**School\_K12\_DW - Oracle Database**

**Sample Queries-**

**Admin Perspective:**

**1. Absence model**

1. Order in descending order the staff names based on the total number of students with the “Missing” and “Skipping class” absent code description on a yearly basis.

select x.StaffName from dimStaff x,

(select count(t.StudentID) TotalStudents,

k.StaffID,

c.AbsenceCodeDesc,

v.YearName

from dimStudent t,

dimAbsenceCode c,

factAbsence a,

dimDate v,

dimStaff k

where

c.AbsenceCodeID=a.AbsenceCodeID

and a.StudentID=t.StudentID

and k.StaffID=a.StaffID

and v.DatePK=a.AbsenceDate

and c.AbsenceCodeDesc IN('Missing','SKIPPING CLASS')

group by c.AbsenceCodeDesc,v.YearName,k.StaffID) o

where x.StaffID=o.StaffID

order by o.TotalStudents DESC;

**2. Discipline model**

1. List total number of males and females involved in disciplinary actions on a yearly basis.

select count(f.studentid) Studentcount,

extract(year from to\_DAte(f.eventdate, 'MM/DD/YYYY:HH24:MI')) Year ,

s.Gender

from factDiscipline f,

dimStudent s,

dimDate d

where f.StudentID=s.StudentID

and f.EventDate=d.DatePK

and s.Gender='M'

group by extract(year from to\_DAte(f.eventdate, 'MM/DD/YYYY:HH24:MI')),s.Gender

union

select count(f.studentid),

extract(year from to\_DAte(f.eventdate, 'MM/DD/YYYY:HH24:MI')) Year,

s.Gender

from factDiscipline f,

dimStudent s,

dimDate d

where f.StudentID=s.StudentID

and f.EventDate=d.DatePK

and s.Gender='F'

group by extract(year from to\_DAte(f.eventdate, 'MM/DD/YYYY:HH24:MI')),s.Gender;

**3. SpecialProgram**

1. Total number of students in each program in one year.

select count(f.SISStudentID) TotalStudents,

d.Program,

t.YearName

from factSpecialProgram f,

dimSpecialProgram d,

dimDate t

where f.ProgramID=d.ProgramID

and f.EntryDate=t.DatePK

and extract(year from to\_DAte(t.YearName, 'MM/DD/YYYY:HH24:MI')) = 2009

group by d.Program,t.YearName;

**4. Academic performance**

1. Course with maximum enrollment.

select c.CourseTitle,

count(s.studentID) EnrollmentCount

from dimCourse c,

factStudentCourse sc,

dimStudent s

where c.CourseID = sc.CourseID

AND sc.StudentID= s.studentID

--AND rowNum =1

group by c.CourseTitle

order by count(s.studentID) DESC;

**Teacher perspective:**

**1. Absence 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 AbsenceDate,

dac.AbsenceCodeDesc AbsenceReason,

c.CourseTitle,

ds.StaffName,

extract(Month from to\_DAte(fa.AbsenceDate, 'MM/DD/YYYY:HH24:MI'))

from factAbsence fa,

dimAbsenceCode dac,

dimStaff ds,

dimdate dd,

dimStudent dst,

factStudentCourse fsc,

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 extract(Month from to\_DAte(fa.AbsenceDate, 'MM/DD/YYYY:HH24:MI')) = 3

group by dd.DateName, dac.AbsenceCodeDesc, ds.StaffName, c.CourseTitle, extract(Month from to\_DAte(fa.AbsenceDate, 'MM/DD/YYYY:HH24:MI'))

1. **Discipline model**
2. List student names involved in respective disciplinary events on a monthly basis.

select s.StudentName,

s.StudentID,

e.DisciplineEventDesc,

substr(t.DAYOFYEAR,1,3) 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.DAYOFYEAR,s.StudentID,e.DisciplineEventDesc;

1. **SpecialProgram**

1. List of students pursuing a specific special program.

select StudentName ,d.program

from factSpecialProgram sp,

dimStudent s,

dimspecialprogram d

where s.StudentID= sp.StudentID

AND s.SISStudentID= sp.SISStudentID

and sp.programid=d.programid

and d.program like '%GIFTED%';

1. **Academic performance**

. 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 factHGSTScore 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;

**Parent Perspective:**

1. **Absence model**

1. Total Number of days student has missed class for a assigned staff and facility

select s.StudentID,

s.StudentName,

f.FacilityName,

st.StaffFirstName,

count(a.AbsenceID) TotalAbsences,

d.SchoolMonthName as SchoolSemesterName

from dimStudent s,

dimFacility f,

dimStaff st,

factAbsence a,

dimDate d

where

s.StudentID=a.StudentID and

f.FacilityID=a.FacilityID and

st.StaffID=a.StaffID and

d.DatePK=a.AbsenceDate and

s.StudentID=3400

group by s.StudentID,s.StudentName,f.FacilityName,st.StaffFirstName,d.SchoolMonthName;

**2. Discipline model**

1. List disciplinary events with the disciplinary action taken against a student with description and dates.

select s.studentid,

s.studentname,

f.eventdate,

e.disciplineeventdesc,

a.disciplineactiondesc

from dimstudent s,

factdiscipline f,

dimdisciplineeventcode e,

dimDisciplineActionCode a

where s.StudentID=f.StudentID

and f.DisciplineActionCodeID=a.DisciplineActionCodeID

and f.DisciplineEventCodeID=e.DisciplineEventCodeID

and f.SISStudentID=711;

**3. SpecialProgram**

1. List special programs, staff offering that program and address of facility where program is offered.

select distinct p.Program,

s.StaffName,

f.Facility,

f.Address,

t.StudentName

from dimSpecialProgram p,

dimStaff s,

dimFacility f,

factSpecialProgram sp,

dimStudent t

where p.ProgramID=sp.ProgramID

and f.FacilityID=t.FacilityID

and sp.SISStudentID=t.SISStudentID

and t.HomeroomStaffID=s.StaffID

and sp.SISStudentID=32;

**4. Academic performance**

1. Details of HSGT scaled score and possible scaled score of a student for a particular subject and course.

select distinct h.ScaledScore,

h.PossibleScaledScore,

t.StudentName

from factHGSTScore h,

dimSubject s,

dimCourse c,

dimStudent t

where t.StudentID=h.StudentID

and h.SubjectID=s.SubjectID

and s.SubjectID=c.SubjectID

and c.SubjectID=9

and c.CourseTitle='10TH LIT/COMP A'

and h.StudentID=3480;