



# Standard 9: Content for Special Education

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

### Why this standard?

Students with special needs must be able to access the K-12 curriculum. It is not sufficient for special education teachers to have training in special education pedagogy; they must also have content knowledge sufficient to teach their assigned grade levels.

### What is the focus of the standard?

State regulation in this area is particularly germane. Because states certify special education teachers for elementary grades, secondary grades or a combination of the two, the analysis for this standard is first conditioned on the state context and then examines program requirements at the undergraduate and graduate levels. If special education teachers are certified to teach in elementary grades only, we determine whether teacher candidates will have a sufficient breadth of subject knowledge (Standard 6). If special education teachers are certified to teach at the secondary level, we look to see if teacher candidates will have a sufficiently focused content preparation, preparation similar to that appropriate for multiple-subject middle school certification (Standard 7). And if special education teachers are certified to teach the full span of grades, PK-12, we assess whether content preparation matches what elementary and multiple-subject certified middle school teachers need (Standards 6 and 7).

Standard applies to special education programs.

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The rationale summarizes research about this standard. The rationale also describes practices in the United States and other countries related to this standard, as well as support for this standard from school leaders, superintendents and others education personnel.

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The methodology describes the process NCTQ uses to score institutions of higher education on this standard. It explains the data sources, analysis process, and how the standard and indicators are operationalized in scoring.

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The research inventory cites the relevant research studies on topics generally related to this standard. Not all studies in the inventory are directly relevant to the specific indicators of the standard, but rather they are related to the broader issues that the standard addresses. Each study is reviewed and categorized based on the strength of its methodology and whether it measures student outcomes. The strongest “green cell” studies are those that both have a strong design and measure student outcomes.



# Standard and Indicators

## Standard 9: Content for Special Education

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

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

### Indicators that the program meets the standard:

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



# Rationale

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**Standard applies to special education programs.**

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### Rationale

#### Research base for this standard

Little “strong research”<sup>1</sup> currently exists to demonstrate the importance of adequate content preparation for special education teachers. However, given the support of some strong research for general education teachers' content preparation<sup>2</sup> and the requirement that special education students learn the same content as their general education peers, it seems logical that special education teacher candidates would similarly benefit from developing content knowledge in the courses they will teach.

#### Other support for this standard

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

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<sup>1</sup> NCTQ has created “research inventories” that describe research conducted within the last decade or so that has *general* relevance to aspects of teacher preparation also addressed by one or more of its standards (with the exceptions of the Outcomes and Evidence of Effectiveness standards). These inventories categorize research along two dimensions: design methodology and use of student performance data. Research that satisfies our standards on both is designated as “strong research” and will be identified as such. That research is cited here if it is *directly* relevant to the standard; strong research is distinguished from other research that is not included in the inventory or is not designated as “strong” in the inventory. Refer to the [introduction](#) to the research inventories for more discussion of our approach to categorizing research. If a research inventory has been developed to describe research that generally relates to the same aspect of teacher prep as addressed by a standard, the inventory can be found in the back of this standard book.

<sup>2</sup> Boyd, D. J., Grossman, P. L., Lankford, H., Loeb, S., & Wyckoff, J. (2009). Teacher preparation and student achievement. *Educational Evaluation and Policy Analysis*, 31(4), 416-440; Willingham, D. T. (2006). How knowledge helps: It speeds and strengthens comprehension, learning—and thinking. *American Educator*, 30(1), 30-37.

subjects they will teach.<sup>3</sup> While special educators should be valued for their critical role in working with students with disabilities and special needs, the state identifies them not as “special education assistants” but as “special education teachers,” because their primary role is to provide instruction.

Too many states make no distinction between elementary and secondary special education teachers, certifying all such teachers under a generic K-12 special education license. While this broad umbrella may be appropriate for teachers of low-incidence special education students, such as those with severe cognitive disabilities, it is deeply problematic for teachers of high-incidence special education students, such as those with learning disabilities, who are expected to learn grade-level content. And because the overwhelming majority of special education students are in the high-incidence category, the result is a mismatch between students’ academic needs and teachers’ ability to meet those needs. The current model does little to protect some of our most vulnerable students.<sup>4</sup>

It is virtually impossible and certainly impractical for states to ensure that a PK-12 teacher knows all the subject matter across 13+ grades, and the same problem exists for pedagogical knowledge. Attaining this depth of knowledge becomes even more imperative for teachers with the advent of the Common Core State Standards, which expect all students, including those classified as special education, to meet the standards (with appropriate modifications). To resolve this inadequacy, teacher preparation and licensure for special education teachers must distinguish between elementary and secondary levels, as they do for general education.

School district superintendents also show support for this standard.

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<sup>3</sup> For an analysis of the importance of special educator content knowledge, see Levenson, N. (2011). Something has got to change: Rethinking special education. *American Enterprise Institute* (Working paper 2011-01, 1-20).

<sup>4</sup> Inclusion models, where special education students receive instruction from a general education teacher paired with a special education teacher to provide instructional support, do not mitigate the need for special education teachers to know content.



# Scoring Methodology

## How NCTQ scores the Content for Special Education Standard

### [Standard and indicators](#)

#### Data used to score this standard

Evaluation of special education programs on Standard 9: Content for Special Education uses the following sources of data:

- Undergraduate and graduate catalogs
- Degree plans provided by institutions of higher education (IHEs)
- Relevant IHE websites (e.g., websites for the college of education or registrar, or graduate school application pages)
- Syllabi (when available and as necessary)
- Textbook listings made available by the IHE bookstore
- Admissions–relevant documents, including transcript review forms
- State regulations regarding content preparation of special education teacher candidates

#### Who analyzes the data

Two [general analysts](#) evaluate each program using a detailed scoring protocol from which this scoring methodology is abstracted. For information on the process by which scoring discrepancies are resolved, see the “scoring processes” section of the [General Methodology](#).

#### Scope of analysis

There are three<sup>1</sup> scoring pathways for **undergraduate** and **graduate** programs for this standard. The choice of pathway depends on the nature of special education certification in the IHE’s state:

- The first pathway relates to programs in states requiring special education teachers to be certified only for the elementary grades or only for the secondary grades. For programs in such states, content coursework requirements for special education candidates being prepared for the elementary grades are evaluated under Indicator 9.1, much as they are evaluated for elementary teacher candidates under Indicators 6.1 and 6.3 of the Elementary Content Standard. (See the [scoring methodology](#) for Standard 6: Elementary Content.)

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<sup>1</sup> The three pathways and the standard’s three indicators are not matched one-for-one. For example, the first pathway evaluates elementary and secondary special education programs in states in which all special education programs fall into one of those two categories, whereas Indicator 9.1 sets a content preparation standard for a special education teacher candidate who will be certified to teach in the elementary grades, whether in an elementary program or in a K-12 program.

- In the case of special education candidates being prepared for the secondary grades, coursework requirements are evaluated under Indicator 9.2 for preparation in two minors (15 or more semester credit hours, or SCHs) in two different core subjects, much as they are evaluated under Indicators 7.6 and 7.7 for middle school teacher candidates seeking multiple-subject certification. (See the [scoring methodology](#) for Standard 7: Middle School Content.)
- The second pathway relates to programs in states that allow special education teachers to be certified for either the elementary grades, the secondary grades or for grades PK-12. The evaluation in the first two cases – preparation only for elementary grades or only for secondary grades — is similar to that outlined in the bulleted section above. However, programs that offer grades PK-12 certification, effectively choosing to offer an overly broad certification when the state provides for a more suitably narrow certification, fail the standard *a priori* on the ground that the program’s structure is flawed.<sup>2</sup>
- A third pathway relates to programs in states that only allow special education teachers to be certified for grades PK-12. For programs in such states, content coursework requirements for teacher candidates are evaluated under Indicator 9.3 for their adequacy in both elementary content preparation and secondary content preparation. (Again, as in the first pathway, the [scoring methodology for Standard 6](#) and [Standard 7](#) provide general guidance for this evaluation.)

Because of state regulations, these programs have no choice but to offer an overly broad special education certification. For that reason, prefatory comments accompanying program-specific scoring comments developed for every program to provide feedback on the *Review’s* evaluation emphasize the state’s role in making adequate content preparation of special education teacher candidates an insuperable challenge.

For information on the framework for special education certification in each state, refer to the [Teacher Licensing Structure Infographics](#).

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<sup>2</sup> NCTQ acknowledges that school districts may prefer to hire special education teachers certified to teach grades PK-12 because this provides more flexibility in filling otherwise hard to fill secondary special education positions. However, one would be hard-pressed to find anyone who would argue that hiring the PK-12 certified teacher is in the best interests of students with special needs, especially students with special needs at the secondary level.

## Pathways for analysis of content preparation of special education teacher candidates

|           | State regulations allow IHEs to prepare special ed teacher candidates to teach at these grades | How NCTQ evaluates content prep or program structure   |
|-----------|--|--|
| Pathway 1 | Elementary   | Special ed teacher candidates evaluated on the same basis as elementary teacher candidates                                       |
|           | Or   |  |
|           | Secondary  | Special ed teacher candidates evaluated on the same basis as dual-subject middle school teacher candidates                       |
| Pathway 2 | Elementary   | Special ed teacher candidates evaluated on the same basis as elementary teacher candidates                                       |
|           | Or   |  |
|           | Secondary  | Special ed teacher candidates evaluated on the same basis as dual-subject middle school teacher candidates                       |
|           | Or   |  |
|           | Elementary and Secondary (PK – 12)   | Program structure is flawed and by choice of this prep approach the standard is not satisfied                                    |
| Pathway 3 | Elementary and Secondary (PK – 12)   | Special ed teacher candidates evaluated on the same basis as elementary <u>and</u> dual-subject middle school teacher candidates |

All undergraduate and graduate programs in the sample of 99 special education programs evaluated in this edition of the *Review* could be evaluated on this standard.<sup>3</sup>

<sup>3</sup> Four of the programs in the original sample of 103 special education programs were removed after we determined that they had been incorrectly categorized as initial certification programs. For information on selection of the sample, see the [General Methodology](#).

Common misconceptions about how analysts evaluate the Content for Special Education Standard:

- *Special education teachers do not need the same level of content preparation as elementary or secondary teachers so it's not important to evaluate their preparation for content.* It is often thought that even special education teacher candidates who are preparing to teach students with the most common learning disabilities should primarily focus on curriculum and instruction or pedagogical strategies, and/or that they can take content coursework solely designed for teacher audiences. But the implication of this approach is that special education *students* cannot be expected to meet the demands of PK-12 standards, which is not fair to them. Particularly with the advent of the Common Core State Standards, the content preparation of all teachers, including special education teachers, has to be rigorous.
- *By rating teacher preparation programs on a standard for which state regulations regarding PK-12 special education certification are so salient, NCTQ's rating process is unfair.* Since we have found eight programs in six states with PK-12 special education certification that require candidates to get either an elementary or secondary endorsement, it is not true that programs have no choice but to simply recommend candidates for PK-12 licensure. Our rating process for these eight programs took into account the responsible decisions their leaders made to focus their candidates' content preparation on a narrower grade span. Moreover, teacher preparation programs have a role to play in advocating for changes to licensure frameworks that do not serve the interests of students.<sup>4</sup>

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<sup>4</sup> We are aware that a number of programs in at least one state (**Ohio**) have advocated without success for a different licensure or endorsement framework that would allow them to better focus preparation on the elementary or secondary grade span and to signal as much to teacher candidates and hiring school districts.



## Examples of what satisfies or does not satisfy the standard's indicators

### Elementary content preparation (Indicator 9.1)

For examples of adequate elementary content preparation for special education candidates programs, refer to the examples of what satisfies or does not satisfy Indicators 6.1 and 6.3 in the [scoring methodology](#) for Standard 6.

### Secondary content preparation (Indicator 9.2)

For examples of adequate secondary content preparation for special education candidates, refer to the examples of what satisfies or does not satisfy Indicator 7.6 or 7.7 in the [scoring methodology](#) for Standard 7.

### Sufficient focus on either elementary or secondary preparation (Indicator 9.3)

#### Analysis for programs in a state with elementary, secondary and PK-12 special education certifications

| ✓ - fully satisfies the indicator  | ✗ - does not satisfy the indicator   |
|--|--|
| A special education preparation program in the state of Washington offers a program entitled “Master’s in Education, K-8/Special Education Teacher Certification,” and the program’s content coursework requirements satisfy all aspects of Indicator 6.1. | A special education program in the state of Washington offers a program entitled “Bachelor of Arts in Education, Special Education P-12.” The program does not satisfy the standard because it offers an overly broad certification when a narrower certification can be made available under state regulations. |

#### Analysis for programs in a state with only a PK-12 special education certification

| ✓ - fully satisfies the indicator   | ✗ - does not satisfy the indicator   |
|---|--|
| Content coursework requirements for a special education preparation program in Ohio satisfy all aspects of Indicator 6.1 and also entail two 15 SCH minors in two different core subject areas. | Content coursework requirements for a special education preparation program in Ohio do not satisfy all aspects of Indicator 6.1 and do not entail two 15 SCH minors in two different core subject areas. |



# Research Inventory

## Researching Teacher Preparation: Studies investigating the preparation of special education teacher candidates in subject content

*These studies address issues most relevant to Standard 9: Content for Special Education*

| Total<br>Number<br>of Studies | Studies with Stronger Design |                                   | Studies with Weaker Design |                                   |
|-------------------------------|------------------------------|-----------------------------------|----------------------------|-----------------------------------|
|                               | Measures Student Outcomes    | Does Not Measure Student Outcomes | Measures Student Outcomes  | Does Not Measure Student Outcomes |
| 6                             | 0                            | 1<br>Citation: 4                  | 0                          | 5<br>Citations: 1, 2, 3, 5, 6     |

*Note: Citation 2 is cross-listed with RI 16: Instructional Design for Special Education; Citation 4 is cross-listed with RI 11: Lesson Planning; Citation 5 is cross-listed with RI 5: Elementary Mathematics and RI 8: Content Preparation for High School; Citation 6 is cross-listed with RI 4: Struggling Readers.*

Citations for articles categorized in the table are listed below.

**Databases:** Education Research Complete and Education Resource Information Center (peer-reviewed listings of reports on research including United States populations).

**Publication dates:** Jan 2005 – June 2012

See [Research Inventories: Rationale and Methods](#) for more information on the development of this inventory of research.

1. Flores, M. M., Patterson, D., Shippen, M. E., Hinton, V., & Franklin, T. M. (2010). Special education and general education teachers' knowledge and perceived teaching competence in mathematics. *Issues in the Undergraduate Mathematics Preparation of School Teachers*, 1.
2. Fullerton, A., Ruben, B. J., McBride, S., & Bert, S. (2011). Development and design of a merged secondary and special education teacher preparation program. *Teacher Education Quarterly*, 38(2), 27–44.
3. Gerretson, H., & McHatton, P. (2009). Learning to teach school mathematics: Perceptions of special education teachers. *Action In Teacher Education*, 31(3), 28–40.

4. Grskovic, J. A., & Trzcinka, S. M. (2011). Essential standards for preparing secondary content teachers to effectively teach students with mild disabilities in included settings. *American Secondary Education*, 39(2), 94–106.
5. Livy, S., & Vale, C. (2011). First year pre-service teachers' mathematical content knowledge: Methods of solution for a ratio question. *Mathematics Teacher Education and Development*, 13(2), 22–43.
6. Spear-Swerling, L. (2009). A literacy tutoring experience for prospective special educators and struggling second graders. *Journal of Learning Disabilities*, 42(5), 431–443.