A Closer Look at Secondary Methods: Coursework and Practice

Undergraduate Secondary Programs

KEY FINDINGS: Twenty-four percent of the 716 secondary teacher prep programs evaluated do not require all teacher candidates to take a subject-specific methods course. This problem is far more prevalent in small programs than in large ones — 88 percent of the 126 undergraduate secondary programs that do not require a subject-specific methods course in English or mathematics produce 25 or fewer secondary teachers each year.

Why all secondary teacher prep programs should require subject-specific methods coursework

It is one thing to know a subject and quite another to teach it. Beyond knowing content, aspiring teachers should know how to deliver that content to students. While some elements of instruction are common to all subjects, secondary teacher candidates should take at least one course focusing on the methods of instruction relevant to their subject area. This allows beginning teachers to enter the classroom with an understanding of specific content-area practices that have proven effective. Additionally, teacher candidates should have at least one opportunity for structured practice of the techniques they learn in the subject-specific methods course. This practice should include feedback from an expert in the content area (such as the supervising teacher or methods course instructor).

Previous analysis under this standard focused on one secondary subject (biology, history, mathematics, etc.) randomly selected for each program. In this edition of the Teacher Prep Review, the Secondary Methods Standard considers both English and mathematics for all programs in the sample. Additionally, while the depth of analysis under the Secondary Methods Standard is unchanged, the results are now reported under two separate standards: Secondary Methods: Coursework and Secondary Methods: Practice. Secondary Methods: Coursework considers if programs require a subject-specific methods course. Whether or not that course requires teacher candidates to practice instruction and receive feedback during a fieldwork experience is analyzed under Secondary Methods: Practice.

For more information about analysis and program grades, see the Methodology in brief and Understanding program grades sections below.

1 Where certification in either English or mathematics is not offered, the program score reflects the analysis of the available certification route. Where neither English nor mathematics is offered, analysis is completed using a certification route in the sciences.
How many programs require undergraduate secondary teacher candidates to take a subject-specific methods course? 
*(N=716 undergraduate secondary programs)*

![Bar chart showing the percentage of programs]

- **76%** of programs require teacher candidates in both English and mathematics to take a subject-specific methods course.
- **7%** of programs require teacher candidates in only English or mathematics to take a subject-specific methods course.
- **18%** of programs do not require teacher candidates in either English or mathematics to take a subject-specific methods course.

**Secondary Methods: Coursework** independently considers the requirements for English and mathematics with each subject potentially earning a grade of A or F. The grades for the two subjects are then averaged. When a subject-specific methods course is found for one subject, but not the other, the program earns a grade of C.

**A closer look at Secondary Methods: Coursework**

The 2014 Teacher Prep Review found 77 percent of programs to satisfy the requirement of a subject-specific methods course. While it would appear as if programs have slightly regressed in this edition (as 76 percent of programs now earn an A), when considering English and mathematics independently (as opposed to the program as a whole), 79 percent of the individual certification routes are found to require a subject-specific methods course.

When these findings are viewed through the lens of teacher production, a telling trend appears. The figure below presents Secondary Methods: Coursework grades distributed by the number of secondary teachers produced by each program. Among programs that produce 50 or more secondary teachers annually, only 4 percent do not require a subject-specific methods course in either English or mathematics. Conversely, among programs producing 25 or fewer secondary teachers each year, 26 percent of programs fail to require subject-specific methods courses. Of the 125 programs in total that do not require any subject-specific methods courses, 110 produce 25 or fewer secondary teachers each year.

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2 As the 2014 Teacher Prep Review considered only one certification route, the independent consideration of English and mathematics in the current edition provides a more accurate comparison between the two editions of the Teacher Prep Review. The three percent difference between the number of certification routes earning an A and the number of programs earning an A in this current edition of the Teacher Prep Review is explained by the disaggregation of programs earning a C.

3 Source: U.S. Department of Education Title II data from academic years 2012-2013 and 2013-2014. The annual secondary teacher production in the table represents the average production of those two academic years.
A Closer Look at Secondary Methods: Coursework and Practice

Distribution of Secondary Methods: Coursework grades by secondary teacher production

(N=709 undergraduate secondary programs4)

A closer look at Secondary Methods: Practice

As shown in the figure below, only about half of undergraduate secondary programs require both English and mathematics teacher candidates to practice instruction and receive feedback during a fieldwork experience. Nearly a quarter of these 239 programs do not even require a fieldwork experience during the methods course, which prevents teacher candidates from observing course concepts in action.

How many programs that require a subject-specific methods course also require undergraduate secondary teacher candidates to teach a lesson and receive feedback during the methods course fieldwork experience?

(N=239 undergraduate secondary programs5)

Digging into the individual results for English and mathematics reveals a slight split in course requirements. Subject-specific methods courses in mathematics require fieldwork and practice with feedback three percentage points more often. While this is not a large discrepancy, it does highlight that for the 13 percent of programs earning a C, more often than not, it is the certification route in mathematics that requires teacher candidates to practice instruction.

4 There are seven fewer programs in this sample due to an absence of Title II teacher production data for those institutions.

5 The 126 programs earning a grade of F under Secondary Methods: Coursework automatically earn a grade of F for Secondary Methods: Practice. Because these programs are not directly analyzed under this Secondary Methods: Practice, they are removed from this sample. Also excluded are the 351 programs for which the necessary documents were not made available for analysis.
Fieldwork and practice opportunities in secondary English and mathematics methods courses

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<thead>
<tr>
<th></th>
<th>English</th>
<th>Mathematics</th>
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<tbody>
<tr>
<td>Certification routes scored under Secondary Methods: Practice</td>
<td>220</td>
<td>213</td>
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<tr>
<td>Percentage of programs requiring fieldwork</td>
<td>83.2%</td>
<td>86.4%</td>
</tr>
<tr>
<td>Percentage of programs requiring practice and feedback</td>
<td>54.1%</td>
<td>57.7%</td>
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**Methodology in brief**
We look at course catalogs, degree plans, and course syllabi for two purposes. First, does the program require methods courses specific to English and mathematics? For example, is there an English methods course rather than a general methods course for those who will teach high school English? Second, will aspiring teachers receive feedback from the instructor on a practice teaching experience in a secondary classroom? Click [here](#) to read more about the Secondary Methods Standards.

**Understanding program grades for Secondary Methods: Coursework**
Each program’s letter grade is based on the requirement of a three semester credit hour, subject-specific methods course in English and mathematics. Where both subjects are evaluated, the grade for the program represents the average of two. Where just one subject is evaluated, programs can only earn scores of A and F.

- **A** The program requires that both teacher candidates pursuing English certification and those pursuing mathematics certification take a subject-specific methods course.
- **C** The program requires that either teacher candidates pursuing English certification or those pursuing mathematics certification take a subject-specific methods course, but such a course is not required for both subjects.
- **F** The program does not require teacher candidates pursuing either English or mathematics certifications to take a subject-specific methods course.

**Understanding program grades for Secondary Methods: Practice**
Each program’s letter grade is based on whether, in the subject-specific methods course or related practicum, the program requires fieldwork and a teaching experience for which the teacher candidate receives direct feedback from the supervising teacher or methods instructor. Where programs offer both English and mathematics, the grade for the program represents the average of two scores. Where programs offer just one of these two subjects, programs can only earn scores of A and F. Programs that do not require a subject-specific methods course automatically earn a grade of F under Secondary Methods: Practice.

- **A** During a fieldwork experience, teacher candidates pursuing English and mathematics certification are required to teach a lesson and receive feedback from an expert in the subject area.
- **C** During a fieldwork experience, teacher candidates pursuing either English or mathematics certification are required to teach a lesson and receive feedback from an expert in the subject area, but such a requirement is not found for both subjects.
- **F** Teacher candidates pursuing English and mathematics certification are either not required to complete a fieldwork experience or, if a fieldwork experience is required, teacher candidates are not required to teach a lesson where feedback is provided by an expert in the subject area.