Project – Campus Student Failing Stats Report

Specifications

A report has been requested that displays student grading statistics for the 1st and 2nd six weeks of the school year. Its focus will be on the number of students who failed at least 1 class. The numbers will be represented by campus as well as a district total. Additionally, the report will include numerous categories by which students are represented. The details are as follows:

- Fiscal Year
- Campus ID
- Campus Name
- Grading Period
- Category (Group)
    - All students
    - Number of students per grade level
    - Number of students with Learn At Home instructional method declaration
    - Number of students with Learn At School instructional method declaration
    - Number of students with Learn At Home instructional method declaration by grade level.
    - Number of students with Learn At School instructional method declaration by grade level.
    - UIL students
    - Non-UIL stuedents
    - LEP (Limited English Proficiency) students
    - Non-LEP students
    - Student race/ethnicity
    - Student gender
- Number of total failing students (failing at least 1 class)
- Number of students failing only 1 class
- Number of students failing 2 or more classes
- Number of total students at campus/in district
- Percentage of total failing students (failing at least 1 class)
- Percentage of students failing only 1 class
- Percentage of students failing 2 or more classes

Project – Campus Student Failing Stats Report

Intended Audience

The main stakeholder of the report will be the school district's superintendent, who will use the data presented in the report to make informed decisions that will greatly impact students, primarily regarding contiunation of remote learning or return to in-class instruction.

Additionally, campus level personnel will utilize the report as a resource of instructional planning.

Scope

2-3 days

The first day of the project will include SQL coding and data checking. Day 2 will be comprised of transporting the code to a report, uploading it to Frontline Student Information System for testing, and troubleshooting any issues with executing the report. Day 3 will used to present the report to stakeholders and for the user acceptance phase of the project.
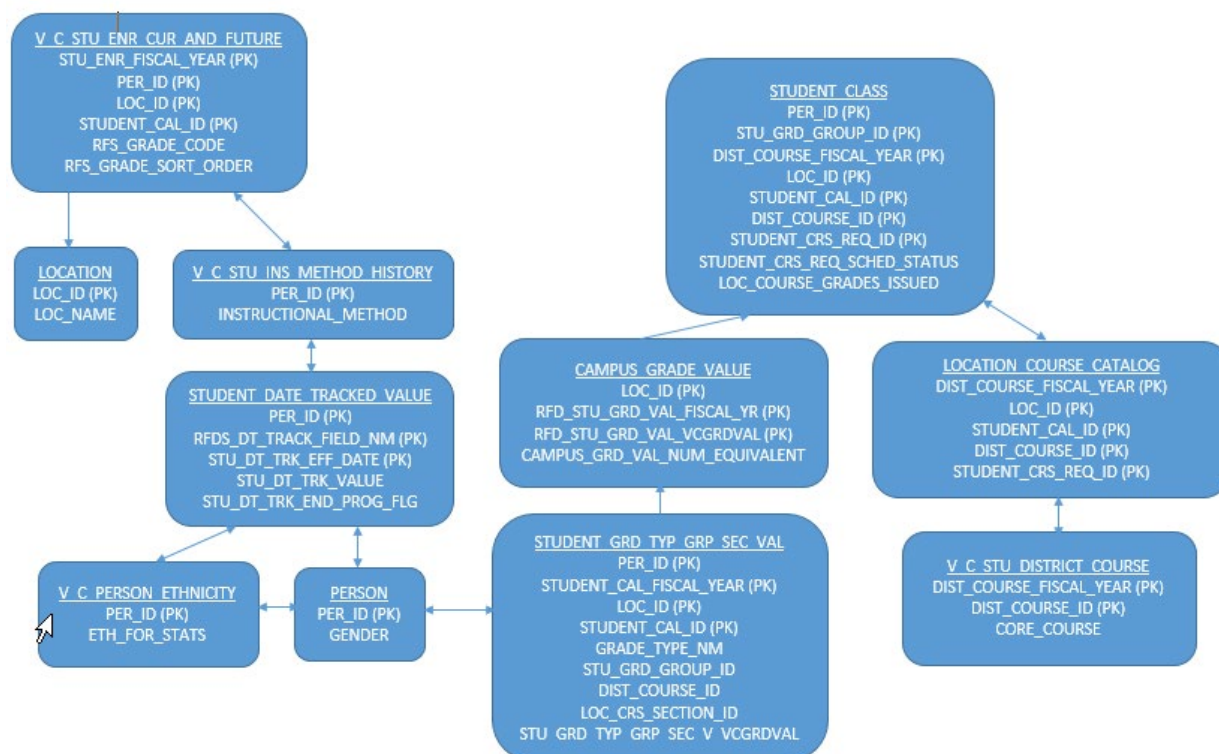
Business Rules

The data source will be Frontline's ERP database table, TEAMS. The data will first be coded for, extracted, examined, and tested before it is transformed into a report that users can run.

The main criteria is that students are currently enrolled; no withdrawn students will be included in the population. For the failing counts, each distinct student who is failing a class will be counted for each category. For example, 10th grade students who are failing just 1 class will only be counted for that particular group (10th graders). Next, the number of students will be summed to get the total number of students for the group. Then, the total number of failing students for that group of students will be divided by the total number of students for that particular group. For example, the number of students who are failing just 1 class in 10th grade will be divided by the total number of students in 10th grade. This process will be done for the total number of failing students, the number of students who are failing just 1 class, and the number of students who are failing 2 or more classes.

Project – Campus Student Failing Stats Report

Data Model

V_C_STU_ENR_CUR_AND_FUTURE
STU_ENR_FISCAL_YEAR (PK)
PER_ID (PK)
LOC_ID (PK)
STUDENT_CAL_ID (PK)
RFS_GRADE_CODE
RFS_GRADE_SORT_ORDER

LOCATION
LOC_ID (PK)
LOC_NAME

V_C_STU_INS_METHOD_HISTORY
PER_ID (PK)
INSTRUCTIONAL_METHOD

STUDENT_DATE_TRACKED_VALUE
PER_ID (PK)
RFDS_DT_TRACK_FIELD_NM (PK)
STU_DT_TRK_EFF_DATE (PK)
STU_DT_TRK_VALUE
STU_DT_TRK_END_PROG_FLG

V_C_PERSON_ETHNICITY
PER_ID (PK)
ETH_FOR_STATS

PERSON
PER_ID (PK)
GENDER

STUDENT_CLASS
PER_ID (PK)
STU_GRD_GROUP_ID (PK)
DIST_COURSE_FISCAL_YEAR (PK)
LOC_ID (PK)
STUDENT_CAL_ID (PK)
DIST_COURSE_ID (PK)
STUDENT_CRS_REQ_ID (PK)
STUDENT_CRS_REQ_SCHED_STATUS
LOC_COURSE_GRADES_ISSUED

CAMPUS_GRADE_VALUE
LOC_ID (PK)
RFD_STU_GRD_VAL_FISCAL_YR (PK)
RFD_STU_GRD_VAL_VCGRDVAL (PK)
CAMPUS_GRD_VAL_NUM_EQUIVALENT

STUDENT_GRD_TYP_GRP_SEC_VAL
PER_ID (PK)
STUDENT_CAL_FISCAL_YEAR (PK)
LOC_ID (PK)
STUDENT_CAL_ID (PK)
GRADE_TYPE_NM
STU_GRD_GROUP_ID
DIST_COURSE_ID
LOC_CRS_SECTION_ID
STU_GRD_TYP_GRP_SEC_V_VCGRDVAL

LOCATION_COURSE_CATALOG
DIST_COURSE_FISCAL_YEAR (PK)
LOC_ID (PK)
STUDENT_CAL_ID (PK)
DIST_COURSE_ID (PK)
STUDENT_CRS_REQ_ID (PK)

V_C_STU_DISTRICT_COURSE
DIST_COURSE_FISCAL_YEAR (PK)
DIST_COURSE_ID (PK)
CORE_COURSE

Data Attributes and Data Display

For each campus, the following fields will be displayed in horizontal format:

Fiscal Year, Campus ID, Campus Name, As of Date, Grading Period, Category, Failing Students (count), Failing Students 1 (only failing 1 class), Failing Students 2+ (failing 2 or more classes), Total Students (total number of students at the campus), Failing Pct (percentage of student failing at least 1 class), Failing Pct 1 (percentage of students failing only 1 class), Failing Pct 2+ (percentage of students failing 2 or more classes).

In addition to campus by campus data, there will also be a row that displays the statistics for the district as a whole, in which campuses can compare how students are performing based in the district scale.

Data Facts

For each student that fits the criteria of a group, that student will receive an integer of 1 in the code of the report. If they do not belong to that specific group, they will receive an integer of 0. This makes it easier to see who is part of the group and who is not. All of the 1s will then be summed so the numbers can be calculated to get counts and percentages.

Project – Campus Student Failing Stats Report

Report Naming Conventions

All field names derived from the database will be given an alias where necessary so that the name of the field is easily understood by the audience. For example, GRADE_TYPE_NM is a field name from the table STUDENT_GRD_TYP_GRP_SEC_VAL. This may not understood by the user of the report as to what data this field represents. Therefore, the field will be renamed to GRADING_PERIOD to gain maximum readability for reporting purposes.

The report title will be Campus Student Failing Stats. For the file name of the report, it will follow the traditional naming convention, TX212905_Campus_Student_Failing_Stats, which is the district ID number, provided by Texas Education Agency, followed by the report name separated by underscores.

Report Header

Each page of the report will include the district's logo and report title in its header, along with the values selected for each parameter by the user, a timestamp for when the report was run, and corresponding page number.

Report Footer

The file name of the report will be displayed at the bottom of the each page.

Security

There will be 2 copies of the report: one for campus-level personnel and one for district-level personnel. As a level of data security, campus-level personnel such as front office staff, counselors, and administrative assistants will only be able to select their particular campus when running the report. This is so that they don't see info for the other campuses. Although campus personnel will not be able to see statistics from other campuses, they will be able to see the district totals as a means to compare how their students are performing in relation to the entire district.

District level personnel will be able to see info from all campuses. This list includes superintendent, deputy superintendent, and most directors and coordinators of a particular area within the district.

Distribution

The report will be uploaded to the Frontline Student Information System for users to run at their request. The campus-level report will be distributed to the campus student grading

Project – Campus Student Failing Stats Report

report category and the district-level report will be distributed to the district grading report category so that the rules of security established by the district are abided by.

Training

A meeting with the superintendent along with his direct reports and administrative assistant will be held to give a demonstration on how to run the report.

As a follow-up, an email will be sent out to all users of the report, providing instructions and details of how to utilize it.

Deployment

Once the report has been created, it will be uploaded to the test category of our Frontline Student Information System. Only the Mangement Information Systems department has access to this category. Therefore, the report can be run and tested for any issues with running the report or with the data that is shown before it is placed in production. Once it has been tested, a copy will be provided to the superintendent for approval. Upon approval, the two copies of the report will be deployed to the Frontline Student Information System.

Presentation

The user will have two options of which to display the report: as a .pdf file or as an Excel file. The main format of presenting reports is in .pdf file, but the Excel file will made available so that the user has the ability to use the filter function to only look at certain pieces of data when needed. The reporting tool that will be used is Jaspersoft.