinois University C-
Rockford College C-
National-Louis University D+
University of St. Francis D+
Chicago State University D+
Roosevelt University D+
Trinity International University D
Benedictine University F
Loyola University Chicago F
Greenville College F
St. Xavier University F
Lewis University F
Olivet Nazarene University CBD
Ratings: Strong design Meets standard Nearly meets standard Partly meets standard Meets a small part of standard Fails to meet standard
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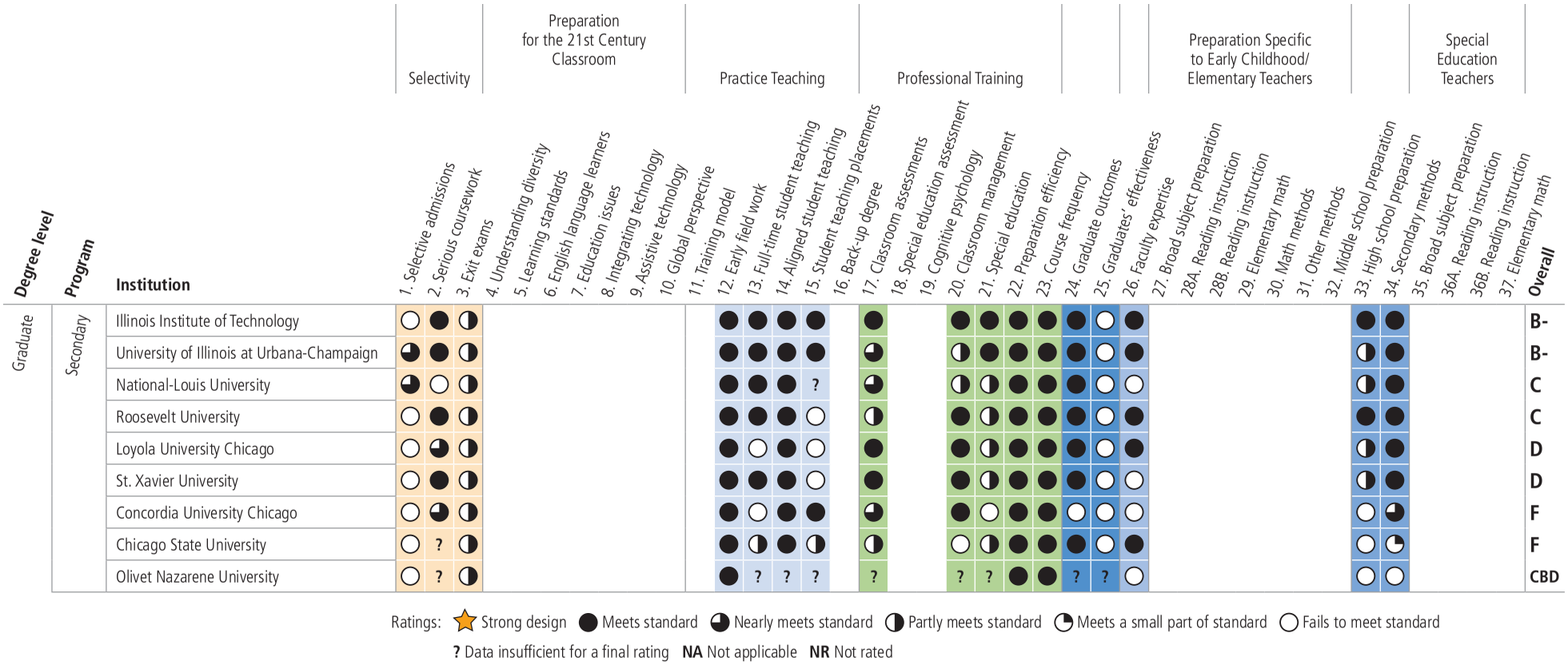
Selectivity
Preparation for the 21st Century Classroom
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Preparation Specific to Early Childhood/ Elementary Teachers
Special Education Teachers
Degree level
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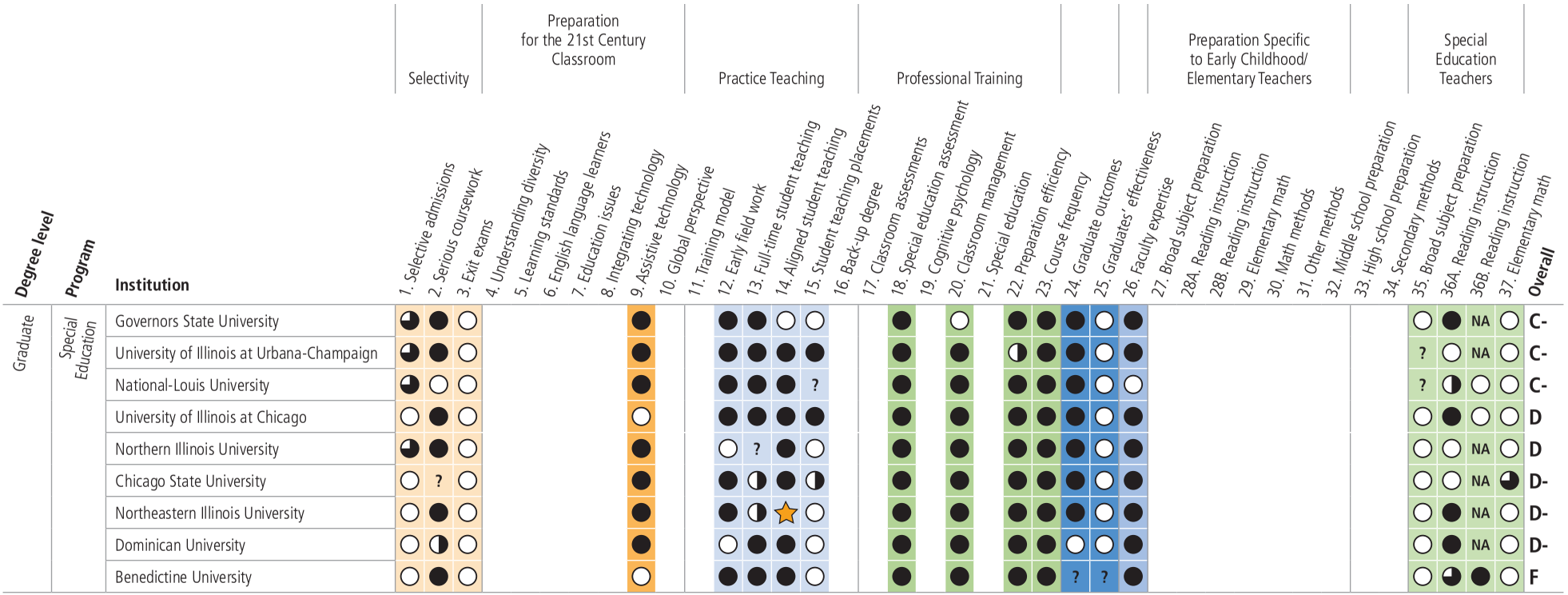
32. Middle school preparation
33. High school preparation
34. Secondary methods
35. Broad subject preparation
36A. Reading instruction
36B. Reading instruction
37. Elementary math
Overall
Graduate
Secondary
Illinois Institute of Technology B-
University of Illinois at Urbana-Champaign B-
National-Louis University C
Roosevelt University C
Loyola University Chicago D
St. Xavier University D
Concordia University Chicago F
Chicago State University F
Olivet Nazarene University CBD
Ratings: Strong design Meets standard Nearly meets standard Partly meets standard Meets a small part of standard Fails to meet standard
? Data insufficient for a final rating NA Not applicable NR Not rated


Selectivity
Preparation for the 21st Century Classroom
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Professional Training
Preparation Specific to Early Childhood/ Elementary Teachers
Special Education Teachers
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36B. Reading instruction
37. Elementary math
Overall
Graduate
Special Education
Governors State University C-
University of Illinois at Urbana-Champaign C-
National-Louis University C-
University of Illinois at Chicago D
Northern Illinois University D
Chicago State University D-
Northeastern Illinois University D-
Dominican University D-
Benedictine University F
NA
?
Ratings: Strong design Meets standard Nearly meets standard Partly meets standard Meets a small part of standard Fails to meet standard
? Data insufficient for a final rating NA Not applicable NR Not rated

Illinois teacher preparation programs' overall grades

School	Program	Overall Program Grade
Augustana College	Undergraduate Elementary	C+
	Undergraduate Secondary	C+
Aurora University	Undergraduate Elementary	D+
Benedictine University	Graduate Elementary	F
	Graduate Special Education	F
Blackburn College	Undergraduate Elementary	D
Bradley University	Undergraduate Elementary	C
	Undergraduate Special Education	C
Chicago State University	Undergraduate Elementary	C-
	Graduate Elementary	D+
	Graduate Special Education	D-
	Graduate Secondary	F
Columbia College Chicago	Undergraduate Early Childhood	D
Concordia University Chicago	Undergraduate Elementary	D
	Undergraduate Special Education	D+
	Graduate Secondary	F
DePaul University	Undergraduate Elementary	C+
	Graduate Early Childhood	F
Dominican University	Undergraduate Early Childhood	F
	Graduate Early Childhood	F
	Graduate Special Education	D-
Eastern Illinois University	Undergraduate Elementary	C
	Undergraduate Special Education	C
	Undergraduate Secondary	C-
Elmhurst College	Undergraduate Elementary	B-
	Undergraduate Special Education	C+
Erikson Institute	Graduate Early Childhood	F
Eureka College	Undergraduate Elementary	D
	Undergraduate Secondary	D+
Governors State University	Undergraduate Elementary	D-
	Graduate Special Education	D-
Greenville College	Undergraduate Elementary	D
	Undergraduate Secondary	D+
	Graduate Elementary	F
Illinois College	Undergraduate Elementary	C+
Illinois Institute of Technology	Graduate Secondary	B-
Illinois State University	Undergraduate Elementary	F
	Undergraduate Special Education	F
	Undergraduate Secondary	D+
Illinois Wesleyan University	Undergraduate Elementary	C
Judson University	Undergraduate Elementary	D+
	Undergraduate Secondary	C

Kendall College	Undergraduate Early Childhood	**D-**
Knox College	Undergraduate Elementary	**C**
	Undergraduate Secondary	**C+**
Lake Forest College	Undergraduate Elementary	**B**
	Undergraduate Secondary	**C+**
Lewis University	Undergraduate Elementary	**F**
	Undergraduate Special Education	**D**
	Graduate Elementary	**F**
Loyola University Chicago	Undergraduate Elementary	**B-**
	Undergraduate Secondary	**C+**
	Graduate Elementary	**F**
	Graduate Secondary	**D**
MacMurray College	Undergraduate Elementary	**D-**
	Undergraduate Special Education	**F**
McKendree University	Undergraduate Elementary	**C-**
	Undergraduate Secondary	**C+**
Millikin University	Undergraduate Elementary	**D+**
	Undergraduate Secondary	**C+**
Monmouth College	Undergraduate Elementary	**D-**
National-Louis University	Undergraduate Elementary	**C**
	Graduate Elementary	**D+**
	Graduate Secondary	**C**
	Graduate Special Education	**C-**
North Central College	Undergraduate Elementary	**D**
North Park University	Undergraduate Elementary	**D-**
Northeastern Illinois University	Undergraduate Elementary	**D+**
	Undergraduate Special Education	**D**
	Graduate Special Education	**D-**
Northern Illinois University	Undergraduate Elementary	**D**
	Undergraduate Special Education	**D**
	Graduate Elementary	**C-**
	Graduate Special Education	**D**
Northwestern University	Undergraduate Secondary	**A-**
Olivet Nazarene University	Undergraduate Elementary	**CBD**
	Graduate Elementary	**CBD**
	Graduate Secondary	**CBD**
Principia College	Undergraduate Elementary	**D+**
	Undergraduate Secondary	**B-**
Quincy University	Undergraduate Elementary	**C-**
Rockford College	Undergraduate Elementary	**D+**
	Graduate Elementary	**C-**
Roosevelt University	Undergraduate Elementary	**C-**
	Graduate Elementary	**D+**
	Graduate Secondary	**C**

Southern Illinois University Carbondale	Undergraduate Elementary	**C-**
	Undergraduate Special Education	**D-**
Southern Illinois University Edwardsville	Undergraduate Elementary	**D+**
	Undergraduate Special Education	**C**
St. Xavier University	Undergraduate Elementary	**C**
	Graduate Elementary	**F**
	Graduate Secondary	**D**
The University of Chicago	Graduate Elementary	**B**
Trinity Christian College	Undergraduate Elementary	**D+**
	Undergraduate Special Education	**C-**
Trinity International University	Undergraduate Elementary	**D+**
	Graduate Elementary	**D**
University of Illinois at Chicago	Undergraduate Elementary	**B**
	Graduate Special Education	**D**
University of Illinois at Urbana-Champaign	Undergraduate Elementary	**B**
	Graduate Secondary	**B-**
	Graduate Special Education	**C-**
University of Illinois Springfield	Undergraduate Elementary	**D-**
	Undergraduate Secondary	**D+**
University of St. Francis	Undergraduate Elementary	**C-**
	Undergraduate Special Education	**C**
	Graduate Elementary	**D+**
Western Illinois University	Undergraduate Elementary	**C-**
	Undergraduate Special Education	**C**
Wheaton College	Undergraduate Elementary	**C**

Weighting by category of standards for grading calculations
(more heavily weighted standard(s) in each category noted if one or more exists)

Program Type	Selectivity	21st Century Teaching	Practice Teaching	Program Evaluation	Faculty	Professional Training	Elementary/ Early Childhood	Secondary	Special Education
Undergraduate Elementary	27% total (Selective admissions)	6% total	15% total (Student teaching placements)	3% total	3% total	10% total	36% total (Reading instruction, mathematics, broad subject preparation)	Not applicable	Not applicable
Graduate Elementary	27% total (Selective admissions)	6% total	15% total (Student teaching placements)	3% total	3% total	10% total	36% total (Reading instruction, mathematics, broad subject preparation)	Not applicable	Not applicable
Undergraduate Secondary	27% total (Selective admissions)	Not applicable	15% total (Student teaching placements)	3% total	3% total	10% total	Not applicable	42% total (High school preparation; secondary methods)	Not applicable
Graduate Secondary	27% total (Selective admissions)	Not applicable	15% total (Student teaching placements)	3% total	3% total	10% total	Not applicable	42% total (High school preparation; secondary methods)	Not applicable
Undergraduate Special Education	27% total (Selective admissions)	5% total (Assistive technology)	15% total (Student teaching placements)	3% total	3% total	8% total	Not applicable	Not applicable	39% total (Reading instruction, mathematics, broad subject preparation)
Graduate Special Education	27% total (Selective admissions)	5% total (Assistive technology)	15% total (Student teaching placements)	3% total	3% total	8% total	Not applicable	Not applicable	39% total (Reading instruction, mathematics, broad subject preparation)

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National Council on Teacher Quality

1420 New York Avenue, Suite 800
Washington, D.C. 20005
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