

Upward Bound and Upward Bound Math-Science Grantee-Level Performance Results: 2013–14

Introduction

The U.S. Department of Education (Department) is committed to ongoing improvement in managing its programs in order to improve the educational outcomes of students. In its efforts to strengthen the work of its programs, the Department provides grantees, key stakeholders, and the public with data on the programs' performance and with contextual information to encourage reflection, action, and collaboration. The Department uses postsecondary enrollment rates, discussed in detail below, as its measure of the Upward Bound (UB) and Upward Bound Math-Science (UBMS) programs' performance.

Performance Measure for UB and UBMS Projects

The performance measure for UB and UBMS projects is:

Postsecondary enrollment rate: the percentage of participants who graduated high school in 2012–13 with a regular diploma for whom there is evidence of enrollment in a postsecondary educational institution by the fall term immediately following high school graduation.

New Calculation Rules for the Performance Measure

Calculation rules for postsecondary enrollment for the current grant cycle (2012–13 through 2016–17) differ from those of the previous cycle in three ways.

- The denominator of the postsecondary enrollment measure has changed from program participants who were *expected to graduate* high school in a particular reporting period to participants who *actually graduated* from high school with a regular diploma during that period. This change is consistent with the postsecondary enrollment objective used in the 2012–17 cycle.
- Postsecondary enrollment rates are now based on one year of APR data rather than two, since the Department has determined that accuracy can be maintained using just one year of data. This change will allow us in the future to report postsecondary enrollment in a more timely way.
- Data to complement the APRs is now drawn from the National Student Loan Data System (NSLDS), rather than from federal financial aid files.

Selected Findings

Table 1 displays the number and percentage of program participants who graduated high school with a regular diploma in 2012–13 for whom there is evidence of enrollment in a postsecondary educational institution by the fall semester immediately following the year of high school graduation. The data is presented at the program level and at the individual project level as well as aggregated by program type (UB or UBMS) and sector of grantee. The calculation methodology for Table 1 can be found in Appendix A.

The Upward Bound program-level postsecondary enrollment rate was 85.3 percent of all 2012–13 high school graduates, which exceeds the Department’s program-level goal of 80.5 percent. To make possible a valid comparison between the 2012–13 rates and those of the previous year (2011–12), we applied the new rules (described above) to the 2011–12 data, resulting in a rate for that year of 83.5 percent—1.8 percentage points lower than the 2012–13 rate.

Moving to individual program rates for 2012–13, the postsecondary enrollment rate for regular UB projects was 85.0 percent, while the postsecondary enrollment rate for UBMS projects was 87.4 percent. Regarding sectors of funded institutions, projects associated with four-year institutions had lower postsecondary enrollment rates (85.0 percent overall, 84.5 percent for UB projects, and 87.7 percent for UBMS projects) compared to those at two-year institutions (85.6 percent overall, 85.4 percent for UB, and 87.7 percent for UBMS projects) and projects associated with secondary schools, non-profit organizations, or other institutions (87.0 percent overall, 87.6 percent for UB, and 79.0 percent for UBMS projects).

Not surprisingly in the first year of a new grant cycle, 69 of the 120 projects that were newly funded 2012–13 did not serve any participants who graduated in 2012–13. Additionally, five projects that were funded in the previous grant cycle did not report any participants who graduated in 2012–13.

Limitations of Data and Findings

While the enrollment rate is an outcome measure of project performance, the limitations of the dataset used for this analysis (the APRs) do not permit us to determine project impacts, such as the extent to which the postsecondary enrollment rate is a direct result of participation in UB or UBMS and not influenced by other factors.

In addition, keep in mind that the performance measure refers exclusively to outcomes of 2012–13 high school graduates who received a regular high school diploma, not all program participants. Participants in future high school graduation cohorts will be included in this measure in upcoming years.

Because the dataset does not permit analysis of all factors that may affect postsecondary enrollment rates in individual projects, **the data should be interpreted with caution; comparing rates between projects could lead to unwarranted conclusions.** For example, a project may have a lower than average postsecondary enrollment rate because the project may be serving more students with a high risk of academic failure, who have low educational aspirations, and/or who have low levels of readiness for enrollment in postsecondary education.

For some projects, only a small number of students graduated in 2012–13. Where only a small number of graduates exist, small changes in numbers can cause substantial changes in percentages. For example, a grantee that served six students who graduated in 2012–13 will have an enrollment rate of 100 percent if all enroll in postsecondary education, but a rate of only 83.3 percent if just one student does not matriculate.

When possible, data from the NSLDS was used to augment APR data on enrollment status. Any program participant who had evidence of postsecondary enrollment in the NSLDS data was considered to have enrolled in postsecondary education. Evidence of enrollment from NSLDS data can be used to compensate for missing APR data as well as to confirm APR-based evidence of enrollment. Out of the 17,953 participants included in the enrollment rate calculation, 2.8 percent had evidence of enrollment from NSLDS data but not from APR data, 13.3 percent had evidence of enrollment from APR data but not from NSLDS data, and 69.3 percent had evidence from both sources.

There are many reasons why a participant may have evidence from one source but not another. Projects may not have been aware of the postsecondary enrollment of participants who had enrollment evidence in NSLDS data. Participants with evidence of enrollment from APR data but not NSLDS data may not have applied for financial aid, or may not have matched properly to the NSLDS database.

Finally, because of the changes in calculation rules for the 2012–13 postsecondary enrollment measure, we recommend that the results produced using the new method not be compared directly to results from prior years using the old method.

Efficiency Measure for UB and UBMS Projects

For UB and UBMS, the efficiency measure is the difference between the annual cost per participant and the annual cost per participant who had a “successful outcome,” also referred to as having persisted. The efficiency measure was revised in 2012–13 to consider grade promotion and to use only a single year of APR data. This year’s calculation includes participants who were served in 2013–14. These participants are considered to have persisted if they met one of the following criteria:

- They were promoted a grade level in high school between 2013–14 and 2014–15
- They were no longer in high school at the beginning of the 2014–15 academic year and had enrolled in postsecondary education.

A smaller gap between the cost per participant and the cost per persister generally represents a larger proportion of successful participants; if all participants were successful, the efficiency measure would be \$0.

Selected Findings

Table 2 shows the efficiency measure calculations at the individual project level and the program level, as well as aggregated by program type (UB or UBMS) and sector of grantee. The 815 UB

projects and 162 UBMS projects included in Table 2 reported 72,814 participants who were served in 2013–14, of whom 70,224 (96.4 percent) persisted into 2014–15.

The 2013–14 program-level efficiency gap was \$147, with a larger gap for UB projects (\$155) than for UBMS projects (\$105). As seen in Table 2, smaller efficiency gaps are generally associated with higher proportions of persisting participants. For comparison, we calculated the efficiency measure for participants served in 2012–13 using the same calculation that was used this year; the resulting program-level efficiency gap for all projects was \$163 (\$173 for UB projects and \$104 for UBMS projects). Further, of the 73,660 participants who were served in 2012–13, 70,933 (96.3 percent) persisted in 2013–14.

This year's efficiency measure calculation uses different APR fields to determine whether participants were promoted a grade level in high school; therefore, the results produced this year are not directly comparable to those produced last year. Additionally, because the results produced this year and in 2012–13 included a different cohort of participants in the calculation and a different definition of persisting, we recommend that the efficiency results produced using this new method not be compared to results from prior years using the old method.

Table 3 shows the one UB project that was excluded from Table 2 due to significant omissions in fields critical to calculating persistence. The reported efficiency measure calculations include participants and funding from non-excluded projects only; the excluded project accounted for \$357,175 in program funding. The exclusion methodology is further explained in Appendix C.

Limitations of Data and Findings

These figures should be viewed cautiously, because in some cases they may be misleading. For example, projects serving a high percentage of students at high risk for academic failure might have lower percentages of successful participants. Given the possibility of such misinterpretation, it is important to consider the efficiency measure in the context of the other data in the table, particularly the percentage of successful participants. In sum, comparing rates among projects in Table 2 could lead to flawed conclusions.

Appendix A. Calculation Methodology for Postsecondary Enrollment Rate (Table 1)

High School Graduation Year Cohort

Participants in UB and UBMS programs who graduated with a regular high school diploma were assigned to a high school graduation cohort year based on the information reported in the APR fields for high school graduation status and the actual date of high school graduation. The Upward Bound longitudinal file (which contains data from 2000–01 through the most recent APR) maintains a single value for each participant’s actual high school graduation cohort year. (Note: This high school graduation cohort year is not a field in the APR, but is derived from APR data.)

Evidence of Postsecondary Enrollment

The methods and fields used to calculate postsecondary enrollment changed for reporting year 2012–13; additional changes were made in 2013–14.

For 2013–14, evidence of postsecondary enrollment is calculated from two APR fields for *actual* high school graduation cohort year 2012–13:

- Source of Postsecondary Education Information (APR Field #52, *SelfTranCD*): response options 1, 2, 3, or 4
- Date of First Postsecondary School Enrollment (APR Field #53, *FirstEnrollDT*): any date between September 2012 and November 2013, or a response of 66/66/6666 that indicates that the participant had received notification by the fall term from an institution of higher education of acceptance for deferred enrollment in the next academic term

For 2012–13, evidence of postsecondary enrollment was calculated from two APR fields for *expected* high school graduation cohort year 2011–12:

- Source of Postsecondary Education Information (APR Field #52, *SelfTranCD*): response options 1, 2, 3, or 4
- Date of First Postsecondary School Enrollment (APR Field #53, *FirstEnrollDT*): any valid entry that contains a year between 2010 and 2013, or a response of 66/66/6666 that indicates that the participant had received notification by the fall term from an institution of higher education of acceptance for deferred in enrollment in the next academic term

For 2007–08 through 2011–12, evidence of postsecondary enrollment was calculated from six APR fields:

- Reporting of Postsecondary Education Information (APR Field #44, *SelfTranCD*): response options 1, 2, 3, or 4

- First Postsecondary Enrollment Date (APR Field #45, *FirstEnrollDT*): any valid entry that contains a year between
 - 2008 and 2012, for 2011–12 calculation
 - 2007 and 2012, for 2010–11 calculation
 - 2006 and 2010, for 2009–10 calculation
 - 2005 and 2009, for 2008–09 calculation
 - 2005 and 2008, for 2007–08 calculation
- School Code for Postsecondary Institutions at First Enrollment (APR Field #46, *PSECDFE*): any valid institution code (6 digits, or E + 5 digits, except for reserve codes 000000, 888888, and 999999)
- College Status at beginning of academic year being reported, (APR Field #47, *PSEGradeLV*): response options 1–5 or 7
- Degree/Certificate Completed (APR Field #48, *DegreeCD*): response options 1–7 or 77
- Date of Undergraduate Degree (APR Field #49, *DegreeDT*): any valid entry that contains a year between
 - 2008 and 2012, for 2011–12 calculation
 - 2007 and 2012, for 2010–11 calculation
 - 2006 and 2010, for 2009–10 calculation
 - 2005 and 2009, for 2008–09 calculation
 - 2005 and 2008, for 2007–08 calculation

For this year’s calculation, 2012–13 APR data and fall 2012 through fall 2013 National Student Loan Data System (NSLDS) data were examined for evidence of postsecondary enrollment. In the past, multiple years of APR and Federal financial aid data were examined for evidence of postsecondary enrollment. For the 2012–13 calculation for expected high school graduation cohort year 2011–12, 2010–11 through 2012–13 APR and Federal financial aid data were checked to determine whether the participant enrolled in postsecondary education. Prior to 2012–13, all available years of APR data and Federal financial aid data were examined for evidence of postsecondary enrollment.

Enrollment Rate Calculation

Each project’s postsecondary enrollment rate (Table 1) was calculated by dividing the number of participants who graduated from high school in 2012–13 and had evidence of postsecondary enrollment between September 2012 and November 2013 by the number of participants in that high school graduation cohort, and multiplying by 100.

Appendix B. Calculation Methodology for Efficiency Measure (Table 2)

The efficiency measure (Table 2) was revised in 2012–13 to consider grade promotion and to be calculated from a single year of data. Between the 2012–13 and 2013–14 reporting years, an additional change occurred in the fields used to determine whether participants were promoted a grade level.

Total Participants

The cohort of program participants was the number of new, continuing, reentry, and transfer participants served in 2013–14 (APR field #27, *PartCD* = 1, 2, 3, or 6).

Persisting Participants

For the 2013–14 calculation, participants in the cohort were considered to be persisting if they met one of the following criteria:

- Promoted a grade level between 2013–14 and 2014–15: had information reported in the Grade Level at the Beginning of the Academic Year in Current Reporting Year (APR field #30, *StartGradeLV*) and in the Grade Level or Postsecondary Status at the Beginning of the Following Reporting Year (APR field #31; *EndGradeLV*) that indicated that participant had advanced one or two grade levels, or
- No longer in high school at the beginning of the 2014–15 academic year and had enrolled in postsecondary education: Source of Postsecondary Education Information (APR Field #52, *SelfTranCD*) had a response of 1, 2, 3, or 4; or Date of First Postsecondary School Enrollment (APR Field #53, *FirstEnrollDT*) had a date between June 2013 and November 2014, or a response of 66/66/6666 that indicates that the participant had received notification by the fall term from an institution of higher education of acceptance for deferred in enrollment in the next academic term; or NSLDS data indicated enrollment in any term between summer 2013 and fall 2014

For the 2012–13 calculation, participants in the cohort (participants who were served 2012–13) were considered to be persisting if they met one of the following criteria:

- Still in high school at the beginning of the 2013–14 academic year (APR field #34, *HsGRAD* = 1) and promoted a grade level between 2012–13 and 2013–14 (APR field #34, *SchoolPersistNum* = 1), or
- No longer in high school at the beginning of the 2013–14 academic year and had enrolled in postsecondary education: Source of Postsecondary Education Information (APR Field #52, *SelfTranCD*) had a response of 1, 2, 3, or 4; or Date of First Postsecondary School Enrollment (APR Field #53, *FirstEnrollDT*) had any date between 2012 and 2013; or had a disbursement amount in the 2012–13 federal financial aid data.

Annual Cost per Participant

Each project's annual cost per participant was calculated by dividing the project's 2013–14 funding by the total number of participants included in Table 2, as calculated above.

Annual Cost per Successful Participant

Each project's annual cost per participant was calculated by dividing the project's 2013–14 funding by the total number of persisting participants, as calculated above.

Efficiency Measure Calculation

Each project's efficiency measure was calculated by subtracting the project's annual cost per participant from the project's annual cost per successful participant.

Appendix C. Grantees Excluded from Table 2

Not all of the 2013–14 UB and UBMS grantees are included in Table 2. Of the 978 grantees funded for 2013–14, all were included in Table 1 while 977 were included in Table 2.

One UB grantee was excluded from Table 2 because 15 percent or more of the participants it served in 2013–14 had missing or invalid data in fields critical to calculating whether participants were promoted a grade level in high school or enrolled in postsecondary education at the beginning of the 2014–15 academic year. A participant record was determined to have “missing or invalid data” if it met one or more of the following criteria:

- Grade level at the beginning of 2013–14 was unknown ($StartGradeLV = 0$) and no evidence of postsecondary enrollment was provided,
- For participants who were in grade levels 8 through 12 at the beginning of 2013–14, grade level at the beginning of the 2014–15 was unknown ($EndGradeLV = 0$) and no evidence of postsecondary enrollment was provided, or
- For participants who were checked for evidence of postsecondary enrollment, both the source of postsecondary enrollment and the date of first postsecondary enrollment fields had an unknown response; also, evidence was provided neither for postsecondary enrollment in the NSLDS data nor for grade level promotion.

Le Moyne College, NY (P047A120997) was excluded from Table 2 due to significant omissions in fields critical to calculating whether participants were promoted a grade level or enrolled in postsecondary education.