## Standard 6: Elementary Content

## What consumers need to know about teacher preparation

For more information on how programs are scored on this standard, including how individual indicators are satisfied, please see its scoring methodology.

This standard is based on a common-sense presumption: Teachers cannot teach what they do not know. Elementary teachers must be broadly educated with sufficient knowledge of the content they will need to deliver instruction in literature and composition, history and geography, the sciences and the fine arts. The importance of broad subject-matter knowledge has gained even more urgency with the arrival of more rigorous state student learning standards, which will demand that teachers cover a wide variety of nonfiction topics as part of reading instruction.

Ideally, elementary teacher candidates would begin their undergraduate or graduate education with such a strong content foundation that little or no coursework would be required, and their proficiency could be easily established with appropriate assessments. Until that ideal is realized, however, this standard is necessary, and it must rely on evaluation of coursework requirements.

## Overview

Distribution of scores on Std. 6: Elementary Content ( $N=1,165$ elementary programs)


At the undergraduate level, analysts conduct a systematic check of core liberal arts courses required for college graduation and for elementary teacher preparation to ascertain how well they cover necessary teachable subjects other than the fine arts. The analysts also examine whether teacher candidates are required to develop a reasonable level of expertise in one teachable subject. At the graduate level, analysts conduct a check of the transcript review process to see that the program is serious about addressing gaps in preparation in any of those subjects.

Programs meeting the strong design indicator have fully satisfied the standard's course requirements in literature and composition, history and geography and the sciences, and also have requirements that include the fine arts.

## Sample for this standard

The sample for this standard encompasses all elementary programs, both undergraduate and graduate, in the Review's sample.

What are common reasons that programs do not satisfy, or only partially satisfy, the Elementary Content Standard?

- Undergraduate "general education" requirements are too broad. To fulfill these requirements, colleges and universities often allow students to choose from a wide array of courses, many of which are not relevant to elementary teachers. Teacher preparation programs frequently do not identify which courses elementary candidates should take.
- Required content coursework is designed for teacher audiences. Even when teacher preparation programs are more prescriptive that is usual about content coursework, they often require teacher audience coursework, such as "Biology for Teachers," instead of general audience coursework.
- Graduate programs fail to require or specify undergraduate content area coverage for prospective students. Transcript review forms and admissions requirements rarely include information on what graduate teacher preparation programs expect teacher candidates to know before enrolling.


## Programs earning a "Strong Design" designation

Listed below are six undergraduate programs and one graduate program deserving special recognition for designing courses of study that:

- Require sufficient coursework in literature and composition, history and geography and the sciences.

OR

- Require nearly sufficient literature and composition, history and geography and sciences coursework, and require a concentration in a teachable subject.

AND

- Include at least one fine arts course (music history or art history).


## Undergraduate

- Concord University (WV)
- Gardner-Webb University (NC)
- Glenville State College (WV)
- Martin Methodist College (TN)
- Morgan State University (MD)
- Shepherd University (WV)


## Graduate

- Notre Dame of Maryland University


## More information on elementary content preparation Undergraduate elementary programs ( $\mathrm{N}=880$ )

Of the 3 percent of programs satisfying this standard, 2 percent do so by virtue of the breadth of their topic requirements. The remaining 1 percent satisfy this standard by a combination of a concentration in a teachable subject plus somewhat less broad topic requirements. ${ }^{1}$
$\quad+$ Notably, Bluefield State College (WV), Eastern Mennonite University (VA), Grambling State University (LA), Texas A\&M University - Texarkana (TX), and Virginia State University (VA) fully meet the standard on the basis of their comprehensive breadth of topic requirements and their requirement of a concentration in a teachable subject.

## Content in the sciences

Weak course requirements in the sciences are endemic among institutions preparing teachers. Sixty-ight percent of programs do not require that teacher candidates take a single standard science course. ${ }^{2}$ Elementary teachers cannot meet the nation's need for strong STEM (Science, Technology, Engineering and Math) education if they themselves do not have a strong background in science.

Of the 32 percent of programs that do require one or more science courses, coursework in biology is most frequently required. Even so, only 24 percent of programs require a standard course in biology. A standard course in physics, physical science or earth science is required at only 17 percent of programs, and a standard chemistry course at only three percent.
> $\checkmark+$ California State University - East Bay, Campbellsville University (KY), University of Pikeville (KY), Tarleton State University (TX), Texas A\&M University - Kingsville and Marshall University (WV) require a standard course in each of the three major sciences: biology, chemistry and physical science.

[^0]Science requirements are a particular area of weakness. For example, our evaluation indicates that 70 percent of programs do not require that teacher candidates take a single science course that fully covers the content relevant to elementary grades. More often, candidates spend a full 3-credit course covering a topic that represents a tiny fraction of the content needed or is simply irrelevant. For example, candidates can often fulfill general education science requirements with courses such as Natural Disasters: Hollywood vs. Reality, Earthquakes and Society, or The Science of Gemstones. ${ }^{3}$

## History and geography content

Programs offer relatively strong coverage of history and geography topics: Fifteen percent require three or more history or geography courses and over half require at least one American history course.
$\boldsymbol{\sigma}$ Bay Path College (MA), the College of St. Joseph (VT), Concord University (WV), Eastern Mennonite
University (VA), the University of Charleston (WV), the University of Great Falls (MT), Fort Hays State
University (KS), and Western State Colorado University require standard courses in all topics evaluated in this
subject area: early American history, modern American history/government, ancient world history, modern world
history and geography.

## Literature and composition content

Because the vast majority of programs ( 90 percent) require elementary teacher candidates to take a course in composition, and 32 percent require a content-focused children's literature course, coverage of the literature and composition subject area is the strongest of the three subject areas evaluated. Only seven percent of programs fail to require any coursework in this area. On the other hand, 89 percent of programs do not require that teacher candidates take a standard world or American literature course.
$\boldsymbol{\checkmark}+$ Bay Path College (MA) and Five Towns College (NY) are the only institutions in the sample that require standard courses in all topics evaluated in this subject area: world literature; American literature; writing, grammar and composition; and children's literature.

## More information on elementary content preparation

Graduate elementary programs ( $\mathrm{N}=285$ )
Only 13 programs (five percent) meet the standard on the basis of their transcript review process, which is evaluated for how it addresses the combination of broad subject preparation and a concentration in a teachable subject.
$\boldsymbol{\checkmark}+$ SUNY - Oswego's graduate elementary program meets the standard on the basis of its transcript review process, which ensures both broad subject preparation and a concentration in a teachable subject. D'Youville College (NY), Felician College (NJ), Northeastern Illinois University (IL), and the University of Connecticut also require a concentration.

[^1]4 National Council on Teacher Quality

## Content in the sciences

Graduate elementary programs have somewhat stronger science requirements than undergraduate elementary programs, yet only 45 percent of programs expect prospective teacher candidates to have completed at least one science course in their undergraduate degree programs. Twenty-eight percent of programs require candidates to have two or more science courses on their transcripts.

History and geography content
Only 23 percent of graduate programs require two or more courses in history and geography in undergraduate preparation, with 22 percent requiring only one course.

## Literature and composition content

In contrast to those for the sciences, requirements for preparation in history and geography and literature and composition are weaker at the graduate level than at the undergraduate level. Only 26 percent of graduate programs require two or more courses in literature and composition.

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[^0]:    1 Fourteen percent of programs require a concentration of at least 18 credits of general audience coursework in a teachable subject.
    2 By "standard" we mean courses designed for the general college audience (not the teacher candidate audience) that convey content (not methods of teaching) and that deal with central disciplinary concepts (e.g., "Introduction to Biology" as opposed to "The Wildflowers of Texas").

[^1]:    3 These courses are available to elementary teacher candidates at Pennsylvania State University - Harrisburg.

