

OPTIONS PS=5000 LS=256 NONUMBER NOCENTER;

%LET PathRoot=F:\AchievingtheDream\ATD_XXXX\PDP; /*Change to your path*/

LIBNAME Cohort "&PathRoot\CohortFiles";
LIBNAME Course "&PathRoot\CourseFiles";
LIBNAME ALL "&PathRoot\SAS\Datasets\100_AllCohorts";
LIBNAME PDP "&PathRoot\Uploads";

/*Enter Student Clearinghouse Information*/

%LET SBD=20191112; /* NSC File Completion Date */
%LET SC=XXXXXX; /* OPEID# */
%LET SA=XXXXXXXX; /*Service Account # for Header Row*/
%LET BC=00; /*Branch Code # for Header Row*/
%LET ID=XXXX; /*Institutional Short Name for Header Row*/
%LET SFTPMailbox=XXXXXXXXpdp; /*PDP Mailbox Address (OPEID: SA) & pdp*/

%LET yt01=2019SU /*Academic term using term acronym convention*/
%LET ch01=2018-19 /*Academic year*/
%LET chtm01=Summer; /*Academic term - Fall, Winter, Spring or Summer*/
%LET TermBeginDate=20180701 /*Term start date (YYYYMMDD)*/
%LET TermEndDate=20190630 /*Term end date (YYYYMMDD)*/

data WORK.test
%let EFFERR = 0; /* set the ERROR detection macro variable */
infile "&PathRoot\CohortFiles\&yt01..&ch01..&chtm01..&SBD..&SC..&SA..&BC..&ID..&SFTPMailbox";
MISCOVER DSD dcl=2/07 mstobs=2;

informat DTMM20. ;
informat Cohort \$60. ;
informat CohortTerm \$10. ;
informat SSN \$9. ;
informat ITIN \$9. ;
informat ID \$9. ;
informat FirstName \$60. ;
informat MiddleName \$60. ;
informat LastName \$60. ;
informat Address1 \$30. ;
informat Address2 \$30. ;

FACILITATING POSTSECONDARY DATA PARTNERSHIP DATA SUBMISSIONS AT NEBRASKA INDIAN COMMUNITY COLLEGE

TECHNICAL BRIEF



Achieving the Dream™

ACKNOWLEDGMENTS

This technical brief was developed in partnership with Achieving the Dream and Nebraska Indian Community College. ATD is especially grateful to Bobbie Frye from Achieving the Dream for her technical expertise in creating this document.

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DISCLAIMER

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INTRODUCTION

In 2019, Nebraska Indian Community College (NICC) joined the National Student Clearinghouse Postsecondary Data Partnership (PDP). This technical brief will discuss an approach to prepare Postsecondary Data Partnership (PDP) data collections that consist of the development of both term cohort files and course files. The process utilized course and cohort file templates provided by National Student Clearinghouse, query extractions developed by the Empower representative, data cleaning by the institution's registrar, and further processing by the Achieving the Dream (ATD) data coach, utilizing SAS software which is useful for processing and merging files. The data preparation approach was employed by NICC during the initial PDP data collection in the fall of 2019 and yielded successful participation in the PDP. This brief can be used as an approach for data preparation for the PDP data collection process.



SUMMARY

The Clearinghouse Postsecondary Data Partnership data collection requires two types of files. The first type of file is a single-record student cohort file that consists of all new students at the institution for the term being reported. The second type of file is a multiple-record course file that consists of student's course records for the term being reported.

The cohort file is created for each term and submitted to the Clearinghouse with cohort identifying information such as Cohort Term, Cohort Year, and Student ID. To facilitate the data collections, the data preparer saves the cohort files along with all the identifying information. When the course files are prepared, the cohort files are merged with the course files by Student ID.

The process accomplishes two objectives: 1) creates and saves the cohort files for uploading to the Clearinghouse, and for future processing and 2) creates the course files that are uploaded to the Clearinghouse and includes the cohort students enrolled during the term being reported.

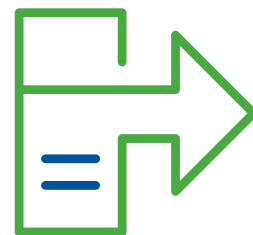
TECHNICAL DETAILS FOR DATA FILE PREPARATION AND SUBMISSION

Nebraska Indian Community College worked with the Empower vendor, utilizing the Clearinghouse file documentation and sample templates, to write queries for both the cohort and course file extracts for each term, fall, spring, and summer, fall 2012-summer 2019. The files were saved in CSV format and shared with the ATD data coach to prepare for file submission to the Clearinghouse. The cohort files included new students in each term being reported. The registrar at the institution manually completed the template with the required data fields that were missing. To begin processing in SAS, the analyst imported the cohort files into the SAS environment and scanned for missing data fields. Data fields that were not populated in the institution's files were subsequently coded using the SAS software. The cohort files were processed using appropriate field formatting and prepared for uploading to the Clearinghouse. The cohort files were saved for future processing of the course files.

The initial course file extracts were handled similarly by importing the course files into the SAS environment and scanning for missing data fields. Likewise, SAS software was utilized to code data fields that were missing in the institution's course files. One challenge with the course file was it included all students enrolled during the term. To create a file that included cohort students, all of the cohort files to date, were merged with the term's course file to create a final course file for the term. Since the cohort files included the initial identifying information of cohort term, cohort year, and student ID, this information was incorporated into the course file and the results captured all cohorts' information for the term.

Data Extractions

- To facilitate the preparation of cohort and course files, the Clearinghouse provides documentation for file formatting and field length requirements. Additionally, the Clearinghouse provides sample templates that can be downloaded and used as a reference in preparation of the data files. Nebraska Indian Community College worked with the Empower vendor, utilizing the file documentation and sample templates, to write queries for both the cohort and course file extracts for each term, fall, spring, and summer, fall 2012-summer 2019. The files were saved in CSV format and shared with the ATD data coach to prepare for file submission to the Clearinghouse.





Cohort Files

- The cohort files included new students in each term being reported. While the queries were able to capture new students in each term being reported, not all of the information was captured in the query process. The registrar at the institution completed the template with the required data fields by manually adding the missing information. In some instances, the registrar looked up the information on the individual student and populated the missing fields. Information that could not be located in the student information system was left blank. If the information is required by the Clearinghouse, missing information will create an error when files are uploaded to the Clearinghouse. File preparers will need to adhere to field requirements and ensure that required fields are provided for each student in the file.
- To begin a subsequent data quality check, the ATD Data Coach imported the cohort files into the SAS environment and scanned for missing data fields. Data fields that were not populated in the institution's files were subsequently coded using SAS software. The process required collaboration with the registrar to ensure that the fields were accurately coded. The cohort files were processed in the SAS environment using appropriate field formatting and prepared for uploading to the Clearinghouse. The cohort files were saved for future processing of the course files.



Course Files

- The course files included new students in each term being reported. While the queries were able to capture all students in each term being reported, not all of the information was captured in the query process. The registrar at the institution completed the template with the required data fields by manually adding the missing information. In some instances, the registrar looked up the information on the individual student and populated the missing fields. Information that could not be located in the student information system was left blank. If the information is required by the Clearinghouse, missing information will create an error when files are uploaded to the Clearinghouse. File preparers will need to adhere to field requirements and ensure that required fields are provided for each student in the file. This also ensures that the PDP reports will provide quality reports that enhance student success efforts locally and across the network.

- The initial course file extracts were handled similarly by importing the course files into the SAS environment and scanning for missing data fields. Likewise, SAS software was utilized to code data fields that were missing in the institution's course files. The course file is the 'meat' of the longitudinal reporting function of the PDP data and hence includes course grades information, term grade point averages, course Cip Codes, credit hours attempted and completed during the term, etc. (See documentation for a complete listing). The main distinction of the course file from the cohort file is that information is associated with the course(s) with which students are enrolled, and multiple instances of student records are provided.
- Course grades are typically stored in a student information system utilizing numerical values or letter grades. The PDP utilizes numerical coding for grading systems on a 4.0 scale. At NICC, SAS software was utilized to translate the letter grades into the appropriate numerical coding. The registrar provided documentation from the institution which provided the letter grade translations.

Challenges during file creations

- One challenge with the initial course file extract was it included all students enrolled during the term. To create a file that included cohort students, all of the cohort files to date, were merged with the term's course file to create a final course file for the term. Since the cohort files included the initial identifying information of cohort term, cohort year, and student id, this information was incorporated into the course file and the results captured all cohorts' information for the reported term.
- The cohort selection process at NICC utilized queries that select students from the student information system that met new student criteria. In a few instances, students were selected for more than one cohort. A quality check was added to the course file creation process to identify duplicate records.



RESULTS

AND CONCLUSIONS



The results of utilizing the data collection process outline here demonstrated an efficient process for handling the PDP data collections. Cohorts of students were reported in the first term of enrollment and also included in subsequent course data collections if enrolled during the reporting term.

Students were reported in the cohort files in a single record instance along with identifying information. The identifying information was stored in a cohort dataset and used for subsequent course data collections. Students were reported once in a cohort file which equipped the Clearinghouse research center with compiling the institution's new student enrollment trends and demographics.

The multi-record course files included all of the student cohorts to date, in all courses enrolled during the term. Since course files include the reporting term and term outcomes, the files facilitate longitudinal cohort tracking and metrics measured at points-in-time along the student's journey.

The PDP data files will be compiled and reported to NICC in early spring 2020 in two ways: tableau dashboards and an analysis ready file. Utilizing queries in the Empower system and populating the cohort and course templates, Nebraska Indian CC prepared the historical data collections for the PDP in the fall of 2019. The ATD data coach subsequently processed the files in the SAS environment. The institution will gain access to tableau dashboards including cohort enrollment trends, early momentum metrics, student outcomes including completion and transfer, for all of the cohorts submitted during the data collection.

By participating in the Clearinghouse data collections on an on-going basis, NICC will be able to determine the impacts of process, policy, and procedural changes that emerge from utilizing the Tableau dashboards to improve student experiences at the institution. Data partners and the institution also have access to the analysis ready file for future processing and to aid in identifying additional student success improvements.

Recommendations

- The initial cohort file can be saved for future use and creates a record for each student that is utilized in subsequent course files.
- The multiple record course file adheres to reporting information that is associated with the course(s) with which students are enrolled, with some exceptions. For example, term grade point averages are associated with the student and captured at the end of the term. Additionally, the cohort identifying information is associated with the student and/or the term being reported. Pay careful attention to the field requirements and carefully read the requirements to conceptualize the file structure needed.
- The initial data collection is the most time consuming including up to 7 years of data, but the process outlined in this document can be replicated for future data collections.
- While the process can be replicated for future data collections, coding changes in the student information system will need to be addressed in the on-going query extracts. Missing data fields are often an indication of a change in the location of data stored in the student information system.
- The query process developed at NICC will evolve and improve over time as missing data fields are handled in the query.
- The query process developed at NICC through the assistance of the Empower vendor helped to develop a potential vendor solution to handling the Clearinghouse PDP data collections and increasing participation across the Achieving the Dream (ATD,2020) network of colleges, and beyond.



REFERENCES

Achieving the Dream. Our Network Retrieved from <https://www.achievingthedream.org/our-network>

Empower Student Information System <https://www.empowersis.com/>

Nebraska Indian Community College <http://www.thenicc.edu/index.php/en/>

National Student Clearinghouse Postsecondary Data Partnership. 2020. Guides: Cohort Template File Retrieved from https://studentclearinghouse.info/onestop/wp-content/uploads/PDP_Cohort_Template_2020.csv

National Student Clearinghouse Postsecondary Data Partnership. 2020. Guides: Course Template File Retrieved from https://studentclearinghouse.info/onestop/wp-content/uploads/PDP_Course_Template_2020.csv

National Student Clearinghouse Postsecondary Data Partnership Data Submission Guide. 2019. Retrieved from <https://studentclearinghouse.info/onestop/wp-content/uploads/PDP-Submission-Guide.pdf>

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SAS support website: <https://support.sas.com/en/technical-support.html>

U.S. Department of Education National Center for Education Statistics. 2020. List of Classifications of Instructional Programs (CIP) Retrieved from <https://nces.ed.gov/ipeds/cipcode>

APPENDIX A. Entire Cohort Program for Sample Institution

```
OPTIONS PS=5000 LS=256 NONUMBER NOCENTER;  
%LET PathRoot=F:\AchievingtheDream\ATD_XXXX\PDP; /*Change to your path*/  
LIBNAME Cohort "&PathRoot\CohortFiles";  
LIBNAME Course "&PathRoot\CourseFiles";  
LIBNAME ALL "&PathRoot\SASDatasets\00_AllCohorts";  
LIBNAME PDP "&PathRoot\Uploads";
```

```
/*Enter Student Clearinghouse Information*/
```

```
%LET SBD=20191112; /* Clearinghouse File Completion Date */  
%LET SC=XXXXXX; /* OPEID# */  
%LET SA=XXXXXXXX; /*Service Account # for Header Row*/  
%LET BC=00 /*Branch Code # for Header Row*/  
%LET ID=XXXX; /*Institutional Short Name for Header Row*/  
%LET SFTPMailbox=XXXXXXXXpdp; /*PDP Mailbox Address (OPEID, BC,) & pdp*/
```

```
%LET yf01=2019SU; /*Academic term using term naming convention*/  
%LET ch01=2018-19; /*Academic year*/  
%LET chtm01=Summer; /*PDP term - Fall, Winter Spring or Summer*/  
%LET TermBeginDate=20190521; /*Term Begin Date in this format, yyyyymmdd*/  
%LET TermEndDate=20190720; /*Term End Date in this format, yyyyymmdd*/
```

```
data WORK.test ;  
%let _EFIERR_ = 0; /* set the ERROR detection macro variable */  
infile "&Pathroot\CohortFiles\&yf01..csv" delimiter = `';  
MISSOVER DSD lrecl=32767 firstobs=2 ;  
informat CH1 $2. ;  
informat Cohort $10. ;  
informat CohortTerm $10. ;  
informat SSN 9. ;  
informat ITIN 9. ;  
informat ID 9. ;  
informat FirstName $60. ;  
informat MiddleName $60. ;  
informat LastName $60. ;  
informat Address1 $30. ;  
informat Address2 $30. ;  
informat City $30. ;  
informat State $2. ;  
informat Zip $10. ;  
informat Country $2. ;  
informat Birthdate $8. ;
```

informat Ethnicity \$2. ;
informat Race \$2. ;
informat InstitutionIDType \$5. ;
informat InstitutionID \$8. ;
informat HSDip \$1. ;
informat HSDipYr \$4. ;
informat HSGPA 4.2 ;
informat HSWeightedGPA 4.2 ;
informat FirstGen \$1. ;
informat Dual \$2. ;
informat EnrollmentType \$1. ;
informat NumberofCreditsAttemptedTR 6.;
informat NumberofCreditsAcceptedTR 8;
informat MathPlacement \$2. ;
informat EngPlacement \$2. ;
informat GatewayMath \$2. ;
informat GatewayEnglish \$2. ;

input

CH1 \$
Cohort \$
CohortTerm \$
SSN
ITIN
ID
FirstName \$
MiddleName \$
LastName \$
Address1 \$
Address2 \$
City \$
State \$
Zip \$
Country \$
Birthdate \$
Ethnicity \$

Race \$
InstitutionIDType \$
InstitutionID \$
HSDip \$
HSDipYr \$
HSGPA
HSWeightedGPA
FirstGen \$
Dual \$
EnrollmentType \$
NumberofCreditsAttemptedTR

```

    NumberofCreditsAcceptedTR
    MathPlacement $
    EngPlacement $
    GatewayMath $
    GatewayEnglish $
;
if _ERROR_ then call symputx('_EFIERR_',1); /* set ERROR detection macro variable */

CohortTerm="&chtm01";
TermBegin="&TermBeginDate";
TermEnd="&TermEndDate";
Cohort="&ch01";
if Address1=' ' then Address1='UK';
if Address2=' ' then Address2=' ';
if City=' ' then City='UK';
if State=' ' then State='UK';
if FirstGen=' ' then FirstGen='N';
IF Ethnicity = ( ' ') THEN Ethnicity='UK';
If Ethnicity = 'H' then Race='UK';
InstitutionIDType='OPEID';
format InstitutionID $8.;
InstitutionID=cats ("&SC","&BC");
CH1='D1';

run;

/*Final Processing*/

Data Final&yf01 all .cohort_&yf01;
set test;
ITIN=' ';
SSN=' ';
run;

data test;
set /*input sas file*/
final&yf01 end=lsLast ;
file "&pathroot\Uploads\&SFTPMailbox'_cohort&yf01&SC .txt" dsd dlm=",";
If _N_=1 then do;
put
@1 "DCE01,&SA,&SC,&BC,,,,,&SBD,,&ID,,"
;

put

```

```

"CH1,Cohort,Cohort Term, Cohort Term Begin Date, Cohort Term End Date,
SSN,ITIN,Student ID,First Name,Middle Name,
Last Name,Street Line 1,Street Line 2,City,
State,Zip/Postal Code,Country,Date of Birth,Ethnicity,Race,Institution ID Type,Institution ID,HS
Completion Status,
HS Completion Year,HS Unweighted GPA,
HS Weighted GPA,First Gen,Dual and Summer Enrollment,Enrollment Type,
Number of College Credits Attempted to Transfer,Number of College Transfer Credits Accepted,
Math Placement,English Placement,Gateway Math Status,Gateway English Status"
;
end;

```

```

put CH1 Cohort CohortTerm TermBegin TermEnd SSN ITIN ID FirstName MiddleName LastName
Address1 Address2
City State Zip
Country Birthdate Ethnicity Race
InstitutionIDType InstitutionID HSDip HSDipYr
HSGPA HSWeightedGPA FirstGen Dual EnrollmentType
NumberofCreditsAttemptedTR NumberofCreditsAcceptedTR
MathPlacement EngPlacement
GatewayMath GatewayEnglish
;

```

*/*Sample Output Line*/*

```

IF IsLast=1 then do;
CT=_n_+3;
put @1 "T1"
@3 ','
@4 CT " "
;
end;
run;

```

APPENDIX B. Entire Course Program for Sample Institution

OPTIONS PS=**5000** LS=**256** NONUMBER NOCENTER;

%LET PathRoot=F:\AchievingtheDream\ATD_XXXX\PDP; /*Change to your path*/

LIBNAME Cohort "&PathRoot\CohortFiles";

LIBNAME Course "&PathRoot\CourseFiles";

LIBNAME ALL "&PathRoot\SASDatasets\00_AllCohorts";

LIBNAME PDP "&PathRoot\Uploads";

/*Enter Student Clearinghouse Information*/

%LET SBD=20191112; /* Clearinghouse File Completion Date */

%LET SC=XXXXXX; /* OPEID# */

%LET SA=XXXXXXXX; /*Service Account # for Header Row*/

%LET BC=00; /*Branch Code # for Header Row*/

%LET ID=XXXX; /*Institutional Short Name for Header Row*/

%LET SFTPMailbox=XXXXXXXXpdp; /*PDP Mailbox Address OPEID, BC, & pdp*/

%LET yt01=2019SU; /*Academic term using term naming convention*/

%LET ch01=2018-19; /*Academic year*/

%LET chtm01=Summer; /*PDP term - Fall, Winter Spring or Summer*/

/*Cohort Terms Reported*/

%LET yt1=2013FA;

%LET yt2=2014SP;

%LET yt3=2014SU;

%LET yt4=2014FA;

%LET yt5=2015SP;

%LET yt6=2015SU;

%LET yt7=2015FA;

%LET yt8=2016SP;

%LET yt9=2016SU;

%LET yt10=2016FA;

%LET yt11=2017SP;

%LET yt12=2017SU;

%LET yt13=2017FA;

%LET yt14=2018SP;

%LET yt15=2018SU;

%LET yt16=2018FA;

%LET yt17=2019SP;

%LET yt18=2019SU;

%LET yt19=2019FA;

```

data WORK.Course ;
%LET _EFIERR_ = 0; /* set the ERROR detection macro variable */
infile "&Pathroot\CourseFiles\&yft01 course.csv" delimiter = ',' MISSOVER DSD lrecl=32767 firstobs=2 ;
informat CH1 $2. ;
informat Cohort $7. ;
informat Cohort_Term $10. ;
informat Academic_Year $7. ;
informat Term $10. ;
informat Institution_ID_Type $5. ;
informat Institution_ID best32. ;
informat SSN best32. ;
informat ITIN $9. ;
informat ID 20. ;
informat FirstName $60. ;
informat MiddleName $60. ;
informat LastName $60. ;
informat ADCStuNameSuffix $10. ;
informat Address1 $30. ;
informat Address2 $30. ;
informat City $20. ;
informat State $2. ;
informat Zip $10. ;
informat Country $2. ;
informat Birthdate $20. ;
informat ADCStuPersonalPhone $20. ;
informat Pell $2. ;
informat ADCStuEmailAddress $255. ;
informat CompleteDevMath $4. ;
informat CompleteDevEnglish $4. ;
informat Intent $4. ;
informat DegreeType $2. ;
informat SemesterGPA best32. ;
informat CumulativeGPA best32. ;
informat CoursePrefix $50. ;
informat CourseNumber $20. ;
informat CourseSection $20. ;
informat CourseName $50. ;
informat ADCclsShortTitle $255. ;
informat CourseCIP $10. ;
informat CourseType $2. ;
informat MathOrEnglishGateway $10. ;
informat CorequisiteCourse $1. ;
informat CourseBeginDate $20. ;
informat CourseEndDate $20. ;
informat LetterGrade $20. ;
informat NumCreditsAttempt best32. ;

```



```
informat NumCreditsComplete best32. ;
informat Method $1. ;
informat Core_Course $1. ;
informat Core_Course_Type $1. ;
informat Core_Competency_Completed $1. ;
informat Total_Combined_Earned___Transf $1. ;
informat Purpose_of_Course_Exchange best32. ;
informat Certification_Endorsed_Curricu $1. ;
informat Certificate_Endorsing_Industry $1. ;
informat Grade_Effective_Date $1. ;
informat DGI_Institutional_ID_Type best32. ;
informat DGI_Institutional_ID best32. ;
informat DGI_Student_ID $1. ;
```

input

```
CHI $
Cohort $
Cohort_Term $
Academic_Year $
Term $
Institution_ID_Type $
Institution_ID
SSN
ITIN $
ID
FirstName $
MiddleName $
LastName $
ADCStuNameSuffix $
Address1 $
Address2 $
City $
State $
Zip
Country $
Birthdate
ADCStuPersonalPhone $
Pell $
ADCStuEmailAddress $
CompleteDevMath $
CompleteDevEnglish $
Intent $
DegreeType $
SemesterGPA
CummulativeGPA
CoursePrefix $
```

```

CourseNumber
CourseSection $
CourseName $
ADCCIsShortTitle $
CourseCIP
CourseType $
MathOrEnglishGateway $
CorequisiteCourse $
CourseBeginDate
CourseEndDate
LetterGrade $
NumCreditsAttempt
NumCreditsComplete
Method $
Core_Course $
Core_Course_Type $
Core_Competency_Completed $
Total_Combined_Earned___Transf $
Purpose_of_Course_Exchange
Certification_Endorsed_Curricu $
Certificate_Endorsing_Industry $
Grade_Effective_Date $
DGI_Institutional_ID_Type
DGI_Institutional_ID
DGI_Student_ID $
;
if _ERROR_ then call symputx('_EFIERR_',1); /* set ERROR detection macro variable */

```

```

BeginYear=substr(CourseBeginDate,7,2);
BeginMonth=substr(CourseBeginDate,1,2);
BeginDay=substr(CourseBeginDate,4,2);
CourseBeginDate=cats('20',beginyear,beginmonth,beginday);
EndYear=substr(CourseEndDate,7,2);
EndMonth=substr(CourseEndDate,1,2);
EndDay=substr(CourseEndDate,4,2);
CourseEndDate=cats('20',Endyear,Endmonth,Endday);
BirthYear=substr(BirthDate,7,2);
BirthMonth=substr(BirthDate,1,2);
BirthDay=substr(BirthDate,4,2);
if BirthYear <= substr("&yt01",3,2) then
BirthDate=cats ('20',birthyear,birthmonth,birthday);
else BirthDate=cats ('19',birthyear,birthmonth,birthday);
Course=cats(CoursePrefix, CourseNumber);
if substr(Course,1,4) in ('MTH1') or substr(course,1,5) in ('MATH1')
then MathorEnglishGateway='M';
else if substr(Course,1,4) in ('ENGI') or substr(course,1,5)in ('ENGL1') then

```

```
MathorEnglishGateway='E';  
else MathorEnglishGateway='NA';
```

```
If NumCreditsAttempt < NumCreditsComplete then do;  
NumCreditsAttempt=NumCreditsComplete;  
end;
```

```
If LetterGrade='A' then grade='4.00';  
else if LetterGrade='A-' then grade='3.67';  
else if LetterGrade='B+' then grade='3.33';  
else if LetterGrade='B' then grade='3.00';  
else if LetterGrade='B-' then grade='2.67';  
else if LetterGrade='C+' then grade='2.33';  
else if LetterGrade='C' then grade='2.00';  
else if LetterGrade='C-' then grade='1.67';  
else if LetterGrade='D' then grade='1.00';  
else if LetterGrade='F' then grade='F';  
else if LetterGrade in ('P') then Grade='P';  
else if LetterGrade in ('R') then Grade='O';  
else if LetterGrade='Audit' then Grade='A';  
else if LetterGrade in ('W','UW') then Grade='W';  
else if LetterGrade='UF' then Grade='F';  
else if substr(LetterGrade,1,1)='I' then Grade='I';  
else if LetterGrade='`' then Grade='M';  
else Grade='O';
```

```
If Country='UN' then do;  
Country='US';  
end;  
run;
```

```
proc sort; by id;  
run;
```

```
/*Combine Cohorts Reported to Date*/
```

```
%macro cohort;
```

```
proc sort data=All .Cohort_&yt out=cohort&yt (keep=id cohort cohortterm) ; by id;  
run;
```

```
%mend;
```

```
%LET yt=&yt1; %cohort;
```

```
%LET yt=&yt2; %cohort;
```

```
%LET yt=&yt1; %cohort;
```

```
%LET yt=&yt2; %cohort;
```

```
%LET yt=&yt3; %cohort;
```

```
%LET yt=&yt4; %cohort;
```

```
%LET yt=&yt5; %cohort;
```

```
%LET yt=&yt6; %cohort;
```

```
%LET yt=&yt7; %cohort;  
%LET yt=&yt8; %cohort;  
%LET yt=&yt9; %cohort;  
%LET yt=&yt10; %cohort;  
%LET yt=&yt11; %cohort;  
%LET yt=&yt12; %cohort;  
%LET yt=&yt13; %cohort;  
%LET yt=&yt14; %cohort;  
%LET yt=&yt15; %cohort;  
%LET yt=&yt16; %cohort;  
%LET yt=&yt17; %cohort;  
%LET yt=&yt18; %cohort;  
/*%LET yt=&yt19; %cohort;  
%LET yt=&yt20; %cohort;  
%LET yt=&yt21; %cohort;  
%LET yt=&yt22; %cohort;  
%LET yt=&yt23; %cohort;  
%LET yt=&yt24; %cohort;*/
```

```
/*Facilitates the Coding Change, to Cohort Term from Numeric to Fall, Winter, Spring, Summer, in  
September 2019*/
```

```
Data allcohorts&yt01;  
format CohortTerm $10.;  
set cohort&yt1  
cohort&yt2  
cohort&yt3  
cohort&yt4  
cohort&yt5  
cohort&yt6  
cohort&yt7  
cohort&yt8  
cohort&yt9  
cohort&yt10  
cohort&yt11  
cohort&yt12  
cohort&yt13  
cohort&yt14  
cohort&yt15  
cohort&yt16  
cohort&yt17  
cohort&yt18  
/*cohort&yt19  
cohort&yt20  
cohort&yt21  
cohort&yt22  
cohort&yt23  
cohort&yt24*/
```

```

;
if CohortTerm='1' then CohortTerm='Fall';
if CohortTerm='3' then CohortTerm='Spring';
if CohortTerm='6' then CohortTerm='Summer';
;
proc sort; by id;
run;
/*Code Developmental Requirements*/
Data DEVGroup&yt01;
set All .Cohort_&yt1
All .Cohort_&yt2
All .Cohort_&yt3
All .Cohort_&yt4
All .Cohort_&yt5
All .Cohort_&yt6
All .Cohort_&yt7
All .Cohort_&yt8
All .Cohort_&yt9
All .Cohort_&yt10
All .Cohort_&yt11
All .Cohort_&yt12
All .Cohort_&yt13
All .Cohort_&yt14
All .Cohort_&yt15
All .Cohort_&yt16
All .Cohort_&yt17
All .Cohort_&yt18
;
proc sort data=DEVGroup&yt01; by id;
run;

/*Begin Processing Developmental Completions*/
Data Course2;
merge course (in=a) devgroup&yt01(in=b keep=id MathPlacement EngPlacement ); by id;;
format completedevmath $2. completedevenglish $2.;
completedevmath=' `';
completedevenglish=' `';
if a;
if mathplacement='N' then do;
CompleteDevMath='D';
If course in ('MTH99','MATH904') and grade in ('P')
then CompleteDevMath='C';
end;
if mathplacement='C' then do;
CompleteDevMath='NA';
end;

```

```

if engplacement='N' then do;
CompleteDevEnglish='D';
If course in ('ENG99', 'ENGL900') and grade in ('P')
then CompleteDevEnglish='C';
end;
if engplacement='C' then do;
CompleteDevEnglish='NA';
end;
run;

```

```

Data devmath (keep=id completedevmath) deveng (keep=id completedevenglish);
set course2;
run;

```

```

proc sort data=devmath; by completedevmath;
proc sort data=devmath nodupkey; by id;
proc sort data=deveng; by completedevenglish;
proc sort data=deveng nodupkey; by id;
run;

```

```

Data CombDev;
merge deveng devmath; by id;
run;

```

```

/*Finish Creating Student Completion Attribute*/
Data course3;
merge course2 (in=a) combdev ; by id;
if a;
if CompleteDevEnglish= ' ' then CompleteDevEnglish='NA';
if CompleteDevMath= ' ' then CompleteDevMath='NA';
run;

```

```

/*Final Merge*/
Data final&yt01;
format DGInstitutionID $8. InstitutionID $8. TotalCombCredits 10. CoreCourseType $20.
GradeEffectiveDate $8. DGISStudentID $20.;
merge allcohorts&yt01 (in=a) course3 (in=b drop=Cohort Cohort_term term); by id;
if a and b;
AcademicYear="&ch01";
Term="&chtm01";
SectionID='Missing';
SSN=' ';
ITIN=' ';
CH1='D1';
CoreCourse=' ';
CoreCourseType=' ';

```

```

CoreCompetencyCompleted=' ';
PurposeCourseExchange=2;
CertCurriculumProgram=' ';
CertEndorsingIndustry=' ';
GradeEffectiveDate=' ';
CourseDescription=' ';
TotalCombCredits=.;
InstitutionIDType='OPEID';
InstitutionID=cats("&SC","&BC");

```

```

DGIInstitutionIDType='OPEID';
DGIInstitutionID=cats("&SC","&BC");
DGIStudentID=ID;
Semestergpa3=put(semestergpa,4.2);
if SemesterGPA3=. then SemesterGPA2='Missing';
else SemesterGPA2=SemesterGPA3;
Cummulativegpa3=put(cummulativegpa,4.2);
if CummulativeGPA3=. then CummulativeGPA2='Missing';
else CummulativeGPA2=CummulativeGPA3;

```

RUN;

*/*Export to Text File*/*

```

data test2;
set /*input sas file*/
Final&y†01 end=IsLast ;
file "&pathroot\Uploads\'&SFTPMailbox'_course&y†01&SC .txt" DSD dlm=",";
If _N_=1 then do;
put
@1 "DCE02,&SA,&SC,&BC,,,,&SBD,,&ID,,"
;
put
"CH1,Cohort,Cohort Term,Academic Year,Term,Institution ID Type,Institution ID,
SSN,ITIN,Student ID,First Name,Middle Name,
Last Name,Suffix, Current Street 1,Current Street 2,Current City,
Current State,Current Zip/Postal Code,Current Country,Date of Birth,
Student Phone Number,Pell Recipient,Student
Email,CompleteDevMath,CompleteDevEnglish,TransferIntent,
Degree Type Sought,Semester/Session GPA,Overall GPA,Course Prefix,Course Number,Section
ID,Course Name,Course Description,Course CIP,
Course Type,MathOrEnglishGateway,Co-requisite Course,Course Begin Date,
Course End Date,Grade,Number of Credits Attempted,Number of Credits Earned,Delivery Method,
Core Course,Core Course Type,Core Competency Completed,Total Combined Earned and
Transferred Credits,
Purpose of Course Exchange,Certification Endorsed Curriculum/Program,Certificate Endorsing Industry,
Grade Effective Date,DGI Institution ID Type,DGI Institution ID,DGI Student ID"

```

```

;
end;

put CH1 Cohort CohortTerm AcademicYear Term InstitutionIDType InstitutionID
SSN ITIN ID FirstName MiddleName
LastName ADCStuNameSuffix Address1 Address2 City
State Zip Country Birthdate
ADCStuPersonalPhone Pell ADCStuEmailAddress CompleteDevMath CompleteDevEnglish Intent
DegreeType SemesterGPA2 CumulativeGPA2 CoursePrefix CourseNumber SectionID CourseName
ADCCIsShortTitle CourseCIP
CourseType MathorEnglishGateway CorequisiteCourse CourseBeginDate
CourseEndDate Grade NumCreditsAttempt NumCreditsComplete Method
CoreCourse CoreCourseType CoreCompetencyCompleted TotalCombCredits
PurposeCourseExchange CertCurriculumProgram CertEndorsingIndustry
GradeEffectiveDate DGIInstitutionIDType DGIInstitutionID DGIStudentID
;

/*Sample Output Line*/

IF IsLast=1 then do;
CT=_n_+3;
put @1 "T1"
@3 ','
@4 CT " "
;
end;
run;

```




Achieving the Dream™

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