How Ready are Iowa Students?

Preparing students to be college or career-ready is critically important in a highly competitive global economy. *One Unshakable Vision* (2011) identifies a need for such information for all students.

Recent research has focused on the readiness of students who are college bound. This report focuses on all students in the Iowa Class of 2012. Iowa Testing Programs provides this information to raise awareness of the importance of monitoring progress towards readiness of all students for post-secondary opportunities.

This report traces progress of the graduating class of 2012 from 6th grade through 11th grade. It answers the following important questions:

- In the Iowa class of 2012, what percent of students are ready for college when they graduate?
- In the class of 2012, what percent of students were on track for readiness as younger students (for example, as 6th graders, 7th graders or 8th graders)?
- In the class of 2012, what percent of Iowa students are proficient? Why is there a difference between proficiency and readiness?
- How can information about post-secondary readiness be used?
For all Iowa students graduating in the spring of 2012, Iowa Assessment data suggest that 34% are ready for college coursework in reading, 38% in mathematics and 32% in science. Contrast this with similar percentages for college-bound students where 62% are ready in reading, 52% in mathematics and 40% in science (ACT, 2010).

Some student groups within Iowa are more prepared than others. The table below provides the percent of Iowa students from the class of 2012 prepared for college-level courses.

<table>
<thead>
<tr>
<th></th>
<th>Reading</th>
<th>Math</th>
<th>Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>All students</td>
<td>34</td>
<td>38</td>
<td>32</td>
</tr>
<tr>
<td>African American</td>
<td>12</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>American Indian</td>
<td>12</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td>Asian</td>
<td>36</td>
<td>46</td>
<td>37</td>
</tr>
<tr>
<td>Hawaiian/Pacific Islander</td>
<td>23</td>
<td>37</td>
<td>20</td>
</tr>
<tr>
<td>Hispanic</td>
<td>18</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>White</td>
<td>38</td>
<td>41</td>
<td>35</td>
</tr>
<tr>
<td>Two or more races</td>
<td>34</td>
<td>29</td>
<td>26</td>
</tr>
<tr>
<td>Male</td>
<td>32</td>
<td>44</td>
<td>33</td>
</tr>
<tr>
<td>Female</td>
<td>39</td>
<td>33</td>
<td>31</td>
</tr>
<tr>
<td>English Language Learners</td>
<td>2</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Students eligible for free or reduced-priced lunches</td>
<td>19</td>
<td>20</td>
<td>15</td>
</tr>
</tbody>
</table>

References
ACT. (2011). The condition of college and career readiness Class of 2011 Iowa.


In the class of 2012, what percent of students were on track for readiness as 6th graders, 7th graders or 8th graders?

Research would suggest that waiting for high school is too late to learn whether students are on track for college or a career. ACT researchers found that the “level of academic achievement that students attain by 8th grade has a larger impact on their college and career readiness by the time they graduate from high school than anything that happens academically in high school” (ACT, 2008).

Longitudinal data available on the Iowa Assessments™ allow the monitoring of the performance of this class between 6th grade and 12th grade. Figures 2, 3 and 4 capture the readiness of the class as 11th graders (as previously indicated in Figure 1), but also provide the percent of those students that were on track for readiness in earlier grades in reading, mathematics, and science. For example, Figure 2 indicates that 33% of the Class of 2012 were on track to being college ready in mathematics as early as 6th grade (G6). The other figures suggest that 35% of the Class of 2012 were on track in reading in 6th grade while only 26% of the students were on track in science.

References
Why do proficiency and readiness indicators disagree?

In the class of 2012, what percent of Iowa students are proficient? Figures 2, 3 and 4 answer this question. Why is there a difference between proficiency and readiness? A critical element of The No Child Left Behind Act (2000) has been the annual identification of students who are proficient and those who are not proficient.

Students who are proficient have demonstrated an overall competence in fundamental knowledge and skills appropriate for their grade level as defined by the state’s proficiency level descriptors (http://educateiowa.gov).

Figures 2, 3 and 4 also provide information about the percent of students from the class of 2012 who were defined as proficient and not proficient from 6th grade to 11th grade in reading, mathematics and science. For example, Figure 2 illustrates that 25% of students were not proficient in mathematics in grade 6 and 21% remained not proficient by grade 11. Similar trends are found in reading and science.

These figures provide information to illustrate the contrast between the definitions of not proficient, proficient and college-ready. Proficient and college-ready standards introduce two different levels of preparation that are best illustrated by their definitions.

### Definitions of Preparation for 6th Grade Students in Mathematics

<table>
<thead>
<tr>
<th>College-ready and proficient</th>
<th>Students are on track in their level of preparation to be successful in entry-level, credit-bearing courses in mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proficient, but not yet college-ready</td>
<td>Students can understand math concepts, solve word problems, and interpret data from graphs and tables. Students are sometimes able to use estimation methods.</td>
</tr>
<tr>
<td>Not proficient</td>
<td>Students can seldom understand math concepts, solve word problems, use estimation methods, or interpret data from graphs and tables.</td>
</tr>
</tbody>
</table>

References

ACT. (2011). *The condition of college and career readiness Class of 2011 Iowa.*


How can this information be useful for future graduating classes?

Trends within the state for the past ten years suggest consistent results across graduating classes with respect to college readiness and proficiency. The results of this research suggest that future classes can use information from the Iowa Assessments™ to track growth towards readiness and predict performance on college entrance exams.

- **Policymakers** can use this information to compare Iowa performance to that of other states that test all students with the ACT
- **Policymakers** can use this information to gauge the readiness of future classes of students
- **Schools** can use this information to identify the appropriate places for interventions and change
- **Schools** can use this information to assess needs for coursework offerings
- **Schools** can use this information to evaluate effectiveness of programs and effects of program changes
- **Students, teachers, and parents** can use this information to set goals and monitor progress
- **Students, teachers, and parents** can use this information as they plan high school coursework
- **Students and teachers** can use this information to predict admissions decisions based, for example, on the Iowa Regents Admission Index
- **Researchers at Iowa Testing Programs** can expand this work to include a variety of programs at two- and four-year institutions.

**References**

ACT. (2011). *The condition of college and career readiness Class of 2011 Iowa.*
