Building the Longitudinal Cohort Used for Calculating Completion Rates

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Division of Accountability Research
Texas Education Agency
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Longitudinal rate description

A completion rate is the percentage of students from a class of beginning (not repeating) ninth graders who complete their high school education by their anticipated graduation date. The cohort includes students who transfer in during the second, third, or fourth years. Depending on the accountability system used, a completer may be defined as a student who graduates, continues high school in the fall after expected graduation, or receives a GED.

A longitudinal dropout rate is the percentage of students from the same class who drop out before completing their high school education.
Components of the completion rate

- **Graduates** – a student who graduates early or on time
- **Continuers** – a student who is still in high school after the expected graduation date
- **GED recipients** – a student who earns a GED by the expected graduation date
- **Dropouts** – a student who drops out and does not graduate, return to school, or earn a GED by the expected graduation date
A dropout is a student who attends Grade 7-12 in a public school in a particular school year, does not return the following fall, is not expelled, and does not:

- graduate,
- receive a General Educational Development certificate (GED),
- continue school outside the public school system,
- begin college, or
- die.

*Note.* SB186, 78th Legislature, directed districts to collect data consistent with the National Center for Education Statistics (NCES) dropout definition beginning in 2005-06. The 2007-08 school year is the third year the definition is in effect.
Dropout definition (continued)

Dropouts are counted according to the definition in place the year the student left school. The definition changed in 2005-06. Thus, students in the class of 2008 who left in 2005-06, 2006-07, or 2007-08 were subject to a different definition than that which applied to students from the same class who left in 2004-05.

<table>
<thead>
<tr>
<th>Year</th>
<th>Dropout definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>Previous state accountability</td>
</tr>
<tr>
<td>2005-06</td>
<td>NCES</td>
</tr>
<tr>
<td>2006-07</td>
<td>NCES</td>
</tr>
<tr>
<td>2007-08</td>
<td>NCES</td>
</tr>
</tbody>
</table>
Cohort vs. class

What is a cohort?
All students tracked from the beginning year through the fall after the expected graduation, regardless of final status.

What is a class?
The students from a cohort with a final status of graduate, continuer, GED recipient, or dropout. Completion rates are based solely on students with one of these final statuses.
Cohort membership

• A student belongs to one and only one cohort.
• This means that a student who is retained in grade or graduates early is not moved to another cohort.
Calculations
Calculateds

Completion I rate
Use in state accountability: Campuses rated under standard accountability procedures are evaluated on the completion I rate

\[
\frac{\text{graduates} + \text{continuers}}{\text{graduates} + \text{continuers} + \text{GED recipients} + \text{dropouts}}
\]
Completion II rate

Use in state accountability: Campuses rated under alternative education accountability procedures are evaluated on the completion II rate

\[
\frac{\text{graduates} + \text{continuers} + \text{GED recipients}}{\text{graduates} + \text{continuers} + \text{GED recipients} + \text{dropouts}}
\]
Calculations (continued):

Graduation rate

Use in federal accountability: Campuses are evaluated on the graduation rate for adequate yearly progress (AYP)

Use in PBMAS: The graduation rate is reported for districts in the Performance-Based Monitoring Analysis System

\[
\text{graduates} = \frac{\text{graduates} + \text{continuers} + \text{GED recipients} + \text{dropouts}}{} \]
How to build a longitudinal cohort
How is the longitudinal cohort built?

- Determine which students are in the cohort (beginning ninth graders + transfers in).\(^a\)
- Track students for 5 years.
- Determine leaver status (if any) for each year.
- Determine final status.

\(^a\)A student belongs to one, and only one, cohort. This means that a student who graduates early or repeats a grade is not moved to another cohort.
## Class of 2008: Summary of cohort build

<table>
<thead>
<tr>
<th>Attendance records, Grades 9-12</th>
<th>Graduate, other leaver, GED, and dropout databases</th>
<th>Fall enrollment records</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05&lt;sup&gt;a&lt;/sup&gt;</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2005-06&lt;sup&gt;b&lt;/sup&gt;</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2006-07&lt;sup&gt;b&lt;/sup&gt;</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2007-08&lt;sup&gt;b&lt;/sup&gt;</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2008-09&lt;sup&gt;c&lt;/sup&gt;</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Grade 9 students, with Grade 9 students from previous 5 years (repeaters) excluded.  
<sup>b</sup>Students who match, regardless of grade, + students who join on grade level.  
<sup>c</sup>Students who match, regardless of grade.
Class of 2008: Establish the cohort
Year 1 – 2004-05

The class of 2008 cohort is built from 2004-05 first-time ninth graders.

PEIMS submission 3 attendance data are used to determine the first time a student is in grade 9 across the state.

Add program participation and leaver information.
Track cohort over next 4 years

- Year 2 – 2005-06
- Cohort is in the second year of high school. Although cohort students can be in any grade, if on grade level, students are in grade 10.
- PEIMS submission 3 is primary data source.
- Program participation and leaver data are added.
Track cohort over next 4 years (continued)

- Year 3 – 2006-07 and Year 4 – 2007-08
- PEIMS submission 3 is primary data source.
- Program participation and leaver data are added.
Track cohort over next 4 years (continued)

- Year 5 – 2008-09
- PEIMS submission 1 is primary data source.
- Enrollment in school-start window is used to determine if students are continuing in high school.
- Program participation data are added.
Transfers In

Students can be added to a district’s cohort in one of two ways:

1. **District-to-district movers.** A student can begin grade 9 in one district and move into and enroll in another district. The student is still in the class of 2008 cohort. The student leaves the sending district’s cohort and enters the receiving district’s cohort.

2. **Students new to the Texas public school system.** A student who enrolls “on-grade” with the expected grade of the cohort is added to the district’s cohort. For example, a student who enrolls in grade 10 2005-06 when the on-grade members of the cohort are in grade 10 is added to the district’s cohort.
Determine statuses for the class of 2008: Every student will have one of the statuses below

<table>
<thead>
<tr>
<th>Status</th>
<th>Definition</th>
<th>Included in final completion calculation?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate</td>
<td>Graduated by August 31, 2008</td>
<td>Yes</td>
</tr>
<tr>
<td>Continuer</td>
<td>Enrolled by October 24, 2008&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Yes</td>
</tr>
<tr>
<td>GED recipient</td>
<td>Received GED by August 31, 2008</td>
<td>Yes</td>
</tr>
<tr>
<td>Dropout</td>
<td>Dropped out</td>
<td>Yes</td>
</tr>
<tr>
<td>Other leaver</td>
<td>Left for reasons other than graduating or dropping out</td>
<td>No</td>
</tr>
<tr>
<td>Underreported</td>
<td>No record received</td>
<td>No</td>
</tr>
<tr>
<td>Student ID error</td>
<td>Cannot track student from year to year because of errors in identification information&lt;sup&gt;b&lt;/sup&gt;</td>
<td>No</td>
</tr>
</tbody>
</table>

<sup>a</sup>The school-start window was extended in 2008-09 because of Hurricane Ike. <sup>b</sup>Error might have been made by either sending or receiving district.
# Leaver codes for the class of 2008

<table>
<thead>
<tr>
<th>Students who left in 2004-05:</th>
<th>Students who left in 2005-06, 2006-07, or 2007-08&lt;sup&gt;a&lt;/sup&gt;:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate: 01</td>
<td>Graduate: 01</td>
</tr>
<tr>
<td>Other leaver: 03, 16, 19, 21, 22, 24, 30, 31, 60, 61, 63, 64, 66, 72, 78, 80, 81, 82, 83</td>
<td>Other leaver: 03, 16, 24, 60, 66, 78, 81, 82, 83, 85, 86, 87&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Dropout: 02, 04, 08, 09, 10, 14, 15, 79, 84, 99</td>
<td>Dropout: 98</td>
</tr>
</tbody>
</table>

<sup>a</sup>Codes reflect NCES dropout definition.  <sup>b</sup>Added in 2006-07.
When a student has multiple statuses, then the status in the last year the student attended Texas public school becomes the final status, except:

<table>
<thead>
<tr>
<th>If leaver status is:</th>
<th>Then final status is:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate in any year</td>
<td>Graduate</td>
</tr>
<tr>
<td>Dropout but student received GED by 8/31/08</td>
<td>GED recipient</td>
</tr>
</tbody>
</table>
Examples of final status determination: Student A

<table>
<thead>
<tr>
<th>School year</th>
<th>Yearly status</th>
<th>Final status</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>in school</td>
<td>Dropout</td>
<td>Student’s last status was dropout, and student did not earn a GED</td>
</tr>
<tr>
<td>2005-06</td>
<td>in school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006-07</td>
<td>other leaver</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007-08</td>
<td>dropout</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008-09</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earned GED?</td>
<td>No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Examples of final status determination: Student B

<table>
<thead>
<tr>
<th>School year</th>
<th>Yearly status</th>
<th>Final status</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>in school</td>
<td>Continuer</td>
<td>Student failed TAKS, returned in fall after expected graduation, then dropped out</td>
</tr>
<tr>
<td>2005-06</td>
<td>in school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006-07</td>
<td>in school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007-08</td>
<td>in school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008-09</td>
<td>in school</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Earned GED?**

No
Completion results, class of 2007

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Rate&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduates</td>
<td>226,712</td>
<td>78.0%</td>
</tr>
<tr>
<td>Continuers</td>
<td>25,257</td>
<td>8.7%</td>
</tr>
<tr>
<td>GED recipients</td>
<td>5,688</td>
<td>2.0%</td>
</tr>
<tr>
<td>Dropouts</td>
<td>33,005</td>
<td>11.4%</td>
</tr>
<tr>
<td>Completion I</td>
<td>251,969</td>
<td>86.7%</td>
</tr>
<tr>
<td>Completion II</td>
<td>257,657</td>
<td>88.6%</td>
</tr>
</tbody>
</table>

<sup>a</sup>Parts may not add to 100 percent because of rounding.
Helpful documents
Resources

- Student-level listings on TEASE, Accountability link, RES tab
  - Preliminary cohorts
  - Final completion rate lists
  - Annual dropout lists
- Technical document on how to build a completion rate
  - www.tea.state.tx.us/perfreport/resources/20080814a.pdf
Preliminary cohort lists on TEASE

- Provided so that districts know when students are expected to graduate for accountability purposes.
- The student-level listings provide cohort membership information for the four cohorts going through high school at any one time.
- For example, in 2007-08:
  - Class of 2008 was in grade 12 (year 4)
  - Class of 2009 was in grade 11 (year 3)
  - Class of 2010 was in grade 10 (year 2)
  - Class of 2011 was in grade 9 (year 1)
Preliminary cohort lists on TEASE (continued)

- Show student information (name, date of birth, ethnicity, etc.) and last year attended Texas public schools.
- Complete cohort is shown on list.
- A student is shown on the district of last attendance.
- Leaver status is not reflected on the lists.
- Cannot be corrected.
- Updated each October with the most recent PEIMS attendance data.
Final completion lists

- The student-level listings provide final completion status for every student in a district’s cohort.
- Available in June.
- Used for accountability ratings in August.
Annual dropout lists

- The student-level listings provide the names of students who dropped out of grades 7-12 in the previous school year.
- Available in June.
- Used for accountability ratings in August.
- Can be combined with preliminary cohort information to encourage students to return to school.
Contacts

- Division of Accountability Research: (512) 475-3523
- Printed reports: [http://www.tea.state.tx.us/research/reports.html](http://www.tea.state.tx.us/research/reports.html)
- Data searches: [http://www.tea.state.tx.us/acctres/entry.html](http://www.tea.state.tx.us/acctres/entry.html)
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