Group:14

Question2 Solution:

Description & list sample types of analysis/queries for each data subset from the following perspectives:

* + School Administrator
  + Teacher
  + Parent

**School Administrator**

* + - 1. School administrator would like to know about the Total number of regular students in the school. This can be queried as follows:

select count(s.studentID) as RegularStudents

from [dbo].[dimEnrollmentCode] as e

join dbo.dimStudent as s

on e.EnrollmentCodeID = s.EnrollmentCodeID

where e.EnrollmentCodeID = 1;

* + - 1. School Administrator can query about the number of students who were regular students and withdraw.

select count(ds.StudentID) as NumberOfWithdrawnRegular

from

[dbo].[dimWithdrawalCode] a

join dbo.dimStudent ds

on a.WithDrawalCodeID=ds.WithDrawalCodeID

where ds.WithDrawalCodeID=1;

* + - 1. To query about various reasons for withdraw for students:

select count(ds.StudentID) as NumberOfWithdrawnRegular,

a.WithdrawalCodeID

from [dbo].[dimWithdrawalCode] a

join dbo.dimStudent ds

on a.WithDrawalCodeID=ds.WithDrawalCodeID

group by a.WithdrawalCodeID;

4. School administrator would like to get information about School KPIs regarding Target Student Attendance, Target Enrollment count and its concerned facility.

select sk.SchoolKPIID,sk.EffectiveDate, sk.TargetEnrollmentCount,sk.TargetStandardizedTestScaledScore,

f.facility, sk.TargetEnrollmentCount

from [dbo].[factSchoolKPI] as sk

join [dbo].[dimFacility] as f

on f.FacilityID = sk.FacilityID

5. How many students are there in each special program offered by the School. This will be helpful to bring more programs in the school looking at the count of students currently enrolled. This can be queried as :

select sp.programID,sp.Program, count(fsp.StudentID) as Students

from [dbo].[factSpecialProgram] as fsp

join [dbo].[dimSpecialProgram] as sp

on sp.ProgramID = fsp.ProgramID

group by sp.ProgramID,sp.Program

6) What subj are temp staff teaching?

select SubjectName, StaffFirstName

from [dbo].[tempStaffSubject] as s

join [dbo].[dimSubject] as sub

on s.SubjectID=sub.SubjectID

join [dbo].[dimstaff] as staff

on s.StaffID=Staff.staffID;

**Teacher**

1. A teacher would keep a check on maintaining discipline. There would be need to know the students who are violating the discipline rules.
2. Overall students count for various discipline events,

Select dec.DisciplineEventCodeID,dec.DisciplineEventDesc,

count(fd.StudentID) as Students

from [dbo].[dimDisciplineEventCode] dec

full outer join [dbo].[factDiscipline] as fd

on fd.DisciplineEventCodeID = dec.DisciplineEventCodeID

group by dec.DisciplineEventCodeID,dec.DisciplineEventDesc

1. For a specific Discipline event, let’s say… Number of Students with Aggressive behavior(Discipline behavior)

select count(ds.StudentID) as NumberOfBullyingOtherStudents from dbo.factDiscipline dc

join dbo.dimStudent ds

on dc.StudentID=ds.StudentID

where DisciplineEventCodeID=69;

1. Teacher would keep a check on absences in the class for some unaccountable reasons. This can be queried as :

To know complete details:-

select \* from dbo.factAbsence;

select count(ds.studentID) as NumberOfStudentsUnaccountableAbsence

from [dbo].[factAbsence] fa

join [dbo].[dimStudent] ds

on fa.StudentID=ds.StudentID

where AbsenceCodeID=22;

1. Total number of students in each course

select count(fsc.studentid) Students,c.CourseID, c.CourseTitle from [dbo].[factStudentCourse] as fsc

join [dbo].[dimCourse] as c on c.CourseID = fsc.CourseID

group by c.CourseID, c.CourseTitle,fsc.FacilityID

4. Teacher keeps of record of the tests conducted and student’s performance against each test.

select \* from [dbo].[factHSGTScore];

select \* from [dbo].[factStandardizedTestScore]

To record students grades against each course:

select \* from [dbo].[factStudentCourseGrade]

To determine top students of the class?

select count(distinct sc.studentID) StudentID

from [dbo.[factStudentCourseGrade] as scg

join [dbo].[factStudentCourse] as sc

on sc.StudentCourseID=scg.StudentCourseID

where NumericGrade = 100.00

**Performance of students**:

1. Number of students with performance level 3 in a particular subject(academic performance)

select count(ds.studentID) Students

from [dbo].[factStandardizedTestScore] as ts

join dbo.dimStudent ds

on ts.StudentID=ds.StudentID

where PerformanceLevel=3 and ts.SubjectID=18;

**Parents**

1. What all special programs they have for special children. This is specifically important for parents of sensitive children.

Select \* from [dbo].[dimSpecialProgram];

1. What all courses student is enrolled in the school?

For example, to check for a student with ID 12.

select \* from [dbo].[factStudentCourse] where StudentID=12;

1. Grades of student in the courses they are enrolled in?

For example, parents can query for their child with studentID 12 as :

Select \* from

[dbo].[factStudentCourseGrade] as c join

[dbo].[factStudentCourse] as sc

On c.StudentCourseID=sc.StudentCourseID

Where sc.studentID = 12;

1. What is the performance level of a child in a particular subject?

For example, parents can query for their child with studentID 12 as

Select StudentName, SubjectName, TestDate,

RawScore, PossibleRawScore, ScaledScore,

PossibleScaledScore, PerformanceLevel

from [dbo].[dimStudent] d

join [dbo].[factStandardizedTestScore] g on d.StudentID=g.StudentID

join [dbo].[dimSubject] f on g.SubjectID=f.SubjectID

where d.studentID = 12;

Or simply check the performance in each subject :

select \* from [dbo].[factStandardizedTestScore] where StudentID=12

1. Is student has been accounted for violating any discipline rule in the school. If yes, what action has been taken against the student?

For example, Parents of student 11 would like to check as:

Select fd.StudentID, fd.DisciplineEventCodeID,

de.DisciplineEventDesc, fd.DisciplineActionCodeID,

da.DisciplineActionDesc, fd.EventDate, fd.ActionDate

from [dbo].[factDiscipline] as fd

join [dbo].[dimDisciplineEventCode] as de

on de.DisciplineEventCodeID = fd.DisciplineEventCodeID

join [dbo].[dimDisciplineActionCode] as da

on da.DisciplineActionCodeID = fd.DisciplineActionCodeID

where StudentID=11;