MIS Student Success: Report Domain and Procedures

Introduction
On summer 2014, the FHDA Community College District began submitting the Student Success (SS) data quarterly report to the Management Information System (MIS) unit of the California Community College Chancellor’s Office (CCCCO). The purpose of this report is to account for matriculation services (e.g., assessment, placement, orientation, counseling, follow-up services) provided to current and prospective students to support their academic success. The data in the report has two key purposes: (1) to promote and facilitate research for improving student services and (2) determine funds to be allocated to each college by the CCCCO. In this document, we provide an overview of the procedures used to extract and report data for each data element in the MIS SS report.

Methodology
The MIS data element dictionary (DED) and the Student Success and Support Program (3SP) Funding Guidelines were used to identify the specifications or requirements for each data element in the report. In collaboration with the counseling deans at each college, data users, and data custodian across the districts, the MIS coordinator developed procedures for data validation and reporting, which included the review of current practices for documenting student services in the parent information system (Banner) and other data sources, such as the degree auditing (Degree Works) and the appointment scheduling.

1 For detailed information on the MIS SS report: http://extranet.cccco.edu/Divisions/TechResearchInfoSys/MIS/DED/StudentSuccess.aspx
2 In the past, matriculation funds were based on the number of first-time students at the college. The new approach, which allocates 40% of the funds based on credit student annual headcount and 60% on student served annual headcount, is meant to incentivize, or direct, the type and frequency of services colleges provide and report to receive funds. These funds are contingent on appropriations by the State for that year, and headcount reported by other districts/colleges. (http://extranet.cccco.edu/Portals/1/SSSP/Matriculation/SSSP_Funding_Guidelines_Final_3-12-14.pdf)
3 The procedures may change, as new information is provided by the CCCCO or new technologies are adopted by the District or the Colleges.
4 http://extranet.cccco.edu/Divisions/TechResearchInfoSys/MIS/DED.aspx
5 http://extranet.cccco.edu/Portals/1/SSSP/Matriculation/SSSP_Funding_Guidelines_Final_3-12-14.pdf
(SARS) systems. Based on this information, initial scripts to extract and report the data were developed and later modified based on new information or changes to technologies used to document services. Procedures for data gathering and reporting followed an ecological approach, which included the following guidelines or principles, as shown in Figure 1.

1. Capitalize on systems “native” to the environment. Identify systems that are currently and successfully used within each service area that can efficiently provide the required information.

2. Identify/Strengthen interdependency among data users, data custodians, and the MIS coordinator given that collaboration among these individuals will greatly influence the quality of the information for each one plays a unique and critical role in documenting services and reporting the data.

3. Adapt/Evolve: Student services are expected to change to address student needs, new practices, and new technologies. MIS SS data gathering and reporting should be able to accommodate (evolve) to those changes in a timely manner.

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For MIS SS, the system must provide the following information: student ID, type of service, and date (or term) when the service was provided.
Procedures

This section provides a description of the domain of the MIS SS (Student Success) report and each of the data elements included in the report, as well as the data sources used for each data element. Edits or check on data validity performed by the CCCCO MIS systems (syntactical, referential or quality edits) are also described, as well as the percentage or weight for 3SP allocation funds.

Data reporting is based on information provided by the MIS DED (Data Element Dictionary) and 3SP Funding Guidelines. The initial services (orientation; assessment for placement in math, English, or ESL courses; and education plan development) are reported once during the student attendance at the college or after an absence of at least three years. When initial services for the student have been reported for a prior term or academic year, these are then reported as follow-up services in their respective category (follow-up service: orientation, assessment for placement, education plan development). Given that counseling services are funded once per academic year (annual headcount), services provided during a prior term of the academic year are then reported as follow-up as other academic-progress service. Academic progress/probation is reported for every term (quarterly) for every service report is counted (no limitations for academic year or college attendance). All follow-up services are reported.

The reporting term for services not provided through a course is based on the month of the year when the service was provided. In specific,

- Winter: January 1st to March 30th
- Spring: April 1st to June 30th
- Summer: July 1st to August 31st
- Fall: September 1st to December 31st

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8 More information available at: http://extranet.cccco.edu/Portals/1/TRIS/MIS/DataSub_Tab/DED_Data_Edit_Reference.pdf
9 http://extranet.cccco.edu/Divisions/TechResearchInfoSys/MIS/DED/StudentSuccess.aspx
10 http://extranet.cccco.edu/Portals/1/SSSP/Matriculation/SSSP%20Handbook%202014/Chapter%204%20-%20SSSP%20Funding%20Guidelines.pdf
11 The abbreviated education plan is meant for students applying to the college, usually first-time students. Development of the comprehensive education plan may be better-suited for students already enrolled at the college, those with a declared major/program.
12 Originally, academic probation and follow-up services were only reported during a follow-up term. However, given that MIS is allowing district to report these service, independently of student enrollment history at the college, these services are now reported for all students.
**MIS Domain**

The SS report, or data file, includes one record for every credit or noncredit student at the college who enrolled or received pre-enrollment services during the reporting term and completed a college application. (See Figure 2 for details on the data provided in the report.) Each student record answers the following questions:

1. Who received the SS service? (Student, applicant ID)
2. Which college provided the service? (College ID)
3. What was the service? (Data field and code)
4. When was the service provided? (The term)

**Figure 2. MIS SS Report Domain**

Notes:
MIS SS (Student Success) is a ‘child’ report of the SB (Student Characteristics) report; only students that show up in the SB report can be included in the SS report. To include students in the SB report, an admission application must be submitted to the College by the time of data submission. The SB report provides information on the student California residency and special admit status; which are used to determine if funds for services provided to the student are applicable for 3SP funding.
**SS01 Student Educational Goal**

This element describes the student's educational goal while enrolled at the college and should be updated each term to reflect changes during the academic career. This information is in addition to SB01, which records the initial goal of the student upon application. SS01 records or confirms a student's goal after reviewing assessment results, received orientation or other services which expand his or her understanding of the requirements necessary to achieve that goal. Based on Goal Orientation theory, Figure 3 shows how a goal relates to behavior, and how this relationship could be mediated by SS services.

![Figure 3. Goal Orientation Theory: Relationship between Goal and Behavior](image)

**FHDA Procedures/Data Sources**

The education goal in the system is reported in SS01 when the student record meets at least one of the following conditions:

1. The educational goal in latest admission application (SZRCCAP_EGOL_CODE) and Banner (SGBSTDN_EGOL_CODE) are different.
2. User id in Banner indicates that the student has made changes to either the major or educational goal (SGBSTDN_USER_ID begins with ‘WWW’).
3. The student has developed a comprehensive education plan.

Otherwise, “Undecided” is reported.
**SS02 Course of Study**

The preferred value is the control number (SP04, Program Award MIS annual report) for programs approved by the CCCCO.\(^{13}\) For programs with catalog rights, or that do not need or have approval, the TOP code is reported.

Key MIS edits:
If SS02 equal to ‘000000’ (undecided major/no course of study) then SS09 (educational plan) cannot be reported as ‘C’ (comprehensive). The submission for the college will be rejected if, out of all the credit, non-special admit students:
- 35% or more have a value of ‘YYYYYY’ (exempt) and/or
- 45% or more have a value of ‘000000’ (no course of study).

**FHDA Procedures/Data Sources**

1. Students’ program of study is extracted from Banner (Banner form, SGASTDN). If there are two programs for different colleges (Program_1, Program_2) in the student record, the one applicable to the reporting college is extracted.
2. If the program does not have a unique or control number (i.e., not approved by CCCCO), the top code for the program is reported instead. For students with ‘Undecided’ as program, ‘000000’ is reported. For “Undecided” students that developed a comprehensive plan for the reporting term, the data in SS09 (developed a comprehensive education plan) will then be changed to “developed an abbreviated plan,” or “education plan follow-up service” in SS11, depending on whether development of an abbreviated plan was previously reported for the student.

\(^{13}\) Nonexempt students are required to identify a course of study after completing 15 semester units or 22 quarter units of degree-applicable credit course work, or prior to the end of the 3rd semester or 4th quarter of enrollment, or a shorter period if required by district or program policy. Once the student has identified a course of study, the district must provide the student with an opportunity to develop a comprehensive student educational plan pursuant to Title 5, Section 55524 within a reasonable time period.
SS03, SSO4, & SS06 Student Exempt Status (Orientation, Assessment, & Education Plan)

This element indicates whether the student was directed to, or exempted (education level equal or higher than an associate degree, or other criteria) from matriculation services as part of the student success process at the college.

SS03, SSO4, & SS06 codes include:

- **A** - Student was directed to initial orientation services.
- **D** - Student has completed an Associate or higher degree.
- **O** - Student exempted based on other district criteria.

FHDA Procedures/Data Sources

Based on educational level, special admit status, or course subject code in transcript prior or during current term.

1. Students with at least an associate degree are by default classified exempted from having to complete or receive the matriculation services.
2. Special admit students are classified as non-applicable.
3. Students showing transcripts evaluations (Banner form, SHATRNS) with a counseling course subject code ('COUN', 'CSLN') prior or during the term are also reported as exempted.
4. All others are classified as directed to receive the services.
SS06 Student Initial Orientation Services

(Funding level 10%: Count once during the time student attends the college)

This data element indicates whether the student received initial orientation services as part of the student success process at the college; it is reported each term for services provided during the term and is intended to capture the first substantive orientation provided to a student as defined in title5, section 55521. A substantive orientation addresses all of the following: (1) academic expectations, and progress and probation standards, (2) maintaining registration priority, (3) prerequisite or co-requisite challenge process, (4) Maintaining fee waiver eligibility, (5) descriptions of services and programs, (6) academic calendar and important timelines, (7) registration and college fees (8) available education planning services, and (9) Other issues, policies, and procedures the college deems necessary14.

If an additional orientation is provided during the same or subsequent term, that service will be reported as a follow-up service, SS11, position 1.

A student enrolled at the reporting college after an absence of six or more primary terms (semesters), nine or more primary terms (quarters), or the equivalent of 3 academic years may be considered a new student for the purpose of reporting the development of initial orientation.

FHDA Procedures/Data Sources

Data sources used to identify students who received initial orientation services include:

- Courses\(^{15}\)
  - De Anza: COUN200, COUN200X
  - Foothill: CNSL005, SPED008.
- SARS (see website for latest meeting reason codes)
- Banner (SPAIDEN)\(^{16}\)
  - De Anza: DAGT (Attended DA Orient Workshop), DAIO (Attended DA Intern Stud Orient); DAOO (DA Online Orientation), or DAOR (Attended DA HS Orientation)
  - Foothill: FHGT (Attended FH Orient Workshop); FHIO (Attended FH Intern Stud Orient), FHOR (Attended SOAR), FHOO (Online Orientation)
- Special programs: first term the student became active in the program and was enrolled in at least one course during first census date.
  - De Anza: Puente, Sankofa, Summer Bridge, First Year Experience, SSRS (Student Success & Retention Services), Middle College, or College Now
  - Foothill: Puente

\(^{15}\) Enrollment by first census, if the course was offered during the reporting term.
\(^{16}\) Date of the orientation must be included in the “Additional Information” data field.
**SS07 STUDENT-INITIAL-ASSESSMENT-SERVICES-PLACEMENT**

*(Funding level 10%: Count once during the time student attends the college)*

This element indicates whether the student received **assessment** services for initial course placement as a part of the student success process of the college. This data element is reported each term for **services provided during the term** and is intended to capture **initial assessment for placement** in English, Math, or ESL as defined in title 5 section 55522. Retesting should be reported in SS11. 17

SS07 has four characters or positions; for each position indicate "yes" (1) or "no" (0).

Student received **placement** services based on:

- Position 1: Alternative measures in lieu of an assessment test
- Position 2: Assessment testing and alternate multiple measures
- Position 3: Placement results from other college or university
- Position 4: Early Assessment Program (EAP) test results

**FHDA Procedures/Data Sources**

Three main data sources in Banner: assessments (SOATEST), transcript evaluations (SHATRNS), and pre-requisite override/clearance (SFASRPO). All sources are taken into account when identifying the original assessment/placement for course placement in English, Math or ESL at the college. For other subject areas, the service is reported as a follow-up service. When the analysis shows that the student has already been reported as receiving initial placement services during a prior term at the college, the service is then reported as a follow-service in SS11, position 2.

- **SOATEST (Test Score Information):** provides data on test scores for De Anza and Foothill and course placement/pre-requisite clearance for Foothill. The test code is used to identify whether the assessment that the code represents relates to placement in English, Math or ESL, or other area. 18 Date of assessment is used to determine the term when the service was provided. SS07 coding (type of assessment) is based on test and source code. (See website for details.)
- **SHATRNS (Transfer Course Information):** provides data on transcript evaluations. The TOP code, attribute, or subject code for the transferred course is used to identify whether the course relates to English, Math or ESL course placement. The date the information was entered in

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18 Assessment Center supervisors at each college are who identify the purpose of the code in SOATEST.
Banner is used to determine the term when the service was provided. Same procedure applies to both colleges. Data from SHATRNS is mostly reported as assessment testing and multiple measures (position 2), unless the school code signals that the assessment is based on results from a different school (including advanced placement tests) or the military.

- SFASRPO (Student Registration Permit-Override): Course TOP code is used to identify the course subject area to which the override applies. The first date when the override was entered in the system represents the actual placement. Most of the data from SFASRPO is reported as assessment testing or multiple measures, unless the type of permit signals that the placement is based on a transcript, which is reported as assessment based on results from another college.

**Figure 4. Data Flow for SS07 Initial and SS11 P2 Follow-Up Assessment for Placement**

**Notes**
Assessment for placement data for reporting term are retrieved from three areas in Banner (testing, transfer, registration permit and overrides) and divided into two groups: (1) assessment for placement in Math, English or ESL, and (2) assessment for placement in other courses. For the first group, if this was the initial assessment (no initial assessment service was previously reported for the student), the record is used to identify initial placement services during the reporting term. For students with initial placement services reported during a prior term, the record is used to report follow-up assessment services, position 2. For the second group (placement in other courses), the record is also used to identify follow-up services in SS11.
SS08 STUDENT COUNS/ADVIS-SERV

(Funding level 15%: Count once per year during the time student attends the college)

This element indicates whether the student received counseling/advise services, other than the development of a Student Education Plan, during the reporting term. Counseling and advisement service refers to a substantive interaction between a counselor or advisor and the student. Report the counselor or advisor contact in this element, which can take place during individual appointments or group advising/counseling. Counseling or advising services provided thru another categorical program should be included for purposes of reporting. 19

SS08 codes include:

- A - Student received counseling/advise services.
- N - Student did not participate in counseling or advise services.

FHDA Procedures/Data Sources

- Students active in any of the special programs during reporting term
  - Both colleges: EOPS, DSPS, CalWorks, Puente, First Year Experience, Middle College
  - De Anza: Sankofa, MPS (Math Performance Success Program), College Now
- SARS (see website for meeting reason codes)
- Counseling courses (see website for meeting reason codes)

**SS09 STUDENT-EDUCATION-PLAN**

*(Funding level by type: abbreviated 10%, comprehensive 35%. Count once each plan type during the time student attends the college)*

This element indicates whether the student developed an education plan at the college during the reporting term.

SS09 codes for type of Student Education Plan developed during the term:
- A - Student developed an abbreviated education plan.
- B - Student developed an abbreviated and a comprehensive education plan.
- C - Student developed a comprehensive education plan.
- N - Student did not complete an education plan.

Comprehensive plans cannot be reported for students with 'Undecided' majors.

**Type of Student Education Plan—Title 5 § 55524.**

- Abbreviated student education plans are one to two terms in length designed to meet the immediate needs of students for whom a comprehensive plan is not appropriate.
- Comprehensive student education plans take into account a student's interests, skills, career and education goals, major, potential transfer institutions, and the steps the student needs to take on their educational path to complete their identified course of study. The comprehensive plan helps the student achieve their course of study. The comprehensive plan includes, but is not limited to, addressing the education goal and course of study requirements, such as the requirements for the major, transfer, certificate, program, applicable course prerequisites or co-requisites, the need for basic skills, assessment for placement results, and the need for referral to other support and instructional services as appropriate. The comprehensive student education plan is tailored to meet the individual needs and interests of the student and may include other elements to satisfy participation requirements for programs such as EOPS, DSPS, CalWORKs, veteran education benefits, athletics, and others.

Once an abbreviated and/or a comprehensive education plan are developed, revisions are reported in SS11 (STUDENT-SUCCESS-OTHER-SERVICES). A student enrolled at the reporting college, after an absence of: six or more primary terms (semester schedule), or nine or more primary terms (quarter schedule), or the equivalent of 3 academic years, may be considered a new student for the purpose of reporting the development of initial education plans.
FHDA Procedures/Data Sources

The main data source for documenting education plan development is Degree Works. The key factor to determine the type of plan is the number of terms covered by the plan: abbreviated, 1 or 2 terms; comprehensive, 3 or more terms. The plan does not need to be active or locked at the time the data is extracted from Degree Works. See Appendix A for more information on how the data is extracted from Degree Works for MIS reporting.

The development of an abbreviate plans is also reported when the reporting term is equal to the term when the student first became active in a categorical program (EOPS, DSPS, or CalWorks).

Factors that are also taken into account when reporting the development of an education plan include:

- If the same type of education plan was previously reported, the record will be reported as a follow-up, SS11 position 3.
- Students with “Undecided” as major/program cannot be reported as having developed a comprehensive plan. The record will be used to report development of an abbreviated (if an initial abbreviated plan was not previously reported) or a follow-up (when initial abbreviated plan was previously reported).

Figure 5. Data Flow for SS09 Education Plan Development
SS10 STUDENT-ACADEMIC-PROGRESS-PROBATION-SERVICE
(Funding level 15%: Count once per term, after first term, during the time student attends the college)

This element indicates whether a student on academic or progress probation, or facing dismissal received support services during the reporting term. SS10 is intended to capture information on services for students on academic progress or probation as described in Title 5, section 55525. Follow-up services for other at-risk students as described in section 55525 should be reported in SS11.

SS10 Codes for academic progress probation service:
    A – Student received academic or progress probation support service.
    C – Student facing dismissal received support service.
    N – Student did not receive academic/progress probation or dismissal support service.

FHDA Procedures/Data Sources

- SARS, any of the following is true:
  - SARS meeting reason cross walked to SS10 Probation Services (see meeting reason code in website)
  - Student was identified as being on probation or facing dismissal during the prior primary term and met with a counselor during the reporting term, as documented by SARS. The reason code for the meeting needs to be cross walked to SS08 (counseling services).

- Canvas, completed Foothill online course for students on academic probation. Report provided by Counseling Office at Foothill College.

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**SS11 STUDENT-SUCCESS-OTHER-SERVICES**

*(Funding level 5%: Count up to four times *(once per term), after first term, during the time student attends the college)*

This element indicates whether a student received other types of student success support services during the reporting term, including: placement assessment retesting, career interest assessment and exploration, assessment for placement in other disciplines besides English, Math or ESL, other orientations beyond the initial orientation, or other education planning or follow-up services.

**FHDA Procedures/Data Sources**

SS11 has four characters or positions; for each position indicate "yes" (1) or "no" (0).

Student received services related to:

- **Position 1: Other orientation services**
  - Student enrolled in Pass the Torch course by census date during the term
  - SARS data; reason code linked to follow-up orientation
  - Students received initial orientation during a previous and the reporting term

- **Position 2: Career, interest, or subsequent placement assessment services.**
  - Courses previously identified as providing career planning or aptitude assessment (see website for courses identified as providing this type of service)
  - SARS data; reason code linked to follow-up Career, interest, or subsequent placement assessment services

- **Position 3: Other follow-up education planning service.**
  - Modifications to an education plan developed during a prior or the reporting term
  - SARS: (see website for meeting reasons identified as providing this type of service)

- **Position 4: Other academic progress service**
  - SARS data; reason code linked to counseling
    - One meeting with a counselor during the term and having reported counseling services during a previous term during the academic year
    - More than one meeting during the term
  - Students active in any of these special program during the reporting term: Puente, Middle College, College Now, Sankofa, MPS, First Year Experience, CalWorks, DSPS, or EOPS
Appendix A

Processing Degree Works Data for MIS Student Success, SS09 Education Plan Development

The following describes main steps for importing data from Degree Works for the MIS SS (Student Success) report.

1. Taking into account a term start date, data is imported from three tables in Degree Works (SEP Plan, SEP Plan Term, and SEP Plan Class) to related tables in the folder LPARENT within the ODS system: Temp SEP Plan (general information for the education plan, such as date, lock status, active status and school), TEMP Plan Term (identifies all terms or academic periods covered by the plan), and Temp SEP Plan Class (identifies all the courses included in the plan).

2. The primary key (PK) constraints for the temp tables in LPARENT make sure that the records stored in these tables do not have null in any of the key fields and are unique (i.e., the data import will abort if any of the records violate the rules implicit in the constraint). Essentially, the scripts used to upload data to each temp table can only inserts records that are unique and have a “not null” value for each of the following:
   a. Temp SEP Plan: Student ID, Plan ID
   b. Temp SEP Plan Term: Term ID, Plan ID, Group ID
   c. Temp SEP Plan Class: Group ID, Sequence, Course Discipline, Course Number

3. As shown in Figure 1, records from the temp tables are linked (equal join or link, which excludes any “orphan” record) and placed into a temporary (Temp) table. Only records with related data in all there tables, including course data, will be inserted into TEMP. Descriptive statistics analyses are then run to check on student headcount and number of plans developed to detect any data issues prior to the final upload.

4. Data is then moved to the permanent table, MIS Degw Stud Plan. In this table the records are checked for discrepancies among the school ID and the terms for the courses in the plan (first and last term/academic period covered by the plan). If the start and end terms within the plan are inconsistent with the school ID, the school ID is changed (e.g., if the term or academic period codes end with ‘1’ and the school ID is ‘DU’, then school ID is updated to ‘FU’).1

5. The data field “TERM_COUNT” in MIS Degw Stud Plan is used to classify the plan as abbreviated or comprehensive (less than two terms, abbreviated; three or more, comprehensive). For the MIS SS (Student Success), the data are then compared to data previously submitted to MIS (type of education plans previously reported for the student). Depending on previous data, the plan type may be changed or reported as a follow-up (see Figure 2.)

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1 The academic period college for the record is also impacted by the update. The academic period for the records links the plan to a reporting term and a college.
Figure A1.

Data flow from Degree Works to ODS-LPARENT

Notes
Checks for data discrepancies (within and across tables) are performed by the constraints (primary keys) on each table in ODS-LPARENT and the equal joins in the script used to upload the data in “Temp.” The use of temporary tables during the upload speeds the process and allows to more efficiently identify the source of any problem with the data or the upload.
Figure A2.
Determining Type of Education Plan for the Reporting Term in MIS SS09

Notes
Preliminary Ed Plan Status: Based on Degree Works data for the term, student declared major, and student participation in a categorical program (DSPS, EOPS, CalWorsk). When students become active in a categorical program, they are required to develop a student contract or education plan.
Previous Ed Plan Status: Type of plan reported to MIS for a previous term.
Reported to MIS: Type of plan to be reported in MIS for the term.