

Project Rubric

Scenario Creation and Complex Questioning

Creating Scenarios

1. Create a new Scenario named, *Improving Student Satisfaction Without Increasing Costs*
2. Select both Visuals from the Student Enrollment Dashboard as Data for this Scenario.

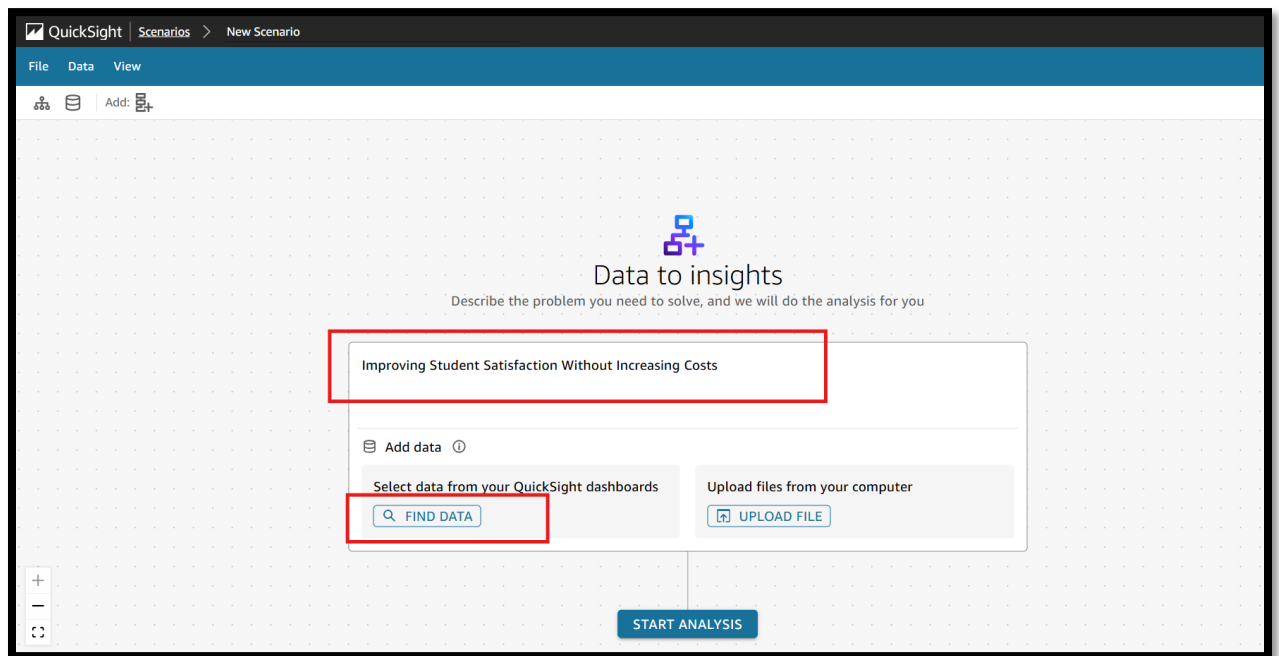


Figure 1 Creating a Scenario

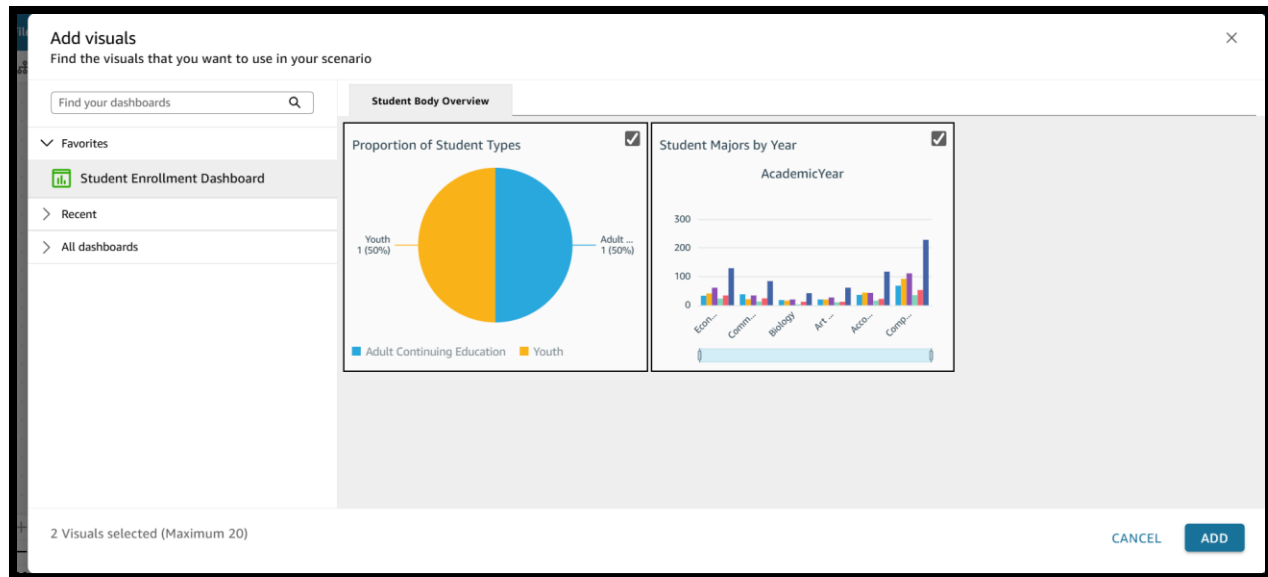


Figure 2 Adding a couple of Visuals

Preview Data
You can preview and modify the data tables before importing them into analysis.

Student Enrollment... Student Enrollment Dashboard_Q - Stude...

Field	Value	Value	Value
Address	Youth	Economics & Finance	018b1dec5a414f939a3048c6674d6622
Mobile	Youth	Economics & Finance	0284fcd28edd490eb819b91825798931
StudentName	Youth	Economics & Finance	06170260ce4d4a4da5cf4f03940c3929
StudentId	Youth	Economics & Finance	06170260ce4d4a4da5cf4f03940c3929
AcademicYear	Youth	Economics & Finance	066359f1f9084d61a6b7cb0aafc3c3b9
EnrollmentDate	Youth	Economics & Finance	066359f1f9084d61a6b7cb0aafc3c3b9
GraduationDate	Youth	Economics & Finance	07446b4ab97b49b0bd7e4c6bb7694ddd
Major	Youth	Economics & Finance	07446b4ab97b49b0bd7e4c6bb7694ddd
Age	Youth	Economics & Finance	07446b4ab97b49b0bd7e4c6bb7694ddd
DOB	Youth	Economics & Finance	07446b4ab97b49b0bd7e4c6bb7694ddd
NationalOrigin	Youth	Economics & Finance	07446b4ab97b49b0bd7e4c6bb7694ddd
ZipCode	Youth	Economics & Finance	07446b4ab97b49b0bd7e4c6bb7694ddd
City	Youth	Economics & Finance	07446b4ab97b49b0bd7e4c6bb7694ddd
State	Youth	Economics & Finance	07446b4ab97b49b0bd7e4c6bb7694ddd

Figure 3 Preview Data

- Start the Scenario with the question: *How do we improve professor evaluations, while avoiding an increase in cost per course?*

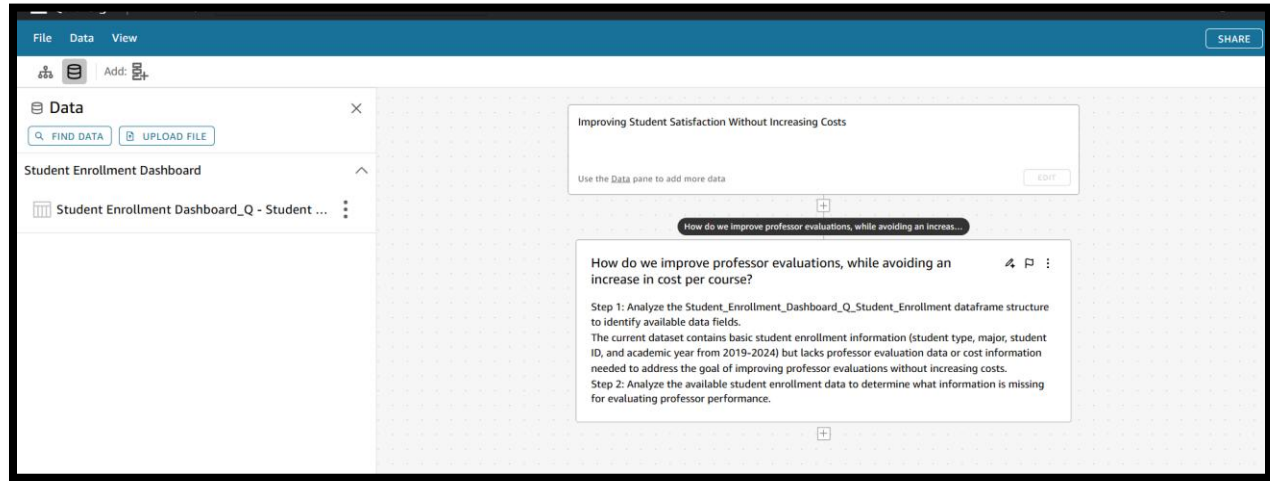


Figure 4 Starting the scenario by Asking the Question - How do we improve professor evaluations, while avoiding an increase in cost per course? Some answers generated

Consider: Do the offered starter questions provide a satisfying start to answering this business question? Why do you think that is? What would make this Scenario more useful?

I think Adding more visuals / data would make scenario better. As mentioned in the answer, lack of professor evaluation data and cost information needed to address the goal of improving professor evaluation without increasing the cost.

Some data / visual depicting Professors with the best average evaluations, Courses with best average evaluations, professors and courses with highest average course costs would be good input to the scenario to generate better result.



Figure 5 Deleting the old scenario

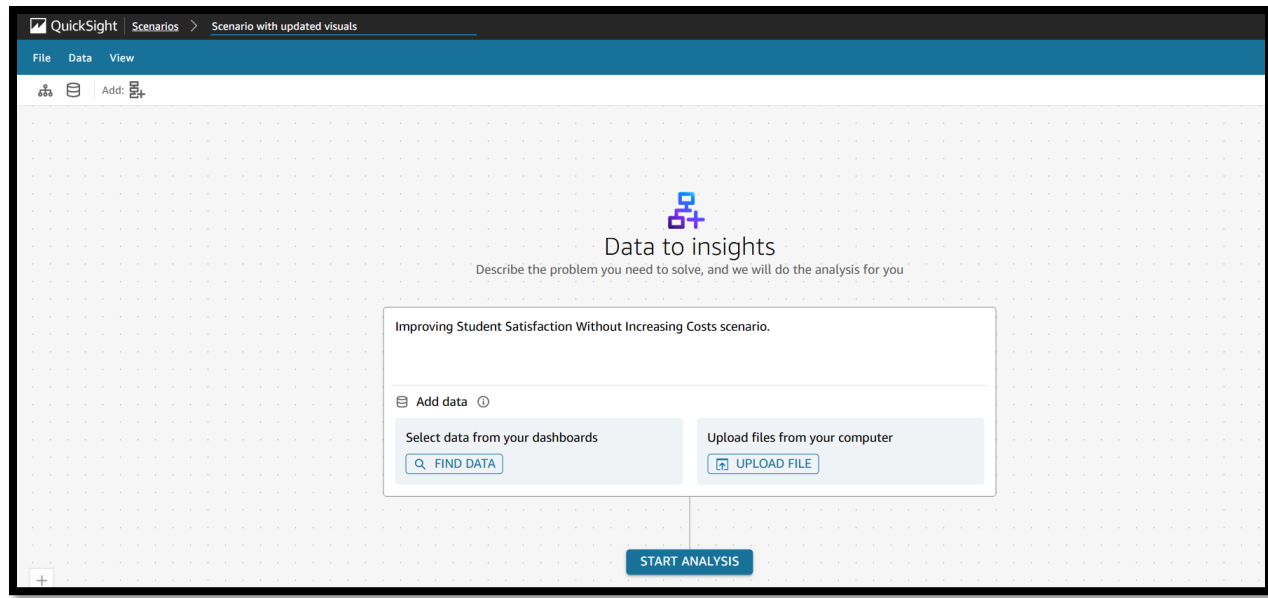


Figure 6 Creating the new scenario with more visuals



Figure 7 Selecting Multiple visuals as required to make it better

Preview Data
You can preview and modify the data tables before importing them into analysis.

Student Enrollment... Student Enrollment Dashboard_Q - Stude...

Address
 Mobile
 StudentName
 Studentid
 AcademicYear
 EnrollmentDate
 GraduationDate
 Major
 Age
 DOB
 NationalOrigin
 ZipCode
 City
 State
 Gender
 Email
 StudentClassification

Student Type	Major	Studentid	AcademicYear
Youth	Economics & Finance	be49390348ac4bf9a8f4312dde4b8d78	2023
Youth	Economics & Finance	d1718abf522744ea92c85ada33914072	2019
Youth	Economics & Finance	9e800d243fbc46a2b67f85e7188bee58	2019
Youth	Economics & Finance	a63fa500ecfd4e23999eeeb49bdaf587	2019
Youth	Economics & Finance	bb0e0c7db7c04b918fc4095c4f623337	2021
Youth	Economics & Finance	a67bf3664d149769db92d04e523a97e	2021
Youth	Economics & Finance	83ab8e25965e42b6b7b84182b4c30e0f	2021
Youth	Economics & Finance	7224010821e0455d9f083403084c021ae75	2021
Youth	Economics & Finance	2fbd6c6adf204fec3403084c021ae75	2021
Youth	Economics & Finance	507d2c7248824acd9f0eb348f5def545	2020
Youth	Economics & Finance	da5eb8d1a6e4431891eeb617bc0ee3fb	2020

CANCEL ADD DATA

Figure 8 Preview Data

Data to insights
Describe the problem you need to solve, and we will do the analysis for you

Improving Student Satisfaction Without Increasing Costs scenario.

Use the Data pane to add more data

How do we improve professor evaluations, while avoiding an increase in cost per course?

Step 1: Generate summary statistics and structure overview of the student enrollment dataset
The dataset contains 7,306 course enrollments with evaluation scores ranging from 65.0 to 98.7 (average 75.7) and costs per course ranging from \$1,206 to \$2,864 (average \$2,064) across academic years 2019-2024.
Still analyzing... hang tight...

Step 2: Analyze the relationship between professor evaluation scores and course costs to identify factors for improving evaluations without increasing costs

EvaluationScore CostPerCourse

Figure 9 Starting the Scenario with Question How do we improve professor evaluations, while avoiding an increase in cost per course?

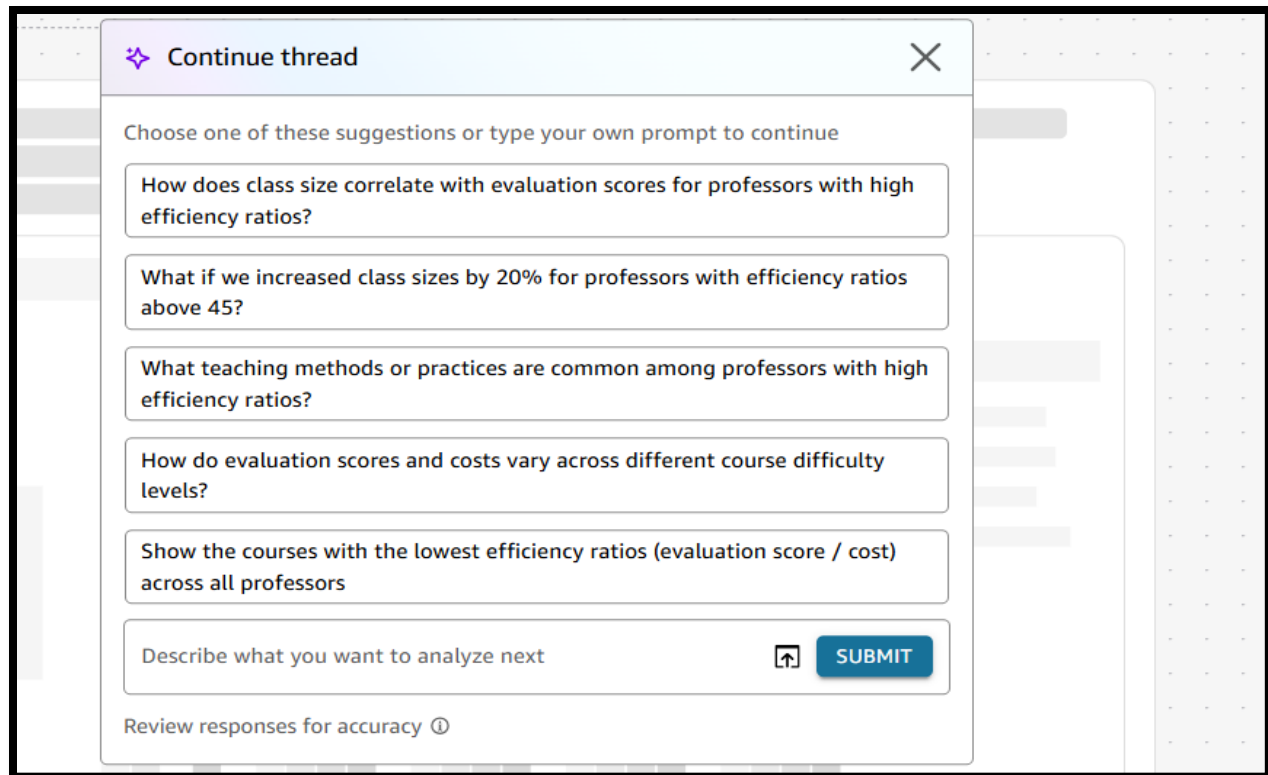


Figure 10 Display of Suggested questions to continue the thread

QuickSight | Scenarios > Improving Student Satisfaction Without Increasing ...

File Data View

cost-effective manner, focusing on proven strategies rather than simply increasing expenditures.

what factors contribute to high professor evaluation scores?

what factors contribute to high professor evaluation scores?

Step 1: Analyze factors influencing professor evaluation scores by comparing course types, student demographics, majors, and academic years.

Course	EvaluationScore	CostPerCourse	Student_Count
Environmental Ethics	78.63	2624.03	460
Investment	78.13	2673.38	400
Communication	77.91	2622.62	920
Modern History	76.54	1996.24	407
Python2	76.5	1968.44	464
Counseling Psychology	76.48	1951.85	480
Data Visualization	75.2	1328.37	475
Big Data	75.2	2692.58	442
Commercial Law	74.97	2615.25	443

Figure 11 Extending the thread with the question to determine factors contributing to high professor evaluation scores

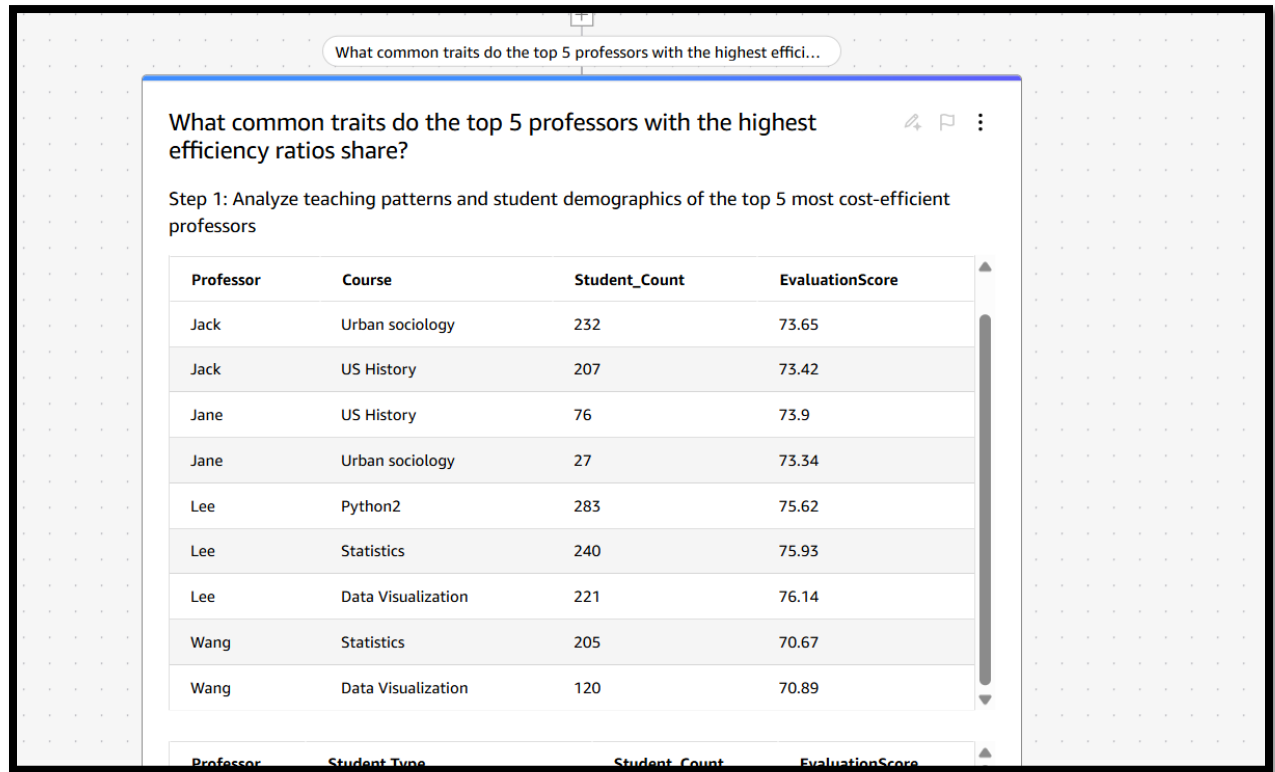


Figure 12 Extending the thread with question - What common traits do the top 5 professors with the highest efficiency ratios share?

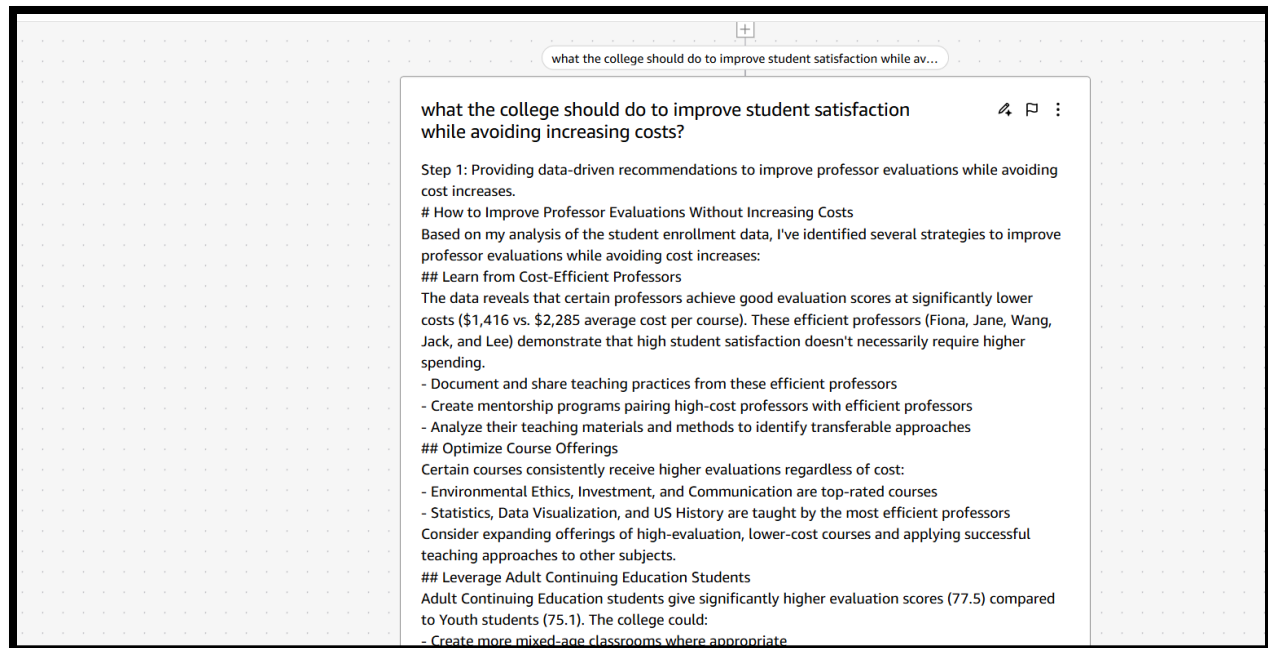


Figure 13 Extending the thread with question - what the college should do to improve student satisfaction while avoiding increasing costs?

What teaching methods are common among the top 5 most efficient professors?



Step 1: Analyze teaching patterns and evaluation trends of the top 5 most cost-efficient professors across different courses, student types, and academic years.

Step 2: Analyze teaching patterns and evaluation trends of the top 5 most cost-efficient professors across different student demographics and class sizes.

index	Professor	Adult_Score	Youth_Score	Score_Difference
0	Fiona	77.27	74.67	2.6
1	Jack	75.25	72.85	2.4
2	Jane	78.7	72.49	6.22
3	Lee	77.44	75.36	2.08
4	Wang	74.04	69.82	4.22

Professor	Average_Score	Score_Std_Dev
Jack	73.54	4.83
Wang	70.75	5.06
Fiona	75.18	5.1

Figure 14 Extending the thread with question what teaching methods which are common among the most efficient professors

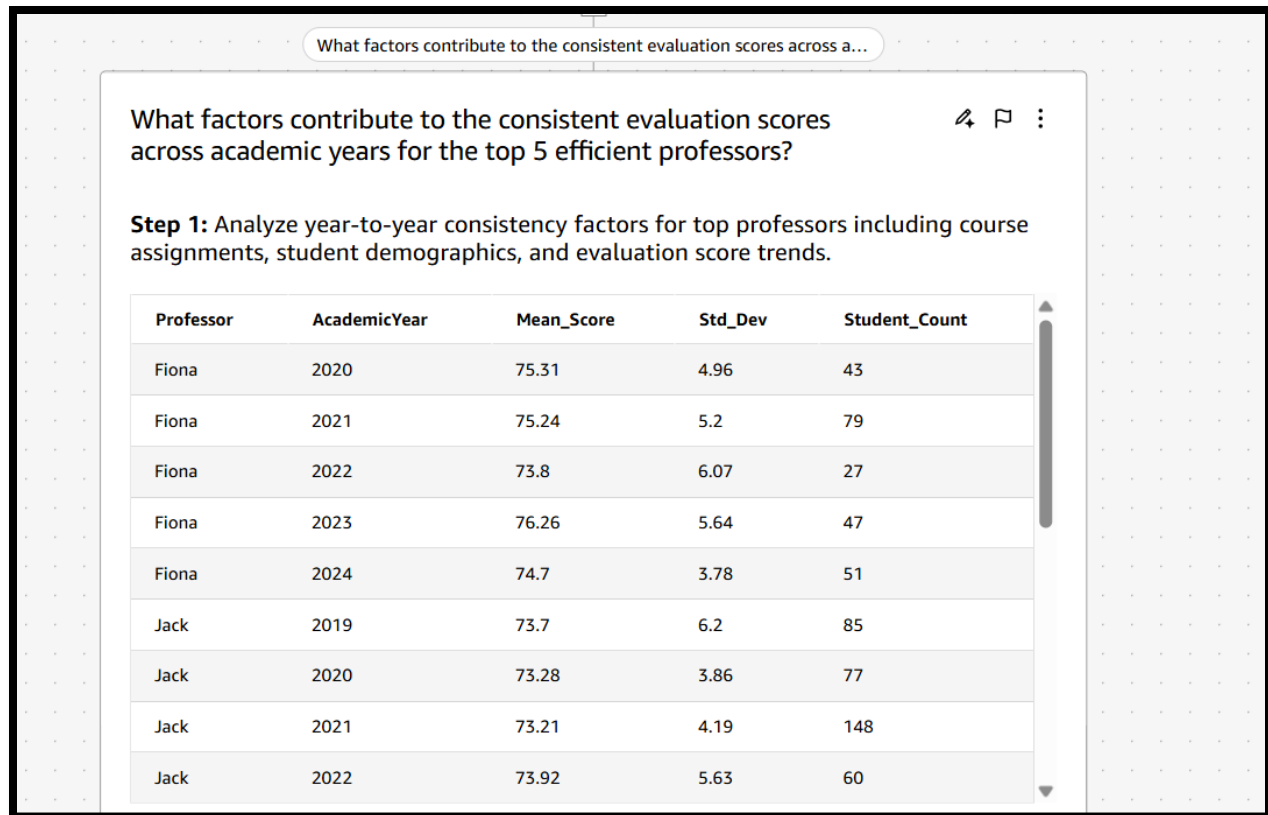


Figure 15 Extending the thread with the question - What factors contribute to the consistent evaluation scores across academic years for the top 5 efficient professors?