

Upward Bound and Upward Bound Math-Science Grantee-Level Performance Results: 2007–08

Introduction

The U.S. Department of Education is committed to ongoing improvement in managing its programs so as 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 and Upward Bound Math-Science programs' performance.

Performance measure for Upward Bound (UB) and Upward Bound Math-Science (UBMS) projects

The performance measure for UB and UBMS projects is:

- Postsecondary enrollment rate: the percentage of participants expected to graduate high school in 2006–07 for whom there is evidence of enrollment in a postsecondary educational institution by the 2007–08 APR.

Participants in UB and UBMS programs are assigned to an expected high school graduation year cohort upon program enrollment, based on grade level at entry and the year of program entry. The UB longitudinal file (which contains data from 2000–01 through the most recent APR) maintains a single value for each participant's expected high school graduation date, divided into cohorts by year.

UB and UBMS projects do not necessarily become aware of prior participants' postsecondary enrollments until a year or more after the students' high school graduation; moreover, relevant postsecondary financial aid data are not available for analysis until at least one year after high school graduation. Postsecondary enrollment rates thus tend to increase over several years.

The specifics of each calculation can be found in the Appendix.

Selected Findings

Table 1 displays the number and percentage of program participants with an expected high school graduation date in 2006–07 for whom there is evidence of enrollment in a postsecondary educational institution by the 2007–08 APR, along with reported postsecondary status. The data are 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. Five grantees

were excluded from Table 1 because they did not submit a 2007–08 APR; details on these grantees can be found in Appendix C.

The UB program-level postsecondary enrollment rate was 77.9 percent of all 2006–07 expected high school graduates. This is lower than the enrollment rate of 79.0 percent for those expected to graduate high school in 2005–06, but still exceeds the Department’s program-level goal of 65 percent for those two years.

The postsecondary enrollment rate for regular UB projects was 77.0 percent, and the postsecondary enrollment rate for UBMS projects was 85.7 percent. On average, projects associated with four-year institutions had slightly higher postsecondary enrollment rates than those at two-year institutions (78.7 percent versus 76.6 percent). However, rates at four-year and two-year institutions differed considerably by project type. On average, UBMS projects at four-year institutions reported enrollment rates that were eight percentage points higher than those of regular UB projects at four-year institutions. UBMS projects at two-year institutions reported enrollment rates that averaged fourteen percentage points higher than those of regular UB projects at two-year institutions. Overall, projects that were not associated with postsecondary institutions reported lower enrollment rates than both two- and four-year institutions (75.8 percent), and the rates varied little by project type.

Of the 256 grantees that were first funded in the 2007–08 academic year, one (Hi-Tech Charities, MO; PR number P047A070825) served a single participant with an expected high school graduation in 2006–07, and the remaining 255 new grantees did not serve any participants expected to graduate from high school in 2006–07. The 256 new grantees are identified in the far right column of Table 1.

Table 3 lists the five 2007–08 UB and UBMS grantees that were excluded from Table 1 for failing to submit a 2007–08 APR. The exclusion methodology is fully explained in Appendix C.

Limitations of Data and Findings

First, it is important to note that 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 result of participation in UB or UBMS.

In addition, one should keep in mind that the performance measure refers exclusively to outcomes of 2006–07 expected high school graduates, not all program participants. Participants in other expected high school graduation cohorts are included in this measure in different years; each is assessed one year after expected high school graduation.

Because the dataset does not permit analysis of the roles 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 lower than average rates 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 were expected to graduate in 2006–07. Where only a small number of graduates exist, small changes in numbers can cause significant changes in percentages. For example, a grantee that expects six students to graduate in 2007 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.

Efficiency measure for Upward Bound (UB) and Upward Bound Math-Science (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. For the purposes of this measure, new, continuing, and reentry participants from 2006–07 are considered to have persisted if they met one of the following criteria:

- They were continuing or reentry participants in 2007–08
- They were prior-year participants in 2007–08 who were either:
 - Still enrolled in high school, or
 - Enrolled in postsecondary education

Persistence can be achieved either by persisting in the UB/UBMS program or by persisting in school, whether within high school or postsecondary education or progressing from high school to postsecondary education. Thus, participants who experienced successful outcomes in 2007–08 constituted a subset of all new, continuing, or reentry participants from 2006–07. Postsecondary enrollment was calculated as described above in the enrollment rate calculations.

A smaller gap between these two measures of annual cost 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 659 UB projects and 92 UBMS projects included in Table 2 reported 60,222 new, continuing, or reentry participants in 2006–07, of whom 57,261 (95.1 percent) persisted in 2007–08.

The 2007–08 program-level efficiency gap was \$220, which represents a 21 percent decrease from the 2006–07 efficiency gap of \$278. The 2007–08 efficiency measure was

larger for UB projects (\$228) and smaller for UBMS projects (\$148). As seen in Table 2, smaller efficiency gaps were generally associated with higher proportions of persisting participants.

Table 3 lists the 346 projects excluded from Table 2; 256 were excluded because they were first funded in 2007-08 (and therefore served no participants in 2006-07), 81 were excluded due to significant omissions in fields critical to calculating whether participants stayed in high school or enrolled in postsecondary education, three projects did not submit a 2006-07 APR, five projects did not submit a 2007-08 APR, and one project submitted a 2006-07 APR but reported serving no new, continuing, or reentry participants. The reported efficiency measure calculations include participants and funding from non-excluded projects only; excluded projects accounted for \$93,234,955 in program funding. The exclusion methodology is further explained in Appendix C.

Limitations of Data and Findings

The efficiency measure ranges from \$0 (for 118 projects with a 100 percent persistence rate) to \$2,787 (for a project with a 51.5 percent persistence rate) across individual projects. These figures should be viewed cautiously, because in some cases they may be misleading. A project might have a gap of \$0, which suggests that a project is working efficiently, but the project may have some significant problems. For example, the project might serve fewer students than it was funded to serve, resulting in an undesirably high cost per participant. But if all those participants persisted in secondary education or enrolled in postsecondary education, then all those participants would be successful, and the cost per successful participant would equal the cost per participant. As a result, the gap for that project would be \$0 even though it had failed to serve the number of students intended. In other cases, projects serving a high percentage of students at high risk for academic failure often 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 columns in the table, particularly the percentage of successful participants (which ranges from 51.5 percent to 100 percent). In sum, all the data in Table 2 should be interpreted with caution; comparing rates among projects could lead to flawed conclusions.

APPENDICES

Appendix A. Calculation methodology for postsecondary enrollment rate (Table 1)

Expected High School Graduation Year Cohort

Participants in UB and UBMS programs are assigned to an expected high school graduation year cohort upon program enrollment, based on grade level at entry and the year of program entry. The UB longitudinal file (which contains data from 2000–01 through the most recent APR) maintains a single value for each participant’s expected high school graduation date, divided into cohorts by year.

Evidence of Postsecondary Enrollment

Revisions in the APR between 2006–07 and 2007–08 resulted in a change in the fields used to calculate evidence of postsecondary enrollment. Because evidence of enrollment is assessed across both years of APR data, the calculations for evidence from each year are different.

Evidence of PSE in 2007-08 is calculated from six APR fields:

- APR Field #44, Reporting of Postsecondary Education Information (*SelfTranCD*): response options 1, 2, 3, or 4
- APR Field #45, First Postsecondary Enrollment Date (*FirstEnrollDT*): any valid entry that contains a year between 1994 and 2008
- APR Field #46, School Code for Postsecondary Institutions at First Enrollment (*PSECDFE*): any valid institution code (6 digits, or E + 5 digits, except for reserve codes 000000, 888888, and 999999)
- APR Field #47, College Status at beginning of academic year being reported, (*PSEGradeLV*): response options 1–5 or 7
- APR Field #48, Degree/Certificate Completed (*DegreeCD*): response options 1–7 or 77
- APR Field #49, Date of Undergraduate Degree (*DegreeDT*): any valid entry that contains a year between 1994 and 2008

For 2006-07, evidence of PSE is calculated from nine APR fields:

- APR Field #91, Reporting of Postsecondary Education Information (*SelfTranCD*): response options 1, 2, 3, or 4
- APR Field #92, First Postsecondary School Enrollment Date (*FirstEnrollDT*): any valid entry that contains a year between 1994 and 2006
- APR Fields #93 and #94: School Code for Postsecondary Institutions; first enrollment (*PSECDFE*) and enrollment at end of reporting period (*PSECDEnd*): any valid institution code (6 digits, or E + 5 digits, except for reserve codes 000000, 888888, and 999999)
- APR Field #95: Student Financial Aid Awarded for Postsecondary Attendance (*FinAidRecd*): response options 1-11

- APR Field #96: Postsecondary Enrollment Status (*PSETime*): response options 1, 2, 3, or 7
- APR Field #97: College Grade Level (*PSEGradeLV*): response options 1-11 or 77
- APR Field #98: Postsecondary Academic Standing (*PSEStand*): response options 1, 2, or 7
- APR Field #99: Degree/Certificate Completed (*DegreeCD*): response options 1-10 or 77

Evidence of postsecondary enrollment from the 2000–01 through 2005–06 APRs and Federal financial aid files is represented in the UB longitudinal file by a single variable, *enrolled*, with two values: 1 (evidence of postsecondary enrollment) or 0 (no evidence of postsecondary enrollment). In addition, any non-zero disbursement amount indicated in the 2006-07 or 2007-08 Federal financial aid files (variable *tl_dis_p*, Pell award disbursement amount, in either year) was accepted as evidence of postsecondary enrollment.

Participants who met any of the criteria above (i.e., who showed evidence of PSE in at least one of these six 2007–08 APR postsecondary fields or one of the nine 2006–07 APR postsecondary fields, or who had a value of 1 for the variable *enrolled*, or who had any non-zero disbursement amount indicated in the 2006-07 or 2007-08 Federal financial aid files) were considered to have evidence of PSE in 2007–08.

Enrollment Rate Calculation

Each project’s postsecondary enrollment rate (Table 1) was calculated by dividing the number of participants expected to graduate in 2006–07 with evidence of enrollment in postsecondary educational institutions by the 2007–08 budget period by the number of participants in that expected high school graduation cohort served by that grantee, and multiplying by 100.

Appendix B. Calculation methodology for efficiency measure (Table 2)

Total Participants

For the efficiency measure (Table 2), the cohort of program participants was the sum of the new, continuing, and reentry participants served in 2006–07 (*PartCD0607* = 1, 2, or 3) and for whom there was also a record in the 2007–08 APR.

Persisting Participants

Participants in this cohort were considered to be persisting if they met one of the two following criteria:

- Continuing or reentry participant in 2007–08 (*PartCD0708* = 2 or 3), or
- Prior-year participant in 2007–08 (*PartCD0708* = 4) and either
 - Still in high school in 2007–08 (*HSGrad0708* = 1) or
 - With evidence of PSE enrollment (as calculated above in Appendix A)

Annual Cost per Participant

Each project's annual cost per participant was calculated by dividing the project's 2007–08 funding by the total number of participants included in Table 1, as calculated above.

Annual Cost per Successful Participant

Each project's annual cost per participant was calculated by dividing the project's 2007–08 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 Tables 1 and 2

It is important to note that not all 2007–08 UB and UBMS grantees are included in Tables 1 and 2. Of the 1,097 grantees funded for 2007–08, 1,092 were included in Table 1 and 751 were included in Table 2.

Five UB grantees did not submit a 2007–08 APR and were thus excluded from both Table 1 and Table 2:

- Texas College, TX (P047A041126)
- Shaw University, NC (P047A030554)
- Coppin State College, MD (P047A040499)
- Indiana University/ Bloomington, IN (P047A041126)
- Destination Education, Inc., WI (P047A080272)

Three UB grantees did not submit a 2006–07 APR and were thus excluded from Table 2:

- Fort Belknap College, MT (P047A080349)
- Tidewater Community College, VA (P047A080808)
- University of South Carolina/ Upstate, SC (P047A080811)

One UB grantee submitted APRs in both years but reported no new, continuing, or reentry participants in 2006–07 and was thus excluded from Table 2:

- Pima Community College/ Desert Vista Campus, AZ (P047A070229)

Eighty-one UB and UBMS grantees were excluded from Table 2 because 15% or more of the new, continuing, and reentry participants served in 2006–07 had missing or invalid data in fields critical to calculating whether participants stayed in high school or enrolled in postsecondary education in 2007–08. A participant record was determined to have “missing or invalid data” if it met one or more of the following criteria:

- There was no 2007–08 APR record for the participant;
- The 2007–08 record had unknown or invalid data (i.e., any response other than options 1, 2, 3, 4, 5, 6, or 7) for Participant Status (*PartCD*)
- The 2007–08 record was of a prior-year participant (*PartCD* = 4) with an unknown or invalid value (i.e., any response other than options 1, 2, 3, 4, or 5) for High School Graduation Status (2007–08 APR Field #31, *HSGrad*) and no evidence of PSE as noted above.

The following UB and UBMS grantees were excluded from Table 2 due to significant omissions in fields critical to calculating whether participants stayed in high school or enrolled in postsecondary education, as described above:

- Oklahoma Panhandle State University, OK (P047A030126)
- Southern Illinois University/ Edwardsville, IL (P047A030225)
- Metropolitan Development Council/ Southern Pierce County, WA (P047A030226)
- Higher Education Consortium of Metropolitan/ St. Louis, MO (P047A030247)
- University of Virginia/ Wise, VA (P047A030364)
- Southern Illinois University/ Edwardsville, IL (P047A030483)
- University of Southern Colorado, CO (P047A030583)
- Texas Southern University, TX (P047A030759)
- Weatherford College, TX (P047A031024)
- Utah Valley State College, UT (P047A031157)
- Florida A&M University, FL (P047A041074)
- Southwest Virginia Community College, VA (P047A041124)
- Elgin Community College, IL (P047A041152)
- University of Kansas, KS (P047A051061)
- Chemeketa Community College/ Salem, OR (P047A070015)
- Boys & Girls Clubs of Greater Fort Worth, TX (P047A070158)
- Gadsden State Community College/ Anniston, AL (P047A070164)
- Inter American University of Puerto Rico/ Barranquitas Campus, PR (P047A070179)
- Southern University/ Shreveport, LA (P047A070184)
- Southern University/ Shreveport, LA (P047A070200)
- Montclair State University, NJ (P047A070214)
- Roxbury Community College, MA (P047A070231)
- Community College of Baltimore County, MD (P047A070314)
- Southern Utah University, UT (P047A070318)
- University of Connecticut, CT (P047A070334)
- Oakland University, MI (P047A070373)
- University of Nevada/ Las Vegas, NV (P047A070405)
- Technical College of the Lowcountry, SC (P047A070455)
- Alabama State University/ Montgomery, AL (P047A070487)
- University of South Alabama, AL (P047A070494)
- Seton Hall University, NJ (P047A070495)
- University of North Carolina/ Pembroke, NC (P047A070497)
- Purdue University/ Indiana University, IN (P047A070529)
- Big Bend Community College, WA (P047A070552)
- Governors State University, IL (P047A070554)
- Salem State College, MA (P047A070578)
- John Wood Community College, IL (P047A070605)
- College of Charleston, SC (P047A070612)
- Cleveland State University, OH (P047A070641)
- University of Puerto Rico/ Cayey, PR (P047A070643)
- University of Idaho/ Clearwater Valley, ID (P047A070670)
- University of Alaska/ Fairbanks, AK (P047A070673)
- Pueblo Community College, CO (P047A070682)
- University of Alaska/ Anchorage, AK (P047A070704)

- Northeast Iowa Community College, IA (P047A070712)
- Des Moines Area Community College/ Urban Campus, IA (P047A070719)
- University of New Orleans/ Lakefront Campus, LA (P047A070758)
- Department of Public Instruction, WI (P047A070786)
- University of Texas/ San Antonio, TX (P047A070827)
- University of Texas/ San Antonio, TX (P047A070833)
- Northern Illinois University/ DeKalb, IL (P047A070966)
- Baltimore City Community College, MD (P047A070973)
- University of Georgia, GA (P047A071010)
- St. Augustine's College, NC (P047A071017)
- University of New Orleans/ Lakefront Campus, LA (P047A071020)
- Trinity University, DC (P047A071026)
- College of Micronesia/ FSM/ Yap Campus, FM (P047A071061)
- Indiana State University/ Terre Haute, IN (P047A071078)
- Dillard University, LA (P047A071166)
- Northland College, WI (P047A080030)
- Kean University, NJ (P047A080143)
- Danville Community College, VA (P047A080421)
- Coahoma Community College, MS (P047A080593)
- Illinois Central College, IL (P047A080662)
- National Hispanic University, CA (P047A080675)
- Kellogg Community College, MI (P047A080810)
- Jarvis Christian College, TX (P047A080821)
- Provisional Educational Services, Inc., CA (P047A080832)
- Morris College, SC (P047A080839)
- Ute Indian Tribe, UT (P047A080843)
- Texas A&M University/ Corpus Christi, TX (P047A080909)
- Hampton University, VA (P047A080932)
- CUNY/ Queens College, NY (P047A080933)
- Provisional Educational Services, Inc., CA (P047A081109)
- University of Florida, FL (P047A081175)
- Northeastern Illinois University, IL (P047M030153)
- California State Polytechnic University/ Pomona, CA (P047M040135)
- University of Northern Colorado, CO (P047M040144)
- Southwest Virginia Community College, VA (P047M070005)
- University of Tennessee/ Knoxville, TN (P047M070028)
- University of Nevada/ Las Vegas, NV (P047M070069)

As 2007-08 was the first year of a new funding cycle, the 2007-08 reporting year includes a large number of grantees that were not funded in previous years. These grantees (256 in total) are also excluded from Table 2 because they did not submit APR data in 2006-07. These grantees are listed in Table 3 with the note “Newly funded grantee in 2007-08.”

The entire list of excluded grantees is included as a stand-alone reference in Table 3.