

#### Overview

In early June, 2007, the Indiana Commission on Higher Education (ICHE) released a report charging Indiana's higher education community with increasing access to higher education, including for firstgeneration students, in order to increase the educational level and job prospects of Hoosiers.<sup>1</sup> National reports suggest that students who are the first in their families to attend college tend to be more academically and financially challenged than the general freshman population, and they tend to be less likely to complete their degrees.<sup>2</sup> As a result, Institutional Analytics Compliance and Reporting (IA-C&R) developed a derived field in the data warehouse to identify and report on the educational attainment of first-generation students who apply to and attend Indiana University.

To identify this population, IA-C&R uses the indicators available from the Free Application for Federal Student Aid (FAFSA) and the IU undergraduate admission application. The IU admission applications ask students to indicate if neither parent attended college, with the results recorded in two places in the IU Student Information System (a student group code and an application recruiting category). The FAFSA has used two formats for students to indicate the highest educational level completed by each of their parents:

- 1. The FAFSA for 2023-24 and prior years offered these options independently for each parent: "Middle school," "High school," "College or beyond," or "Other/unknown."
- Beginning with the 2024-25 FAFSA, a single set of options is presented to cover both parents. The initial question on the FAFSA is "Did either of the student's parents attend or complete college?" Here are the options that are presented for 2024-25: "Neither parent attended college," "One or both parents attended college, but neither parent completed college," "One or both parents completed college," or "Don't know."

The IA-C&R process cycles through these data sources, beginning with official FAFSA records, to identify students who most closely meet this predominant definition in the field: "neither parent attended college."

<sup>&</sup>lt;sup>2</sup> See for example page iv of Office of Educational Research and Improvement. 1998. *First-generation students: undergraduates whose parents never enrolled in postsecondary education*. Statistical Analysis Report, U.S. Department of Education, NCES 98-082. For a more recent report, see Saenz, Victor, et. al. 2007. *First in My Family: A Profile of First-Generation College Students at Four-Year Institutions Since 1971*. Higher Education Research Institute (UCLA).



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<sup>&</sup>lt;sup>1</sup> Indiana Commission on Higher Education, *Reaching Higher: Strategic Directions for Higher Education in Indiana,* June 8, 2007, pp. 5-6, 17 (http://www.che.state.in.us/PDF%20Files/Strategic%20Directions%20final%2006-08-2007.pdf).

## Logic Behind the IR First Generation Indicator

IA-C&R has created a reporting flag in the IU Data Warehouse to identify first-generation students. Here are the mutually exclusive cases where this process flags students as first-generation, starting with the first scenario that is evaluated for each student:

- 1. For students with an official FAFSA record and who have a parent education level indicator for both parents, students must meet these conditions as their parents' highest level of education:
  - a. On official FAFSA records for 2023-24 and prior years, both parents' highest level completed was "middle school" or "high school."
  - b. On official FAFSA records for 2024-25 and beyond, the only indication is "Neither parent attended college."
- 2. Or, for students who only filed an official FAFSA for 2023-24 and prior years, the highest level completed by one parent per the FAFSA was middle school or high school, and there is no information on the FAFSA about the educational level of the other parent (i.e. the field is blank).
- 3. Or, the student indicated on the Admissions application that neither parent attended college, and the student's FAFSA records do not indicate that either parent attended or completed college.

Students who meet one of these tests have a positive IR first generation indicator (IR\_FRST\_GEN\_IND = Y or IR\_1ST\_GEN\_IND = Y) on a variety of tables and views, including the following:

DSS\_RDS.PSE\_PRSN\_ST DSS\_RDS.SR\_STU\_TERM\_GT DSS\_RDS.IR\_CEN\_TRM\_SNPSHT\_GT DSS\_RDS.IR\_STU\_DEGR\_SNPSHT\_GT DSS\_RDS.IR\_ADM\_SNPSHT\_ST DSS\_RDS.IR\_ADM\_SNPSHT\_PRLM\_ST DSS\_RDS.IR\_FA\_ENRL\_DEGR\_AWD\_SUM\_GT DSS\_RDS.IR\_FA\_AWD\_SUM\_GT

Note that students' first generation status is updated on a nightly basis in DSS\_RDS.IR\_FRST\_GEN\_STDNTS\_ST. This table includes all students who at one point met the criteria listed above for the IR first generation indicator. It also indicates if a student's parents subsequently completed college based on a subsequent FAFSA record. These students remain on IR\_FRST\_GEN\_STDNTS\_ST, but they will not have an IR first generation indicator on the report objects listed above.



Note for technical users:

If a student was initially included on DSS\_RDS.IR\_FRST\_GEN\_STDNTS\_ST, but subsequently files an official FAFSA indicating that their parent has attended or completed college, the row for this student in IR\_FRST\_GEN\_STDNTS\_ST is updated to be excluded from identification as a First Generation student in future snapshots (IR\_EXCL\_PARNT\_CMPLT\_COLL\_IND is set to Y and IR\_EXCL\_DT is set with the update date).

# Caveats and Potential Benefits:

- In many cases, students submit an electronic FAFSA and/or an electronic admissions application. In these cases, students' answers are electronically recorded in the IU Student Information System (IU-SIS), reducing concerns about data reliability due to potential data entry errors.
- Students only receive a first-generation flag if they positively indicate a parental educational level below college. As a result, students who indicate "other/unknown" on the FAFSA are not counted as first-generation based on any FAFSA data, since their FAFSA-based parents' educational level is ambiguous.

## Issues

The term "first generation" is defined differently by a number of organizations:

In various longitudinal studies, the National Center for Education Statistics (NCES) has defined "first generation" as those whose parents did not attend college.<sup>3</sup> In other NCES reports, first-generation students are defined as those "whose parents have attained no more than a high school education."<sup>4</sup> Although unit records from those longitudinal studies may be available for research, they could not be matched on a student-by-student basis to IU's student population. They would also only contain a small number of IU's student population, since they rely on samples of students selected for the National Postsecondary Student Aid Study (NPSAS) surveys. Similar issues exist with other surveys that rely on a particular sample of students and a survey-specific questionnaire.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> Engle, Jennifer, Adolfo Bermeo, Colleen O'Brien. 2006. *Straight From the Source: What Works for First-Generation College Students.* The Pell Institute for the Study of Opportunity in Higher Education, Washington, D.C.



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<sup>&</sup>lt;sup>3</sup> Office of Educational Research and Improvement. 1998. *First-generation students: undergraduates whose parents never enrolled in postsecondary education*. Statistical Analysis Report, U.S. Department of Education, NCES 98-082.

<sup>&</sup>lt;sup>4</sup> U.S. Department of Education. National Center for Education Statistics. 2000. *Mapping the Road to College: First-Generation Students' Math Track, Planning Strategies, and Context of Support*, NCES 2000–153, by Laura Horn and Anne-Marie Nuñez. Project Officer: Larry Bobbitt. Washington D.C.

- The College Board has defined "first generation" as those whose parents did not complete a 2year degree.<sup>6</sup> The College Board asks takers of the Scholastic Aptitude Test (SAT) to indicate the highest level of education completed by each parent. Students taking the SAT have the option of selecting "2-year degree" or "4-year degree." However, the SAT data for parental educational levels are not routinely available on a unit-record basis to colleges.
- The federal TRIO programs, which strive to improve retention and degree completion among underrepresented groups, define "first generation" as "an individual neither of whose natural or adoptive parents received a baccalaureate degree."<sup>7</sup>

The IR approach most closely matches the federal NCES definitions indicating neither parent attended college or "whose parents have attained no more than a high school education," using data sources that are readily available at IU.

<sup>&</sup>lt;sup>7</sup> See for example the definition of "first generation college student" in the Code of Federal Regulations (CFR) for the Upward Bound Program, Title 34, Volume 3, Part 645, Section 6: 34CFR645.6. http://www.gpoaccess.gov/cfr/retrieve.html



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<sup>&</sup>lt;sup>6</sup> Dougherty, Pam, Renee Gernand, Christen Pollock, and Andrew Wiley for the College Board. *First Generation Students in the 2006 SAT Cohort.* Paper presented at the Annual Forum of the Association for Institutional Research, Kansas City, 2007.

## Further Technical Notes

- The table DSS\_RDS.IR\_FRST\_GEN\_STDNTS\_ST lists each historical First Generation student once. Students who are currently reported as First Generation have a null in the field IR\_EXCL\_PARNT\_CMPLT\_COLL\_IND. However, reporting by IA Compliance and Reporting relies on point-in-time values that are copied from DSS\_RDS.IR\_FRST\_GEN\_STDNTS\_ST to various snapshot tables.
- The column in DSS\_RDS.IR\_FRST\_GEN\_STDNTS\_ST named DTA\_SRC indicates the source for each student's identification as First Generation. The values in this field reference the following underlying tables:
  - IR\_ISIR\_PARNT\_MT (pre-2025) and FTI\_IR\_PS\_SFA\_ISIR\_STU\_MT (post-2024). These are sourced from the Oracle/PeopleSoft tables PS\_ISIR\_PARENT and PS\_SFA\_ISIR\_STU, respectively.
  - Legacy (pre-2004) ISIR data come from FA\_FAMS\_FAFNAR03\_GT and FA\_FAMS\_FAFNAR04\_GT.
  - Admissions indicators come from the PeopleSoft tables PS\_ADM\_APPL\_RCR\_CA and PS\_STDNT\_GRPS.
  - IR first generation indicators from prior to 2004 come from cohort data in legacy IR tables.
- The logic for adding records to DSS\_RDS.IR\_FRST\_GEN\_STDNTS\_ST is stored in these Data Warehouse views which are run in the following sequence. The code behind those views can be seen by querying SYS.ALL\_VIEWS.
  - o IR\_FRST\_GEN\_1\_SV
  - o IR\_FRST\_GEN\_2\_SV
  - IR\_FRST\_GEN\_STDNTS\_INCR\_FA\_SV
  - $\circ \quad \text{IR\_FRST\_GEN\_STDNTS\_INCR\_ADM\_SV}$
  - IR\_FRST\_GEN\_STDNTS\_INCR\_STGRPS\_SV

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