Using Multiple Measures for Placement in College Composition

Assessment and placement in community colleges has depended heavily on placement exams administered shortly after admission. Research indicates that these placement exams frequently misplace students in the curriculum, and that students more often are placed in coursework that is below their potential than they are in coursework that is above their potential (Scott-Clayton, 2012; Willett, et al., 2015). The decisions by ACT to phase out the widely used Compass placement test (Fain, 2015) and Michigan’s move from administering the SAT instead of the ACT have added a new sense of urgency to improving assessment and placement processes in community colleges. Colleges either must invest limited financial and administrative resources in identifying and implementing an alternative placement test or rely on other types of information to place students.

This brief summarizes the results of a study that examined the relationships between a student’s grade in his/her first college-level composition course and several sets of predictors, including Compass placement exam scores, scores on the Michigan Merit Exam (MME), scores on the ACT portion of the MME, and cumulative high school grade point average. To determine which may serve as substitutes for Compass, the study compared sets of predictors with respect to their capacity to predict student performance in college-level English Composition.

High School GPA is the best single predictor of success in College Composition.

The best combination of predictors included high school GPA, MME Reading, and MME Writing.

Students with similar high school GPAs, but different Compass writing scores, performed nearly the same in College Composition.
How did students perform on common assessments?
This study used a sample of 2,386 students who enrolled in college for the first time between the Summer term of 2007 and the Spring term of 2011, who completed the Compass writing and reading placement tests no later than the beginning of their first term of college and no earlier than six months prior to their first term of college, and who enrolled in College Composition as their first English course and within their first year of college. Table 1 displays student performance in College Composition, placement exams, the MME, the reading and writing sections of the ACT (administered as part of the MME), and high school GPA.

### Table 1: Course Grade, Assessment Test Scores, and High School GPA

<table>
<thead>
<tr>
<th>Course Grade (measured in grade points)</th>
<th>College Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compass Reading</td>
<td>83.3</td>
</tr>
<tr>
<td>Compass Writing</td>
<td>86.4</td>
</tr>
<tr>
<td>MME Reading</td>
<td>1104.9</td>
</tr>
<tr>
<td>MME Writing</td>
<td>1092.1</td>
</tr>
<tr>
<td>ACT Reading (administered as part of the MME)</td>
<td>18.4</td>
</tr>
<tr>
<td>ACT Writing (administered as part of the MME)</td>
<td>17.7</td>
</tr>
<tr>
<td>High School Grade Point Average</td>
<td></td>
</tr>
<tr>
<td>4.0-3.5</td>
<td>8%</td>
</tr>
<tr>
<td>3.4-3.0</td>
<td>26%</td>
</tr>
<tr>
<td>2.5-2.9</td>
<td>33%</td>
</tr>
<tr>
<td>2.0-2.4</td>
<td>23%</td>
</tr>
<tr>
<td>1.5-1.9</td>
<td>8%</td>
</tr>
<tr>
<td>0.0-1.5</td>
<td>2%</td>
</tr>
</tbody>
</table>

What assessments best predicted performance in College Composition?
The single best predictor of performance in College Composition was high school GPA. Alone, it explained 11.3% of the variation in final grades in College Composition among students for whom College Composition was their first English course. The best combination of predictors was high school GPA combined with reading and writing scores on the Michigan Merit Exam (MME), which together explained 12.4% of the variation in final grade in College Composition. Figure 1 displays the predictive value ($r^2$) of each of the assessments.
How did students with similar high school GPAs, but different Compass writing scores, perform in College Composition?

The predictions provided in Figure 2 pertain to two groups of students. The first group includes students who entered college immediately after high school, enrolled in College Composition as their first English course, and achieved a score on the Compass writing test that put them in the 10th percentile of students in College Composition. In other words, this group of students had placement test scores that nearly resulted in them being placed in developmental writing. The second group is like the first except that they scored in the 90th percentile of the Compass writing test among students who enrolled in College Composition. The analysis found that students with similar high school GPAs, but different Compass writing scores, performed nearly the same in College Composition, further demonstrating the utility of high school GPA for placing students in the English curriculum.

![Figure 2: College Composition Grade, by HS GPA and Compass Writing Score](image)

Conclusions and Policy Considerations

If colleges were confined to using a single indicator to place students in College Composition, high school GPA reasonably could serve as that indicator. High school GPA is the single best predictor of performance in College Composition, as well as the best predictor of strong success in College Composition, exceeding the reading and writing tests of Compass, the MME, the ACT. As colleges consider options for replacing the Compass placement test and adopt a new approach, we suggest that colleges consider taking the following immediate next steps.

- **Confirm results at your community college**
  Michigan community colleges use a variety of measures to assess and place students. Examine the best predictors of success in College Composition at your institution by examining your own administrative data. Leverage CEPI’s Student Pathways files for missing information about students’ MME, ACT, or high school GPA.

- **Collect high school grade point average on the student admissions application**
  Michigan community colleges historically have not collected high school GPA on the admissions application, although colleges increasingly are requesting this information from students. Consider requesting self-reported high school GPA, in addition to collecting GPA from submitted high school transcripts.

- **Use high school grade point average as a factor in placement**
  Since Compass is no longer a resource and as Michigan moves away from statewide administration of the ACT to the SAT, Michigan community colleges need better predictors for placement. The results of this study indicate that high school GPA is a powerful predictor of success in College Composition. Even if high school GPA is not the only factor used in assessment and placement, consider using it as the primary placement indicator, supplemented by other measures (ACT, MME, Accuplacer) for students “on the bubble” between developmental and college-level courses.
Further Research

This study suggests that, when compared to placement and standardized tests, high school GPA is as good or better at predicting performance and success in college-level English. However, this study did not examine how well high school GPA or any of the test scores (Compass, MME, ACT) predicts success in developmental English courses. Future research should seek to fill this gap in our knowledge. Furthermore, this study examined success among students who enrolled in college within a few years after high school. Future research should explore how well high school GPA predicts success for students who delay college for longer periods of time. Finally, further research should investigate the reasons why high school GPA is a strong predictor of success.

Recommended Citation


Acknowledgements

The complete report (Bahr, 2016) on which this brief is based contains additional details of this study and examined assessment and placement for Intermediate Algebra and College Algebra as well. The report was authored by Peter Riley Bahr, Associate Professor in the Center for the Study of Higher and Postsecondary Education at the University of Michigan. Questions may be directed to Erica Lee Orians, Executive Director, Michigan Center for Student Success. The MCSS is generously funded by a grant from The Kresge Foundation. Data for this study were collected with support from Grant R305C110011 from the Institute of Education Sciences. The opinions expressed are those of the authors and do not represent the views of the Kresge Foundation, the Institute of Education Sciences, or the U.S. Department of Education.

References


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