

## Appendix 1-C

### APS Persistence Definitions (Longitudinal Cohort /Cohort 1)

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ACADEMIC PERSISTENCE AND NON-PERSISTENCE
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Persistence = Declared an engineering major

Non-persistence = Declared a non-engineering major after having intent to study engineering at admission to university

*Guidelines for determining persistence from APS Longitudinal Cohort (Cohort 1) data*

- (1) Majors are determined to be engineering or non-engineering on a school-by-school basis. If the subject chooses a major within the school of engineering at his/her institution after having the intent to study engineering at admission, the student is considered a "persister". (Therefore some majors, such as computer science, may be considered an engineering major at some institutions and not others).
- (2) A student's persistence status is determined when s/he formally declares her/his major. (The major must be reflected in the academic record, i.e., stating an intent to declare a specific major in an APS interview will not change their persistence status.)
- (3) For subjects who are not listed as persisters or non-persisters, we do not have enough information to classify them. (For example, the subject may have dropped out of the study and researchers are unable to track him/her down - or the subject has not yet formally declared a major.)
- (4) Subjects with double (or more) majors of which (at least) one is an engineering major, are classified as persisters.
- (5) Persistence status should be considered subject to change:
  - a. Persistence status is periodically revisited (~twice a year). (I reanalyze previous classifications to update persistence status, for example, there are still subjects declaring non-engineering majors - and we've had one subject declare an engineering major after having declared a non-engineering major).
  - b. Persistence status will be finalized once transcript analyses are completed.

*Note:* In the Longitudinal Cohort, we have one exception who is a CS major (CS is not considered engineering at one APS partner institution) - this student was recruited as a CS student and has remained a CS student. He was initially considered a persister, but as of August 2007 will be excluded from persistence analysis.

MIGRATOR
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Student who initially did not intend to study engineering at admission to university, but later declared an engineering major. Please see: K.M. Donaldson, S.D. Sheppard (2007), Exploring the Not-So-Talked-About Undergraduate Pathway: Migrating Into Engineering. Paper presented at the 2007 International Conference on Research in Engineering Education, Honolulu, Hawaii, June 23-24, 2007.

#### DROPPED OUT

Longitudinal Cohort subject who left the university they were attending during the APS study

#### EXIT

When a Longitudinal Cohort subject declares a non-engineering major (same as non-persister). Not all “exited” students had exit interviews. (For people who are no longer a part of the study, please say they “left the study.”)

#### EXIT INTERVIEW

A special semi-structured interview given to Longitudinal Cohort subjects who formally declared a non-engineering major (or exited engineering).

#### FULL DATA

Full data refers to subject data sets that are complete for their contact grouping, e.g., the low contact group has a full data set for 24 subjects at Orchard University (24 Orchard subjects participated in all of the surveys and APS has all of their transcripts).

#### INCOMPLETE DATA

Incomplete data refers to a subject data set that is not complete, e.g., a Longitudinal Cohort subject took five (out of a total six) surveys.

#### LEFT THE STUDY

Used to describe Longitudinal Cohort subjects who left APS before the study ended – therefore they have an incomplete data set (e.g., they took three surveys and then no longer took part in the study). We do not characterize these students.

#### PROFESSIONAL PERSISTENCE

Subject intends to work in engineering for three years following graduation with their undergraduate degree.

#### RETURNED

Returned refers to a Longitudinal Cohort subject who exited engineering and then returned to engineering, i.e., declared a non-engineering major and then changed majors to an engineering major.

#### UNKNOWN

Refers to Longitudinal Cohort subjects whose persistence status(es) are unknown based on conversations with researchers at the associated Longitudinal Cohort institutions.