

Remediation Rate and Grade Inflation Rate
Methodology

Data were provided from two sources:

- Arkansas Department of Education – High school grades and demographic information
- ACT, Inc. – College entrance exam scores

The following steps were followed in determining grade inflation and remediation rates.

Step 1:

The best ACT score for the English and math sections of the ACT exam were identified for each student.

Step 2:

ACT data from Step 1 were merged with high school grade point average (GPA) information provided by the Arkansas Department of Education. The ADE provided the high school composite GPA for all students grades 8 - 12 in 2007.

Step 3:

Students identified as in Grade 12 were retained in the data, and the remaining students were set aside.

Step 4:

Two measures of grade inflation were calculated. The two indices are the Remediation Index or Remediation Rate (RI) and Grade Inflation Index or Grade Inflation Rate (GII).

1. The RI provides a measure of the percentage of college bound students who will be required to complete remedial courses at postsecondary institutions.
2. The GII examines only those students with reported GPAs of 3.0 or higher.

The calculations are detailed in Table 1 and the three steps outlined below.

Table 1. Calculations for RI and GII

	HSGPA < 3.0	HSGPA >= 3.00	Totals
ACT English or Math Score < 19	A = 20	B = 30	A + B = E or 50
ACT English and Math Scores > 19	C = 30	D = 20	C + D = F or 50
Column Totals	A + C = G or 50	B + D = H or 50	A + B + C + D = I or 100

Calculating the Remediation Index

The calculations for the RI are very straightforward and requires only three steps:

1. Determine the number of students who completed the ACT exam who have an ACT English or ACT Math score that is less than 19. Suppose for School S this number 50 and we call this value “E.”
2. Determine the number of students who completed the ACT exam. For example, suppose School S had 100 students complete the ACT exam and we call this value “I.”
3. Determine the Remediation Index dividing “E” by “I”.

$$RI = E/I = 50/100 = 0.50 * 100 = 50\%$$

The Remediation Index (RI) of .5 indicates 50 percent of students who completed the ACT exam have been identified as needing to complete a remedial course in English, math, or both, due to ACT scores of less than 19 on either the ACT English or ACT math sections. These proportions are converted to percentages for the report card.

Calculating the GII

The calculations for the GII are also very straightforward and requires only three steps.

1. Determine the number of students who completed the ACT exam who have an ACT English or ACT Math score that is less than 19; and had a reported High School Grade Point Average (HSGPA) of 3.0 or higher. Suppose for School S this number is 30 and we call this value “B”.
2. Determine the number of students who completed the ACT exam and had HSGPAs of 3.0 or higher. For example, suppose School A had 50 students completed the ACT exam with HGSPAs ≥ 3.0 , we will call this value “H.”
3. Determine the Grade Inflation Index by dividing “B” by “H”.

$$GII = B/H = 30/50 = 0.60 * 100 = 60\%$$

The Grade Inflation Index (GII) .6 indicates 60 percent of students with GPAs of 3.0 or higher were identified as potentially have “inflated” grade point averages, due to their status of needing to complete a remedial course in college. The GII index is a much more accurate indicator of grade inflation due to the focus on only those students with HSGPAs that exceed 3.0. The RI is designed to get an index of “all” students identified as college bound seniors and the percentage who are remedial.