Fine Points:
What happened to the Teacher Prep Review’s Standard 7: Middle School Content?

The Middle School Content Standard, whose ratings appeared in the first two editions of the Teacher Prep Review, focused on the subject-area content preparation of middle school teacher candidates. This brief provides the rationale for the removal of this standard from the Review.

Bridging the gap between the elementary grades and high school, middle school is typically when students first experience subject-specific courses. Accordingly, middle school teachers are certified by subject(s) and expected to have a strong grasp of the content area they will be certified to teach. This is most often gained by completion of a subject-area major, with verification by a state licensing test.

The Middle School Content Standard reviewed the available certification routes and state test requirements to determine the adequacy of content preparation in each area of middle school certification.

In what states were middle school certification programs evaluated by Standard 7?

States utilize one of three models for teacher certification covering grades six through twelve. The first model, pictured below in an example from North Carolina, carves out a unique certification for middle school teachers that has limited or no overlap with high school certification. Most notably, under this model middle school certification covers at least one grade that cannot be taught with high school certification.

Figure 1. Model of Unique Certification for Middle School Teachers

Middle school programs in states using this model were evaluated under the Middle School Content Standard.

The second certification model eliminates the middle school certification. Instead of distinct certifications for middle school and high school, a “secondary” certification combines the two grade ranges. As the graphic below shows, aspiring teachers who want to teach middle school in Colorado must pursue either elementary or secondary certification.

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1 For the purposes of the Teacher Prep Review, middle school is considered grades six through eight.

2 As with the ninth grade in this instance, states falling under this model will not always have a fully separate middle school certification. In several instances, the middle school certification is considered unique because just a single grade is not covered by the high school certification. For example, in New Mexico, high school certification covers grades 7-12, while the middle school certification is 5-9. Because the sixth grade can only be taught with a middle school certification, New Mexico is considered to use this model.
As there is no middle school certification in Colorado, there are no middle school certification programs in the state. Teacher candidates who aim to teach specific subjects in the middle grades would complete the same certification route as high school candidates. In states utilizing this model, all analysis in the Teacher Prep Review was completed under Standard 8: High School Content, which considers both high school and secondary programs.

Lastly, there are states that combine the previous two models by offering seemingly redundant middle school certification that falls entirely within high school grade range. In the following example, teacher candidates in Indiana have the option to pursue certification in grades 5-9 or grades 5-12.

In states like this, many programs will offer a “secondary” certification route and allow teacher candidates to decide which certification option to pursue. Analysis for these programs is completed under the High School Content Standard unless the program offers the option of a dedicated middle school certification route limiting a teacher candidate to pursuing only middle school certification. In such cases, the program was evaluated under the Middle School Content Standard.

In the full collection of state certification structures, which can be viewed here, each state either matches or is a variation of one of the above models.

Unlike high school certification, middle school certification routes are not found in every state (or even at every institution within states offering a unique middle school certification), and therefore programs rated under the Middle School Content Standard were unevenly distributed across the country. As a result of the variations among states, the total number of programs reviewed under the Middle School Content Standard (375 programs) was much less than the number reviewed under the High School Content Standard (1,110 programs).

3 Teacher candidates interested in teaching the sixth grade would pursue elementary certification as the secondary certification only extends to the seventh grade.
How was middle school certification program evaluation conducted and what did it reveal?

The first consideration in evaluation was whether a program is located in a state in which state licensing tests reach a basic level of adequacy for each of the pathways in the table below. In cases where state licensing tests are adequate, all programs within that state have automatically met Standard 7 in previous editions of the Teacher Prep Review.

In states that offer middle school certification routes but that do not have adequate licensing tests, NCTQ evaluates programs based on whether they require the following coursework in each of the content areas in which a teacher could be certified:

Table 1. Indicator Criteria for Middle School Content Coursework Analysis in the Teacher Prep Review 2014

<table>
<thead>
<tr>
<th>Indicator/pathway</th>
<th>Coursework criteria</th>
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<tbody>
<tr>
<td>7.2 – Mathematics</td>
<td>■ 30 SCH in Mathematics content coursework</td>
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<tr>
<td>7.3 – English</td>
<td>■ 30 SCH in English content coursework</td>
</tr>
<tr>
<td>7.4 – Sciences</td>
<td>■ 30 SCH in Biology, Chemistry, Earth Science or Physics content coursework, or</td>
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<td></td>
<td>■ 15 SCH in one of those fields with an additional 15 SCH in the listed sciences</td>
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<tr>
<td>7.5 – Social Sciences</td>
<td>■ 30 SCH in History, Economics or Political Science/Government content coursework, or</td>
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<td>■ 15 SCH in one of those fields with an additional 15 SCH in the listed social sciences</td>
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<tr>
<td>7.6 – Multiple Subjects</td>
<td>■ 15 SCH in Mathematics, English, one of: Biology, Chemistry, Earth Sciences or Physics, and one of: History, Economics or Political Science (where appropriate)</td>
</tr>
</tbody>
</table>

The “Multiple Subjects” pathway refers to dual and generalist certifications (see textbox). In either case, we looked for 15 semester credit hours (SCHs) in each subject covered under the certification. For the sciences and social sciences, those 15 SCHs had to be in a single-subject, not across the field (for example, 15 SCHs in biology, not 15 SCH spread across biology, chemistry and physics).

What are dual and generalist certifications?

**Dual certification** allows middle school teacher candidates to earn certification in two subject areas. Teacher preparation programs or state certification will frequently pair English and the social sciences or mathematics and the sciences. Teacher candidates will complete content coursework in two subject areas, be required to pass licensing tests in each (where licensing tests are required), and then be certified to teach both subjects.

**Generalist certification** allows a teacher candidate to teach all middle school subjects. The content requirements for these programs are similar to that found in elementary education, with no in-depth concentration in any content area. Candidates who complete these programs are not required to pass licensing tests in each subject they will be certified to teach; instead, they take a general test covering all subjects that does not report sub-scores for each subject area.
The bottom line

The results of evaluation under the Middle School Content Standard can be generalized as follows:

- In the vast majority of cases (nearly 80 percent), the program resides in a state with adequate licensing tests. In all of these instances, the program met the standard.

- In a minority of cases, the program did not reside in a state with adequate licensing tests and did not offer a dual or generalist certification. When this was the case, a small number of programs (about 3 percent) met the standard, while a larger share (about 8 percent) partly met the standard due to inadequate preparation in the sciences.4

- In the remaining cases, the program did not reside in a state with adequate licensing tests and offers a dual or generalist certification. These programs most likely did not meet the standard due to inadequate preparation in the sciences and in dual or generalist certifications (10 percent).

As demonstrated above, the vast majority of the time, a rating on the Middle School Content Standard is merely a rating on the structure of a state’s middle school certification routes and related licensing tests. This provides limited information about the quality of individual middle school programs and is the primary rationale for the removal of the Middle School Content Standard from future editions of the Teacher Prep Review.

Because programs generally performed well on the Middle School Content Standard, ratings on the standard served to boost programs’ overall score and hence their rankings. With the elimination of the Middle School Content Standard, some programs evaluated on the standard will see a downward adjustment in their program score and rank in the next edition of the Teacher Prep Review. This adjusted score will better reflect their contributions to the rigorous content preparation of high school and/or secondary teachers.

4 The sciences proved to be the pathway most likely to fail due to the lack of a 15 SCH concentration in a single subject area (biology, chemistry, etc.). The social sciences differed in this respect by typically requiring at least 15 SCHs in history.