Final Project-Part 2

Teacher Perspective:

1.Absense Model:

1. Number of students who missed the class in a particular month based on date on which class is missed, reason for missing the class and course for which class is missed.

select distinct count(dst.StudentID) NumberOfStudentsAbsent, dd.DateName as AbsenceDate, dac.AbsenceCodeDesc as AbsenceReason, c.CourseTitle, ds.StaffName

from dbo.factAbsence fa, dbo.dimAbsenceCode dac, dbo.dimStaff ds, dbo.dimdate dd, dbo.dimStudent dst, dbo.factStudentCourse fsc,dbo.dimCourse c

where dac.AbsenceCodeID = fa.AbsenceCodeID

And fsc.CourseID = c.CourseID

AND dst.StudentID = fa.StudentID

AND fsc.StudentID = dst.StudentID

AND dd.DatePK = fa.AbsenceDate

And ds.StaffID = fa.StaffID

AND ds.StaffID= fsc.StaffID

And ds.StaffID = 17

And Month(fa.AbsenceDate) = 3

group by dd.DateName, dac.AbsenceCodeDesc, ds.StaffName, c.CourseTitle

1. Order by students according to total number of absences for a SchoolMonthName for a particular staff.

select s.StudentName, count(a.AbsenceID) AbsenceCount, d.SchoolMonthName

from dbo.factAbsence a, dbo.dimStudent s,dimDate d

where s.StudentID = a.StudentID

AND d.DatePK = a.AbsenceDate

AND a.StaffID = 17

--AND Month(d.SchoolMonthName) = Month(a.AbsenceDate)

AND d.SchoolMonthName like 'School January%'

group by s.StudentName,d.SchoolMonthName

order by count((a.AbsenceID)) DESC

1. List total number of students who skipped class or were missing, with appropriate absent code description for a SchoolMonth.

select count(a.StudentID) AbsenceCount from dbo.factAbsence a,dbo.dimAbsenceCode ac, dbo.dimDate d

where a.AbsenceCodeID= ac.AbsenceCodeID

AND a.AbsenceDate = d.DatePK

AND ac.AbsenceCodeDesc in ('Missing', 'SKIPPING CLASS')

AND d.SchoolMonth = '2010-04-01 00:00:00.000'

1. List all student names, with appropriate dates on which they were absent, with absent description as missing and skipping class in a month.

select s.studentName, a.AbsenceDate from dbo.dimStudent s, dbo.factAbsence a, dbo.dimAbsenceCode ac

where a.StudentID= s.studentID

AND ac.AbsenceCodeDesc in ('Missing', 'SKIPPING CLASS')

AND a.AbsenceCodeID=ac.AbsenceCodeID

AND MONTH(a.AbsenceDate) = 5

2.Academic Performance model:

1. Number of students in a class who have HSGT scaled score greater than 550 for the respective teacher’s class.

select st.StaffName,count(f.StudentID)NoOfStudentsAbovegrade550 from factHSGTScore f,dimCourse c,dimSubject su,dimStaff st,factStudentCourse fs

where f.SubjectID=su.SubjectID and

su.SubjectID=c.SubjectID and

c.CourseID=fs.CourseID and

f.ScaledScore>550 and

fs.StaffID=st.StaffID and

fs.StaffID=46

group by st.StaffName;

2. Number of students who got scaled score above 850 in particular standardized test domain that the respective teacher teaches.

select count(f1.StudentID),st.StandardizedTestDomain from factStandardizedTestScore f1,factStandardizedTestDomainScore f2,dimStandardizedTestDomain st

where f1.StandardizedTestScoreID=f2.StandardizedTestScoreID and

f2.StandardizedTestDomainID=st.StandardizedTestDomainID and

st.SubjectID=14 and

f1.ScaledScore>850

group by st.StandardizedTestDomain;

3. Write a procedure to order/rank the students according to their grades under a staff (input parameter will be course id)

CREATE PROCEDURE dbo.uspGetRankStudents @courseID int

AS

SELECT distinct s.StudentName, sf.StaffName,Rank() over (Order By scg.NumericGrade) AS Rank,c.CourseTitle

FROM dbo.dimStudent s, dbo.factStudentCourseGrade scg,dbo.factStudentCourse sc, dbo.dimStaff sf,dbo.dimCourse c

WHERE scg.StudentCourseID = sc.StudentCourseID

AND sc.StudentID= s.StudentID

AND sf.StaffID=sc.StaffID

AND c.CourseID=sc.CourseID

AND sc.StaffID=17

AND sc.CourseID= @courseID

order by Rank

GO

drop procedure dbo.uspGetRankStudents;

EXEC dbo.uspGetRankStudents @courseID = 2474

3.Discipline model:

1. List student names involved in respective disciplinary events on a monthly basis.

select s.StudentName,s.StudentID,e.DisciplineEventDesc,t.MonthName from dimStudent s, factDiscipline d, dimDate t,dimDisciplineEventCode e

where s.StudentID=d.StudentID and

t.DatePK=d.EventDate and

e.DisciplineEventCodeID=d.DisciplineEventCodeID

group by s.StudentName,t.MonthName,s.StudentID,e.DisciplineEventDesc;

1. List student names, disciplinary events involved and disciplinary actions taken on a monthly basis. (Change)

List count of students with a particular disciplinary event on a monthly basis

select distinct e.DisciplineEventCodeID,e.DisciplineEventDesc,count (d.StudentID) As TotalStudents,t.MonthName from dimStudent s, factDiscipline d, dimDate t,

dimDisciplineEventCode e,dimDisciplineActionCode a

where s.StudentID=d.StudentID and

t.DatePK=d.EventDate and

e.DisciplineEventCodeID=d.DisciplineEventCodeID

group by s.StudentName,t.MonthName,e.DisciplineEventCodeID,e.DisciplineEventDesc,a.DisciplineActionDesc;

3. select s.studentname,Convert(varchar(30),f.eventdate,102) as Eventdate , d.DisciplineEventDesc,a.DisciplineActionDesc from dimStudent s,dimDisciplineEventCode d, factDiscipline f,dimDisciplineActionCode a

where s.StudentID=f.StudentID and

d.DisciplineEventCodeID=f.DisciplineEventCodeID and

a.DisciplineActionCodeID=f.DisciplineActionCodeID and

d.DisciplineEventDesc in ('Extreme disrespect to faculty and staff',

'SKIPPING CLASS MORE THAN 1 PERIOD','MULTIPLE CR OFFENSE HANDLED BY TEACHER','GENERAL CLASSROOM DISTURBANCE','AGGRESSIVE BEHAVIOR');

4.Special Program model:

1. List of students pursuing a specific special program.

select distinct StudentName from dbo.factSpecialProgram sp, dbo.dimStudent s,dbo.dimSpecialProgram d

where

s.SISStudentID= sp.SISStudentID and

sp.ProgramID=d.ProgramID and

d.Program='GIFTED';