Tools for Retention:
What the University of Wisconsin Placement Tests Suggest
About Taking More Foreign Language in High School

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Many high school foreign language teachers are interested in finding ways to encourage students to continue their language study throughout their high school years. The purpose of this article is to report on some trends that we are seeing at the university level, in hopes that these data might motivate students to go farther with their language study, thus increasing retention rates in third- and fourth-year classes.

The primary tool used by the UW-System to encourage high school students to take more foreign language is the retroactive credit policy, which awards credit for prerequisite courses in the introductory language sequence, if a student can demonstrate competence at a higher level, by earning a sufficiently high grade in the course.1 Retroactive credits do not count towards a student's grade point average, but they can be applied towards graduation and can be used to elevate one's student status (e.g., from a freshman to a sophomore). Students with higher status are awarded the opportunity to register for courses before students with lower standing, thereby greatly improving the likelihood of getting their classes of choice.

Although the retroactive credit policy is very effective at enticing students to take more foreign language in high school, the relationship between high school coursework and university placement is not well understood. Many students believe that one year of high school language is equivalent to one semester in college, so that after two years of high school language, they will be able to begin at the university in third semester. Many students also believe that whatever the relationship is between high school units and university placement, that relationship is constant, regardless of when those high school units were completed (e.g., completing two units as a freshman and sophomore versus as a junior and senior). Misunderstanding these relationships might well lead one to overestimate their university placement level, causing them to discontinue language prematurely.

For the three most commonly taught foreign languages—French, German, and Spanish—the University of Wisconsin uses a language mechanics and reading comprehension test to determine the appropriate level at which to continue one's language study.

These tests, known as the UW placement tests, are developed by faculty throughout UW-System to align with the curricula taught at the university level. Although each UW campus uses the exact same tests, the cutscores used to place students vary from campus to campus, to best reflect each campus' curriculum and student body. However, the test is monitored closely on each campus to ensure that it is working properly and is a valid instrument.2

This article seeks to address the relationships between high school preparedness and university placement. In many cases, it will be shown that these relationships are not as straightforward as one might think. The hope is that through deeper understanding of these relationships, high school students will come to see the benefit of taking additional foreign language courses, as they ready themselves for the transition to college.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Average Placement Test Scores as a Function of the Number of Units of High School Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>Number of HS Units 2</td>
</tr>
<tr>
<td>French</td>
<td>397.2</td>
</tr>
<tr>
<td>German</td>
<td>392.1</td>
</tr>
<tr>
<td>Spanish</td>
<td>409.3</td>
</tr>
</tbody>
</table>
The first pattern of interest addresses whether students who take more high school foreign language receive higher scores on the university placement tests. Table 1 reports the 2007 average placement scores for French, German, and Spanish, for students with 2 through 5 high school units of language.

From Table 1, one can see that, as expected, placement test scores do increase as the number of high school units increases. However, the increase is not linear. Although the average placement test scores vary a bit across languages, for all three languages, the jump in performance between students taking 3 and 4 high school units is the largest, and is between 50- and 100-percent larger than the difference between students taking 4 and 5 units (which is the smallest difference, though it is not much different from the jump between 2 and 3 units).

Although it is comforting to see that placement test scores increase as high school preparedness increases, Table 1 does not address the matter of whether these differences manifest themselves in higher placement levels. Determining this is actually rather tricky, because, as mentioned previously, placement cut scores vary from campus to campus. Therefore, depending on the set of cut scores used to determine placement level, the distribution of placement levels will change somewhat. For present purposes, in the interest of making the results here maximally generalizable, it was decided to use the average placement cut scores across the six largest UW campuses. The set of average cut scores were different for each of the three languages, because, generally speaking, campus' cut scores are not the same across languages.

Figure 1 shows the placement level distributions (i.e., the percentage of students placing into each level) for students with 2, 3, 4, or 5 units of high school language. The white boxes on the bottom of the stacks correspond to placement into first semester. Darker boxes indicate higher placement; black boxes (on the top) correspond to placement into fifth semester—the top level into which the placement test can put a student. The actual percentages of students placing into each level are printed in the middle of each box, provided that the percentage is greater than 5.

There is considerable variation across the three languages in terms of the percentages of students placing at each level. However, the overall pattern is clear. Students with two units of high school language overwhelmingly place into either first or second semester. In German, first semester is far-and-away the most common placement; in Spanish and French, first
semester remains the most common placement, but the
differences between first and second semester placement are
not as great. For all three languages, the percentage of
students with two units who place directly into third semester,
as would be predicted by a one unit = one semester model, is
very small, varying between 9 and 13 percent.

For each additional unit, the likelihood of placing into first
semester decreases and the probability of placing into higher
levels (e.g., fourth and fifth semesters) increases. By the time
students have four units, placing into first semester is about as
unlikely as placing above second semester was for those with
only two units. Among students with five units, placement is
predominantly into the upper-most levels.

The final issue to address is whether all students earning a
particular number of units are equally prepared, or if students
who discontinue the language see their skills regress. Figure 2
graphs the change in average placement test scores, as a
function of high school units and years away from the
language. Because sample sizes in some of these categories
can get rather small in German and French, leading to
instability of the sample averages, Figure 2 is based on data
from both the 2005-06 and 2006-07 testing cycles.

The figure shows quite clearly that all units are not created
equally. Rather, on average, placement scores decline
markedly for students who are a year or two removed from the
language. Regardless of language or number of units,
students who have not taken language in the year leading up
to the placement test score much lower—an average drop of
nearly 43 points. Recall from Table 1 that students who moved
from 2 to 3 units and from 4 to 5 units saw their scores
improve by an average of approximately 50 points, so taking a
year off is nearly equivalent to having taken a whole year less
of foreign language. The deterioration of skills continues for
students who take a second year off. Across all languages and
levels, scores dropped an additional 22 points, on average, for
those who were two years removed from having taken a
language. However, from Figure 2, one will note that for
students with only 2 units, there was no difference in
performance between those who were one and two years
away from a language. For students with 3 or 4 units,
spending a second year away from the language resulted in
an average drop of an additional 34 points.

Students are clearly advantaged by taking their foreign
language uninterrupted. Students who are not planning or are
unable to take foreign language throughout their entire high
school education (as might be the case with students on a
block scheduling system), should be alerted to this information
and advised to plan their schedules accordingly. If data from all
the tables and figures are taken in combination, it is reasonable to
assume that students who continue in the language will see their
placement scores increase by 40-50 points (usually
Corresponding to at least one level), whereas students who opt
against taking foreign language will likely see their placement
scores decrease by approximately 40 points (often corresponding
to a reduction of one level). Therefore, the decision to take an
extra year of foreign language corresponds to an 80-130 point
swing on the test, corresponding to roughly 2 placement levels.
The analysis presented here shows very clearly that students are benefitting by having taken more high school foreign language (and more recently). The UW-System placement testing trends appear to debunk the widespread theories that one year of high school is equivalent to one semester of college and that acquired language skills remain stable in the absence of continued instruction.

Furthermore, it was shown that after the first two units have already been taken, the decision on whether or not to take each additional year corresponds to a swing of roughly two placement levels (plus one from taking the higher level, and minus one for not taking any language). It is my hope that these trends can be used by high school teachers and guidance counselors to address the retention issue and encourage students to take more foreign language at the high school level. |

1 The grade necessary to earn retroactive credits is either a B or B-, depending on the UW campus. Also, some campuses stipulate that the course must be completed within the first 30 UW credits. Please visit http://www.testing.wisc.edu/campus%20foreign%20language%20policies.html for more on individual campuses retroactive credit policies.

2 Based on studies conducted on the individual campuses, students who enroll in the course suggested by the test tend to earn a half a grade point better, on average, than students who enroll in a course above the one suggested.

3 Placement test scores range from 150 – 850, with an average score of 500 and a standard deviation of 100.

4 It is worth noting that, although the exact distributions of placement levels varied when individual campus' cut scores were applied, the general pattern of results reported in Figure 1 was identical to that found by using cut scores from any individual campus.

5 This is due largely to a floor effect of the test. Students with only two units who had either 1 or 2 years away were essentially performing at the chance-level (i.e., the expected score based purely on guessing). The chance-level scores for French, German, and Spanish were 383, 363, and 394, respectively.