# IPEDS 12-MONTH ENROLLMENT SQL

-- XXX = 3-DIGIT YEAR

/\*

Changes made for the 2023-24 reporting year (COHORT YEAR C23):

1. Replaced DW\_KEY with EMPLID

2. Reporting # of Unknowns and # of "other" (X) genders

3. Added Dual Enrollment section (new: Part C)

4. Changed the DegreeSeek = Y criteria so that it does not include dual enrolled students.

DEGREE SEEKING: DEGREE\_SEEK = Y and (DUAL\_ENROLL is null or DUAL\_ENROLL NOT IN('1','2','3'))

NON DEGREE SEEKING: DEGREE\_SEEK = N or DUAL\_ENROLL IN('1','2','3')

5. Removed the Student Funded exclusion criteria and replace it with Intent <> 'W' to exclude CNED

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## CREATE 12MonthCohort and update Instructional Activity Credits

--DROP SYNONYMS IF THEY EXIST

IF EXISTS (SELECT \* FROM sys.synonyms WHERE NAME = 'STUDENT' and

SCHEMA\_ID = (SELECT schema\_id FROM SYS.SCHEMAS WHERE NAME = 'dbo'))

DROP SYNONYM dbo.STUDENT

IF EXISTS (SELECT \* FROM sys.synonyms WHERE NAME = 'STUCLASS' and

SCHEMA\_ID = (SELECT schema\_id FROM SYS.SCHEMAS WHERE NAME = 'dbo'))

DROP SYNONYM dbo.STUCLASS

--CREATE SYNONYMS

--FOR CURRENT PROCESSING YEAR

CREATE SYNONYM dbo.STUDENT FOR [SQL-4].SMIS.DW\_ENR.STUDENTXXX

CREATE SYNONYM dbo.STUCLASS FOR [SQL-4].SMIS.DW\_ENR.STUCLASSXXX

TRUNCATE TABLE dbo.[12MonthCohort]

--Insert non-Summer first quarter data into 12MonthCohort

INSERT INTO dbo.[12MonthCohort]

( EMPLID

, YEAR

, COLLEGE

, COL\_IPEDS\_UNIT

, FirstQtr

, FT\_PT

, DegreeSeeking

, FIRST\_TIME

, RACE

, RACE\_TITLE

, SEX

, SEX\_PRORATED

, INTENT

, RUNNING\_START\_STATUS

, STATE\_START

, CR\_EQUIV

, DualEnroll

, SEX\_ORIG

)

SELECT

a.EMPLID

, a.YEAR

, a.COLLEGE

, a.COL\_IPEDS\_UNIT

, a.FirstQtr

, CASE WHEN s1.FULL\_PART\_TIME\_IND = 'F' THEN 'FT' ELSE 'PT' END as FT\_PT

, CASE WHEN s1.DEGREE\_SEEK = 'N' or DUAL\_ENROLL IN('1','2','3') THEN 'N' ELSE 'Y' END as DegreeSeeking --Dual\_Enroll criteria added in COHORT YEAR C23

, CASE WHEN s1.SOURCE = '2' OR (s1.SOURCE='4' AND s1.PRIOR\_EDUC In ('14','15','16','17')) THEN 'TRANSFER-IN'

WHEN s1.STATE\_START = '1' AND s1.INTENT <> 'I' THEN 'FIRST-TIME FIRST-YEAR'

ELSE 'ALL OTHER STUDENTS' END as FIRST\_TIME

, CASE WHEN s1.INTERNATIONAL\_STUDENT = 'Y' THEN '1'

WHEN s1.HISPANIC = 'Y' THEN '2'

WHEN s1.RACE\_CODE = '4' THEN '2'

WHEN s1.RACE\_CODE IN('3','8') THEN '3'

WHEN s1.RACE\_CODE = '1' THEN '4'

WHEN s1.RACE\_CODE = '2' THEN '5'

WHEN s1.RACE\_CODE IN('5','7') THEN '6'

WHEN s1.RACE\_CODE = '6' THEN '7'

WHEN s1.RACE\_CODE = '9' THEN '8'

ELSE '9' END as RACE

, NULL --RACE\_TITLE (updated later)

, CASE WHEN s1.SEX NOT IN('M','F') THEN NULL ELSE s1.SEX END AS SEX

, NULL --SEX\_PRORATED (updated later)

, s1.INTENT

, s1.RUNNING\_START\_STATUS

, s1.STATE\_START

, NULL --CR\_EQUIV (updated later)

, CASE WHEN s1.DUAL\_ENROLL IN('1','2','3') THEN 'Y' ELSE 'N' END as DualEnroll

, s1.SEX

FROM

(

SELECT EMPLID, YEAR, COLLEGE, COL\_IPEDS\_UNIT, MIN(QUARTER) as FirstQtr

FROM dbo.STUDENT s

JOIN [SQL-4].LOOKUP.DW\_REF\_ENR.COL\_CD\_CTC c

ON s.COLLEGE = c.COL

WHERE QUARTER <> '1' AND

/\* criteria prior to 2023-24 reporting year:

((FUND\_SOURCE\_PRIORITY\_CATEGORY Is Null Or FUND\_SOURCE\_PRIORITY\_CATEGORY <> '3') AND

(INSTIT\_CATEGORY\_INDICATOR NOT LIKE '00001' AND INSTIT\_CATEGORY\_INDICATOR Not Like '0\_01\_' AND INSTIT\_CATEGORY\_INDICATOR Not Like '010\_\_'))

\*/

--the following criteria replaced the above criteria as of the 2023-24 reporting year (COHORT YEAR C23):

(INTENT <> 'W' AND INSTIT\_CATEGORY\_INDICATOR Not Like '0\_01\_' AND INSTIT\_CATEGORY\_INDICATOR Not Like '010\_\_' )

GROUP BY EMPLID, YEAR, COLLEGE, COL\_IPEDS\_UNIT

) a

JOIN dbo.STUDENT s1

ON a.EMPLID = s1.EMPLID and a.COLLEGE = s1.COLLEGE and a.YEAR = s1.YEAR and a.FirstQtr = s1.QUARTER

GROUP BY

a.EMPLID

, a.YEAR

, a.COLLEGE

, a.COL\_IPEDS\_UNIT

, a.FirstQtr

, CASE WHEN s1.FULL\_PART\_TIME\_IND = 'F' THEN 'FT' ELSE 'PT' END

, CASE WHEN s1.DEGREE\_SEEK = 'N' or DUAL\_ENROLL IN('1','2','3') THEN 'N' ELSE 'Y' END --Dual\_Enroll criteria added in COHORT YEAR C23

, CASE WHEN s1.SOURCE = '2' OR (s1.SOURCE='4' AND s1.PRIOR\_EDUC In('14','15','16','17')) THEN 'TRANSFER-IN'

WHEN s1.STATE\_START = '1' AND s1.INTENT <> 'I' THEN 'FIRST-TIME FIRST-YEAR'

ELSE 'ALL OTHER STUDENTS' END

, CASE WHEN s1.INTERNATIONAL\_STUDENT = 'Y' THEN '1'

WHEN s1.HISPANIC = 'Y' THEN '2'

WHEN s1.RACE\_CODE = '4' THEN '2'

WHEN s1.RACE\_CODE IN('3','8') THEN '3'

WHEN s1.RACE\_CODE = '1' THEN '4'

WHEN s1.RACE\_CODE = '2' THEN '5'

WHEN s1.RACE\_CODE IN('5','7') THEN '6'

WHEN s1.RACE\_CODE = '6' THEN '7'

WHEN s1.RACE\_CODE = '9' THEN '8'

ELSE '9' END

, CASE WHEN s1.SEX NOT IN('M','F') THEN NULL ELSE s1.SEX END

, s1.INTENT

, s1.RUNNING\_START\_STATUS

, s1.STATE\_START

, CASE WHEN s1.DUAL\_ENROLL IN('1','2','3') THEN 'Y' ELSE 'N' END

, s1.SEX

--Insert Summer students not already included

INSERT INTO dbo.[12MonthCohort]

( EMPLID

, YEAR

, COLLEGE

, COL\_IPEDS\_UNIT

, FirstQtr

, FT\_PT

, DegreeSeeking

, FIRST\_TIME

, RACE

, RACE\_TITLE

, SEX

, SEX\_PRORATED

, INTENT

, RUNNING\_START\_STATUS

, STATE\_START

, CR\_EQUIV

, DualEnroll

, SEX\_ORIG

)

SELECT

s.EMPLID

, s.YEAR

, s.COLLEGE

, l.COL\_IPEDS\_UNIT

, s.QUARTER

, CASE WHEN s.FULL\_PART\_TIME\_IND = 'F' THEN 'FT' ELSE 'PT' END as FT\_PT

, CASE WHEN s.DEGREE\_SEEK = 'N' or DUAL\_ENROLL IN('1','2','3') THEN 'N' ELSE 'Y' END as DegreeSeeking --Dual\_Enroll criteria added in COHORT YEAR C23

, CASE WHEN s.SOURCE = '2' OR (s.SOURCE='4' AND s.PRIOR\_EDUC In ('14','15','16','17')) THEN 'TRANSFER-IN'

WHEN s.STATE\_START = '1' AND s.INTENT <> 'I' THEN 'FIRST-TIME FIRST-YEAR'

ELSE 'ALL OTHER STUDENTS' END as FIRST\_TIME

, CASE WHEN s.INTERNATIONAL\_STUDENT = 'Y' THEN '1'

WHEN s.HISPANIC = 'Y' THEN '2'

WHEN s.RACE\_CODE = '4' THEN '2'

WHEN s.RACE\_CODE IN('3','8') THEN '3'

WHEN s.RACE\_CODE = '1' THEN '4'

WHEN s.RACE\_CODE = '2' THEN '5'

WHEN s.RACE\_CODE IN('5','7') THEN '6'

WHEN s.RACE\_CODE = '6' THEN '7'

WHEN s.RACE\_CODE = '9' THEN '8'

ELSE '9' END as RACE

, NULL --RACE\_TITLE (updated later)

, CASE WHEN s.SEX NOT IN('M','F') THEN NULL ELSE s.SEX END AS SEX

, NULL --SEX\_PRORATED (updated later)

, s.INTENT

, s.RUNNING\_START\_STATUS

, s.STATE\_START

, NULL --CR\_EQUIV (updated later)

, CASE WHEN s.DUAL\_ENROLL IN('1','2','3') THEN 'Y' ELSE 'N' END as DualEnroll

, s.SEX

FROM

dbo.STUDENT s

JOIN [SQL-4].LOOKUP.DW\_REF\_ENR.COL\_CD\_CTC l

ON s.COLLEGE = l.COL

LEFT JOIN dbo.[12MonthCohort] c

ON s.EMPLID = c.EMPLID and s.COLLEGE = c.COLLEGE and s.YEAR = c.YEAR

WHERE QUARTER = '1' AND

/\* criteria prior to 2023-24 reporting year:

((FUND\_SOURCE\_PRIORITY\_CATEGORY Is Null Or FUND\_SOURCE\_PRIORITY\_CATEGORY <> '3') AND

(INSTIT\_CATEGORY\_INDICATOR NOT LIKE '00001' AND INSTIT\_CATEGORY\_INDICATOR Not Like '0\_01\_' AND INSTIT\_CATEGORY\_INDICATOR Not Like '010\_\_'))

\*/

--the following criteria replaced the above criteria as of the 2023-24 reporting year (COHORT YEAR C23):

(s.INTENT <> 'W' AND INSTIT\_CATEGORY\_INDICATOR Not Like '0\_01\_' AND INSTIT\_CATEGORY\_INDICATOR Not Like '010\_\_' )

AND c.EMPLID is null

GROUP BY

s.EMPLID

, s.YEAR

, s.COLLEGE

, l.COL\_IPEDS\_UNIT

, s.QUARTER

, CASE WHEN s.FULL\_PART\_TIME\_IND = 'F' THEN 'FT' ELSE 'PT' END

, CASE WHEN s.DEGREE\_SEEK = 'N' or DUAL\_ENROLL IN('1','2','3') THEN 'N' ELSE 'Y' END --Dual\_Enroll criteria added in COHORT YEAR C23

, CASE WHEN s.SOURCE = '2' OR (s.SOURCE='4' AND s.PRIOR\_EDUC In('14','15','16','17')) THEN 'TRANSFER-IN'

WHEN s.STATE\_START = '1' AND s.INTENT <> 'I' THEN 'FIRST-TIME FIRST-YEAR'

ELSE 'ALL OTHER STUDENTS' END

, CASE WHEN s.INTERNATIONAL\_STUDENT = 'Y' THEN '1'

WHEN s.HISPANIC = 'Y' THEN '2'

WHEN s.RACE\_CODE = '4' THEN '2'

WHEN s.RACE\_CODE IN('3','8') THEN '3'

WHEN s.RACE\_CODE = '1' THEN '4'

WHEN s.RACE\_CODE = '2' THEN '5'

WHEN s.RACE\_CODE IN('5','7') THEN '6'

WHEN s.RACE\_CODE = '6' THEN '7'

WHEN s.RACE\_CODE = '9' THEN '8'

ELSE '9' END

, CASE WHEN s.SEX NOT IN('M','F') THEN NULL ELSE s.SEX END

, s.INTENT

, s.RUNNING\_START\_STATUS

, s.STATE\_START

, CASE WHEN s.DUAL\_ENROLL IN('1','2','3') THEN 'Y' ELSE 'N' END

, s.SEX

-- Update Previous Running Start to FIRST-TIME FIRST-YEAR

UPDATE dbo.[12MonthCohort]

SET FIRST\_TIME = 'FIRST-TIME FIRST-YEAR'

WHERE RUNNING\_START\_STATUS = '3' AND STATE\_START = '1' AND INTENT <> 'I' AND FIRST\_TIME <> 'FIRST-TIME FIRST-YEAR'

-- Update RACE\_TITLE

UPDATE c

SET c.RACE\_TITLE = l.IPEDS\_ETHNICITY\_TITLE

FROM dbo.[12MonthCohort] c

JOIN [SQL-4].LOOKUP.DW\_REF\_ENR.RACE\_ETHNICITY\_IPEDS l

ON c.RACE = l.IPEDS\_ETHNICITY\_CODE

/\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Update Instructional Activity\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*/

UPDATE e

SET CR\_EQUIV = a.CR\_EQUIV

FROM dbo.[12MonthCohort] e

JOIN

(select e.EMPLID, e.COLLEGE, e.YEAR, sum(s.cr\_equiv) as CR\_EQUIV

from dbo.[12monthcohort] e

join dbo.STUCLASS s

on e.EMPLID = s.EMPLID and e.college = s.college and e.year = s.year

where s.fund\_source\_enrollment <> 'U' and s.cip not like '32%'

group by e.EMPLID, e.COLLEGE, e.YEAR)a

ON e.EMPLID = a.EMPLID and e.college = a.college and e.year = a.year

--Make sure the following two counts match

select e.YEAR, sum(s.cr\_equiv) as [InstructionalActivityCredits\_JoinedToStuclass]

from dbo.[12monthcohort] e

join dbo.STUCLASS s

on e.EMPLID = s.EMPLID and e.college = s.college and e.year = s.year

where s.fund\_source\_enrollment <> 'U' and s.cip not like '32%'

group by e.YEAR

select YEAR, sum(cr\_equiv) as [InstructionalActivityCredits\_From12MonthCohort]

from dbo.[12monthcohort]

group by YEAR

--DROP SYNONYMS

DROP SYNONYM dbo.STUDENT

DROP SYNONYM dbo.STUCLASS

## Recode Unknown Gender

--Gender values such as “X” must be converted to Null in your cohort table in order for this process to work correctly.

--There should only be “M”, “F” and null values in the SEX field prior to running this procedure.

DECLARE @queryString varchar(1024)

DECLARE @CountTotal INT

DECLARE @countKnownTotal INT

DECLARE @countFemale INT

DECLARE @percentFemale float

DECLARE @changeToFemale INT

DECLARE @countGenderNull INT

DECLARE @collegeLoop INT

DECLARE @endLoop INT

DECLARE @college varchar(3)

DECLARE @race INT

DECLARE @raceStr varchar(1)

DECLARE @collegeIDString varchar(106)

--RESET FIELD

UPDATE dbo.[12MonthCohort]

SET SEX\_PRORATED = NULL

UPDATE dbo.[12MonthCohort]

SET SEX\_PRORATED = SEX

WHERE SEX IS NOT NULL

SET @race = 1

SET @collegeLoop = 1

SET @collegeIDString=('010020030040050062063064070080090100110120130140150160171172180190200210220230240250260270280290300') --add or remove college codes as needed. This process will not work correctly if this array is not correct.

SET @endLoop = (3 \* 33) +1

WHILE @collegeLoop < @endLoop

BEGIN

WHILE @race < 10

BEGIN

SET @changeToFemale = 0

SET @countFemale = 0

SET @countTotal = 0

SET @countKnownTotal = 0

SET @percentFemale = 0

SET @CountGenderNULL = 0

SET @raceStr = CAST(@race AS varchar(1))

SET @college = substring(@collegeIDString,@collegeLoop,3)

SELECT @countTotal = COUNT(\*) FROM dbo.[12MonthCohort] WHERE college = @college AND race = @raceStr

SELECT @countKnownTotal = COUNT(\*) FROM dbo.[12MonthCohort] WHERE college = @college AND race = @raceStr AND sex IS NOT null

SELECT @countFemale = COUNT(\*) FROM dbo.[12MonthCohort] WHERE sex = 'F' and college = @college AND race = @raceStr

IF @countFemale > 0

BEGIN

SELECT @percentFemale = ROUND(((@CountFemale \* 100) / @countKnownTotal),0)

SELECT @CountGenderNULL = COUNT(\*) FROM dbo.[12MonthCohort] WHERE sex IS NULL and college = @college AND race = @raceStr

IF (@CountGenderNULL > 0 )

SELECT @changeToFemale = ROUND((@CountGenderNull \* (@percentFemale / 100 )),0)

IF (@changeToFemale > 0 )

BEGIN

SET @queryString = 'UPDATE dbo.[12MonthCohort] SET SEX\_PRORATED = ''F'' FROM dbo.[12MonthCohort] JOIN (SELECT TOP '

+ CAST(@changeToFemale AS varchar(8) )

+ ' college, EMPLID FROM dbo.[12MonthCohort] WHERE sex is null '

+ ' AND college = ''' + @college + ''''

+ ' AND race = ''' + @raceStr + ''')'

+ ' AS #t1 ON dbo.[12MonthCohort].EMPLID = #t1.EMPLID '

+ ' AND dbo.[12MonthCohort].college = #t1.college '

+ ' WHERE dbo.[12MonthCohort].college = ''' + @college + ''''

+ ' AND dbo.[12MonthCohort].race = ''' + @raceStr + ''''

exec (@queryString)

UPDATE dbo.[12MonthCohort] SET SEX\_PRORATED = 'M' WHERE SEX\_PRORATED IS NULL AND college = @college AND race = @raceStr

END

ELSE

UPDATE dbo.[12MonthCohort] SET SEX\_PRORATED = 'M' WHERE SEX\_PRORATED IS NULL AND college = @college AND race = @raceStr

UPDATE dbo.[12MonthCohort] SET SEX\_PRORATED = 'M' WHERE SEX\_PRORATED IS NULL AND college = @college AND race = @raceStr

END

SET @race = @race + 1

END

SET @race = 1

SET @collegeLoop = @collegeLoop + 3

END

--Verify that there are no null SEX\_PRORATED records

select SEX, SEX\_PRORATED, count(\*) as COUNT

from dbo.[12MonthCohort]

group by SEX, SEX\_PRORATED order by SEX, SEX\_PRORATED

## PROCESS DISTANCE EDUCATION

--DROP SYNONYMS IF THEY EXIST

IF EXISTS (SELECT \* FROM sys.synonyms WHERE NAME = 'STUCLASS' and

SCHEMA\_ID = (SELECT schema\_id FROM SYS.SCHEMAS WHERE NAME = 'dbo'))

DROP SYNONYM STUCLASS

--CREATE SYNONYMS

--FOR CURRENT PROCESSING YEAR

CREATE SYNONYM dbo.STUCLASS FOR [SQL-4].SMIS.DW\_ENR.STUCLASSXXX

DROP TABLE dbo.[12Month\_DistanceEducation]

IF OBJECT\_ID ('tempdb..#StudentsByDistEd\_Temp') IS NOT NULL

DROP TABLE #StudentsByDistEd\_Temp

SELECT \* INTO #StudentsByDistEd\_Temp

FROM

(select c.EMPLID, c.college, c.year, left(s.dist\_ed,1) as dist\_ed, c.DegreeSeeking

from dbo.[12MonthCohort] c

join stuclass s

ON c.EMPLID = s.EMPLID and c.college = s.college and c.year = s.year

--where c.college = '010'

group by c.EMPLID, c.college, c.year, left(s.dist\_ed,1) , c.DegreeSeeking

)a

SELECT c.college, c.col\_ipeds\_unit, c.EMPLID,

CASE WHEN c.DegreeSeeking = 'Y' THEN 'degree\_seeking' ELSE 'not\_degree\_seeking' END AS DegreeSeeking,

CASE WHEN MAX(d.is\_dist\_ed)=10 AND MAX(n.not\_dist\_ed)=0 THEN 1 --dist\_ed\_switch 1: Students enrolled exclusively in distance education courses during the year

WHEN MAX(d.is\_dist\_ed)=10 AND MAX(n.not\_dist\_ed)=1 THEN 2 --dist\_ed\_switch 2: Students enrolled in at least one but not all distance education courses during the year

WHEN MAX(d.is\_dist\_ed)=0 AND MAX(n.not\_dist\_ed)=1 THEN 3 --dist\_ed\_switch 3: Students not enrolled in any distance education courses during the year

END AS dist\_ed\_switch

INTO dbo.[12Month\_DistanceEducation]

FROM dbo.[12MonthCohort] c

LEFT JOIN (SELECT DISTINCT college, EMPLID,

CASE WHEN dist\_ed IN('1','2','3','4') THEN 10 ELSE 0 END AS is\_dist\_ed

FROM #StudentsByDistEd\_Temp) d ON c.college = d.college AND c.EMPLID = d.EMPLID

LEFT JOIN (SELECT DISTINCT college, EMPLID,

CASE WHEN dist\_ed IN('1','2','3','4') THEN 0 ELSE 1 END AS not\_dist\_ed

FROM #StudentsByDistEd\_Temp) n ON c.college = n.college AND c.EMPLID = n.EMPLID

GROUP BY c.college, c.col\_ipeds\_unit, c.EMPLID, c.DegreeSeeking

ORDER BY c.college ;

--Cross check a few individual students to make sure the dist\_ed\_switch is working

-- 1: exclusively enrolled in DistEd 2: enrolled in some DistEd 3: not enrolled in any DistEd

/\*

select \* from #StudentsByDistEd\_Temp order by EMPLID, college

select \* from dbo.[12Month\_DistanceEducation] order by EMPLID, college

\*/

--Make sure the following 3 counts match:

select count(\*) as StudentsByDistEd\_UndupTotal from (select distinct EMPLID, college from #StudentsByDistEd\_Temp)a

select count(\*) as [12MonthCohort\_Total] from dbo.[12MonthCohort]

select count(\*) as [12Month\_DistanceEducation\_Total] from dbo.[12Month\_DistanceEducation]

DROP TABLE #StudentsByDistEd\_Temp

DROP SYNONYM dbo.STUCLASS