



Bluenotes **GLOBAL** 2018
CONFERENCE



What's New with Blue Reporting and Analytics

- *Presented by : Georges Geha, Long Hua*





Agenda

- What's new in Blue Reporting
 - Concepts of relational demographics
 - New capabilities in Aggregated reports
 - Blue Text Analytics v2.0
 - Other enhancements in Blue reporting
- Dashboard
 - Instructor Feedback Dashboard (Concepts & Use cases)
 - What's coming in Instructor Feedback Dashboard
 - Blue Analytics Concepts

Question

The instructor was well-prepared for class

Question for Jeannie TAYLOR

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Evolving Storytelling

How did I do?

1 2 3 4 5



Try again *Getting closer* *OK* *Almost there* *Perfect!*

George Dunn, 2014



Storytelling with statistical values

1. The course was intellectually challenging

How clearly were course learning goals and objectives communicated?

How effectively was class time used to help you learn?

How effectively did out-of-class work (assignments, readings, etc.) help you learn?

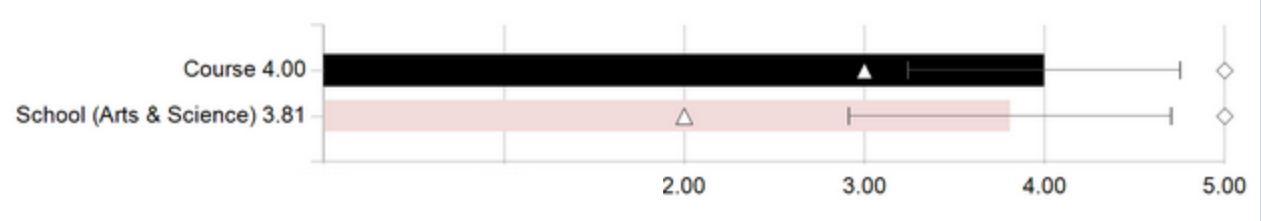
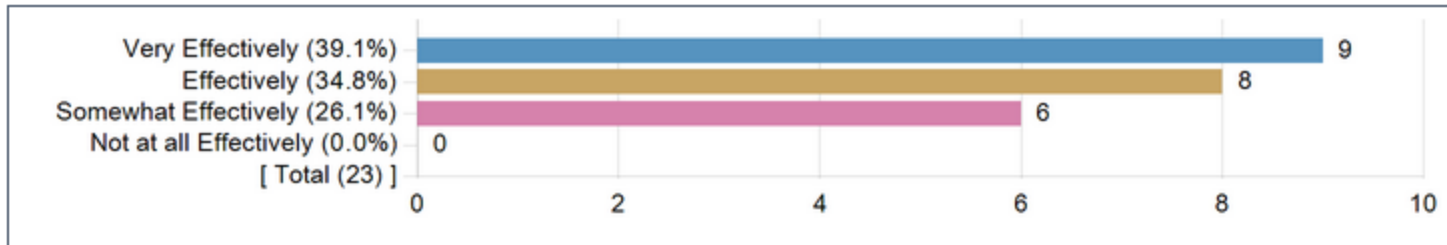
How a

hours,

How li

How n

How effectively was class time used to help you learn?



SIR

0.5

0.9

1.0

0.5

0.4

0.5

Question	Course			Department (BUS)			Institution		
	Response Count	Mean	Standard Deviation	Response Count	Mean	Standard Deviation	Response Count	Mean	Standard Deviation
How effectively was class time used to help you learn?	23	3.1	0.8	2473	3.2	0.9	5245	3.3	0.8





Storytelling with context

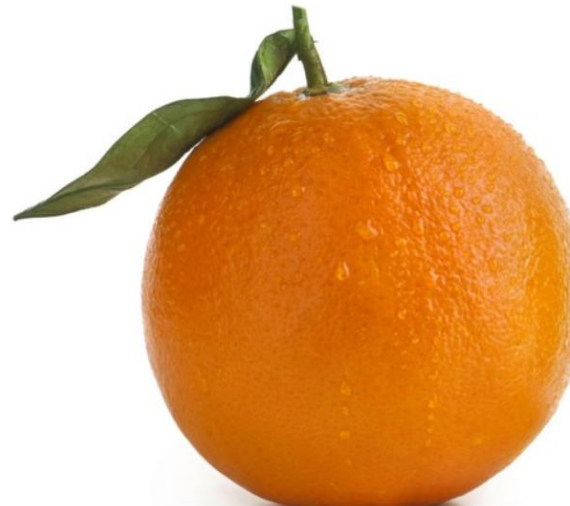


Leveraging course demographics

Course Average vs Department vs Institution

Question	Course			Department. (BUS)			Institution		
	Response Count	Mean	Standard Deviation	Response Count	Mean	Standard Deviation	Response Count	Mean	Standard Deviation
How clearly were course learning goals and objectives communicated to you?	23	3.3	0.6	2481	3.3	0.8	5264	3.4	0.7

- Large class size vs Small class size
- Lvl 200 vs Lvl 400
- Have TA vs No TA





Leveraging Instructor Demographics

I'm an
associate
professor



- My average vs Associate Professors
- My average vs Assistant Professors

I'm an
assistant
professor

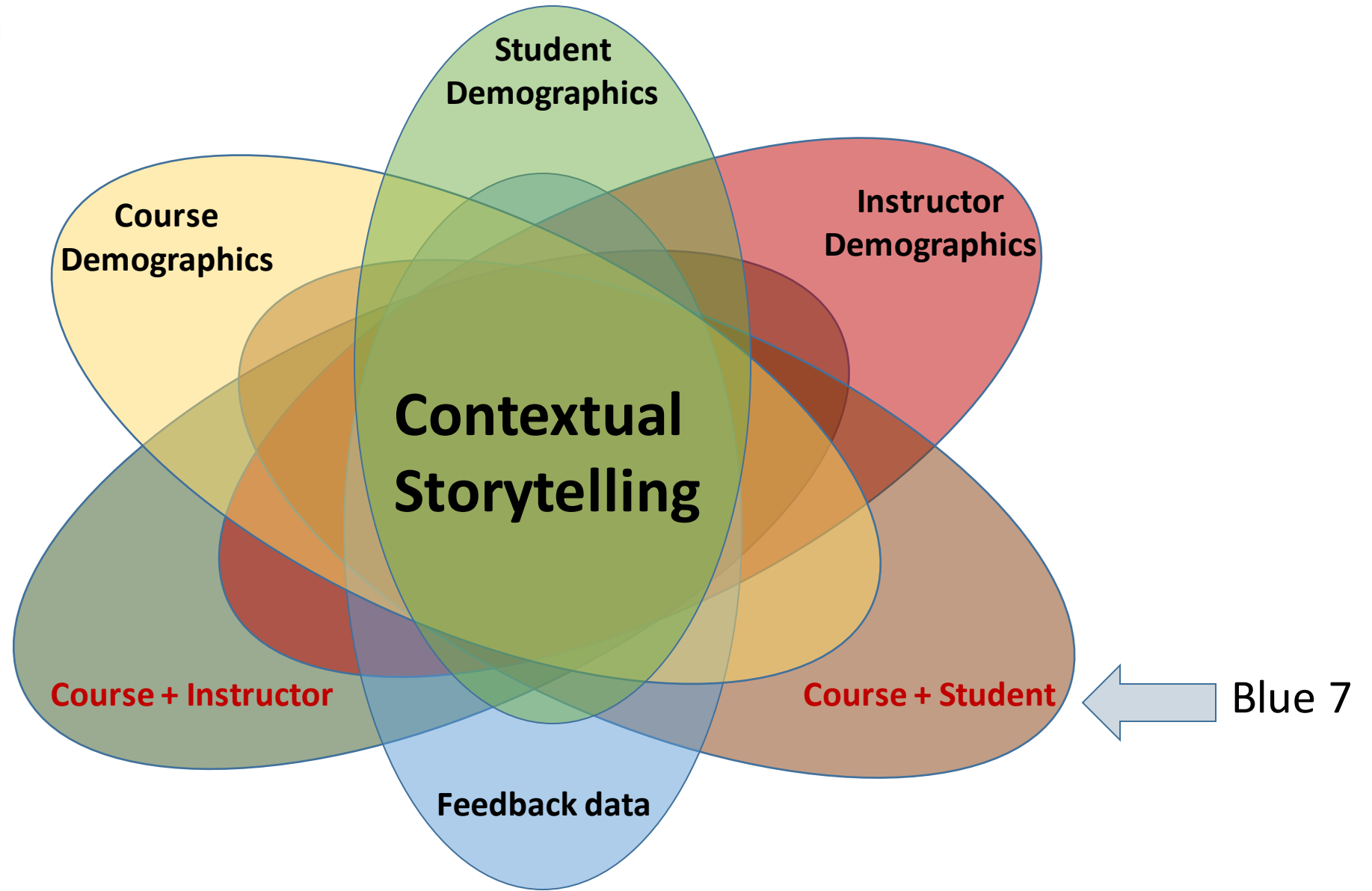




Leveraging Student Demographics

Breaking down feedback data within the course

- ❖ 1st year students vs 2nd year students
- ❖ Full time vs Part time
- ❖ Engineering students vs Art&Sci students



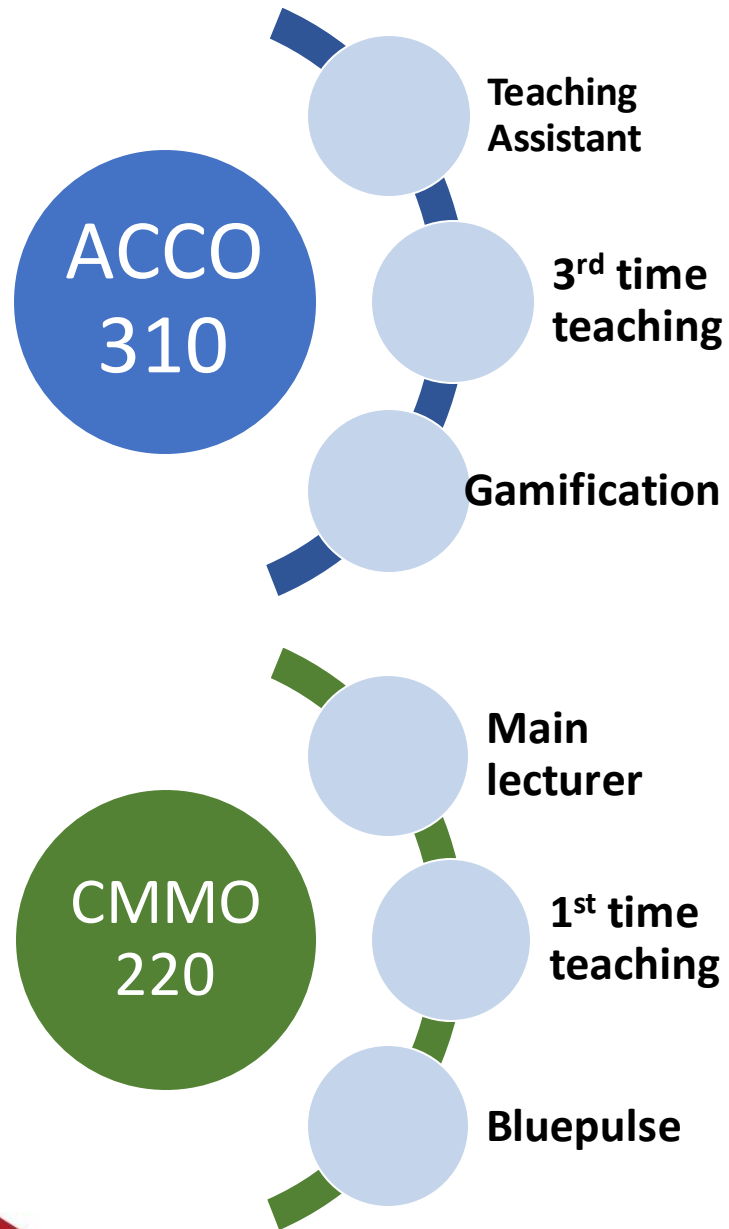


Course and Instructor relationship file

Contextual data between Course and Instructor

CourseID	InsctructorID	Teaching Role	Experience	Innovative Tools
401791-7688-Q4	AJames	Main Lecturer	1st Time	Bluepulse
401791-7688-Q4	Ajtaylor	Guest Speaker	3rd Time	Social Media
401791-7688-Q4	Ajvandam	Teaching Assistant	N Times	Free Online Tools
401791-7688-Q4	Amolsen	Teaching Assistant	2nd Time	Gamification
401794-8432-Q2	Ahroy	Main Lecturer	N Times	Bluepulse
401794-8432-Q2	Amparker	Teaching Assistant	1st Time	Free Online Tools
401802-7806-Q1	Ajbalboa	Main Lecturer	2nd Time	Bluepulse
401802-7806-Q1	Atcheng	Teaching Assistant	N Times	Gamification
401804-3641-Q3	Adwong	Main Lecturer	3rd Time	Free Online Tools
401804-3641-Q3	Awsmith	Guest Speaker	1st Time	Bluepulse





For ACCO 310, I want to compare my results with

- Other TAs who taught the course > 3 times
- Other courses that used gamification tools

For CMMO 220, I want to compare my results with

- Instructors who taught in the same discipline
- Other 1st time instructors in the institution
- Other courses that used Bluepulse formative feedback



Relationship data between Course and Student

Contextual data between Course and Student



CourseID	StudentID	Course Reason	Course Reason 2	Program	Repeat
401791-7688-Q4	A60095	Mandatory	Major	Program 1	No
401791-7688-Q4	A60713	Elective	Minor	Program 3	No
401791-7688-Q4	A60458	Mandatory	Certificate	Program 1	Yes
401791-7688-Q4	A60650	Elective	Minor	Program 2	No
401791-7688-Q4	A60797	Mandatory	Major	Program 3	Yes
401791-7688-Q4	A60852	Elective	Diploma	Program 2	No
401791-7688-Q4	A60816	Mandatory	Major	Program 1	No
401791-7688-Q4	A70547	Elective	Minor	Program 2	No
401791-7688-Q4	A70580	Elective	Certificate	Program 1	No
401791-7688-Q4	A70646	Mandatory	Major	Program 3	Yes
401791-7688-Q4	A70708	Mandatory	Minor	Program 3	No



Almost every part of the report creation process was enhanced in Blue 7 so that **triggers, filters, piping, cross tabulations**, and **norm comparisons** can leverage this new type of relational demographic data.





Describe what happened at a larger scale

Group By
(aggregated)
reports

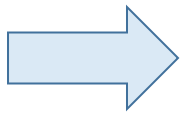
Based on Course Field

- Departmental report
- School report
- Institution report

Based on Instructor Field

- Union Report
- All Associate Professors
- All Assistant Professors

Blue 7 adds new
types of Group
By reports



Based on Student Field

- Program report

Based on Course + Student Field

- Program report (Major, Minor, Certificate)

Based on Course + Instructor Field

- Teaching roles report (Main Lecture and TA Report)
- Teaching tools report (Bluepulse, Gamification)

BTA Dictionary v2.0

- ❖ Additional 400,000 comments were used to enhance the dictionary
- ❖ 104 themes (up from 87 in BTA v1.0)
- ❖ Categories Coverage:
92% of the paragraphs,
90% of the sentences





BTA Dictionary V2.0

Accuracy improvement

- ❖ Better handling of negations and double negations
 - ❖ “He was not really super unclear about the instructions for assignments”
- ❖ Better handling of indirect/passive comments
 - ❖ “It would have been better if a teacher emphasized the key points more clearly”
- ❖ Better handling of misspellings
 - ❖ “awesooooooooooooome”

BTA Dictionary V2.0

- ❖ Catching expressions both in British English and in American English
- ❖ Dictionary theme captions can be presented either in American English or in British English



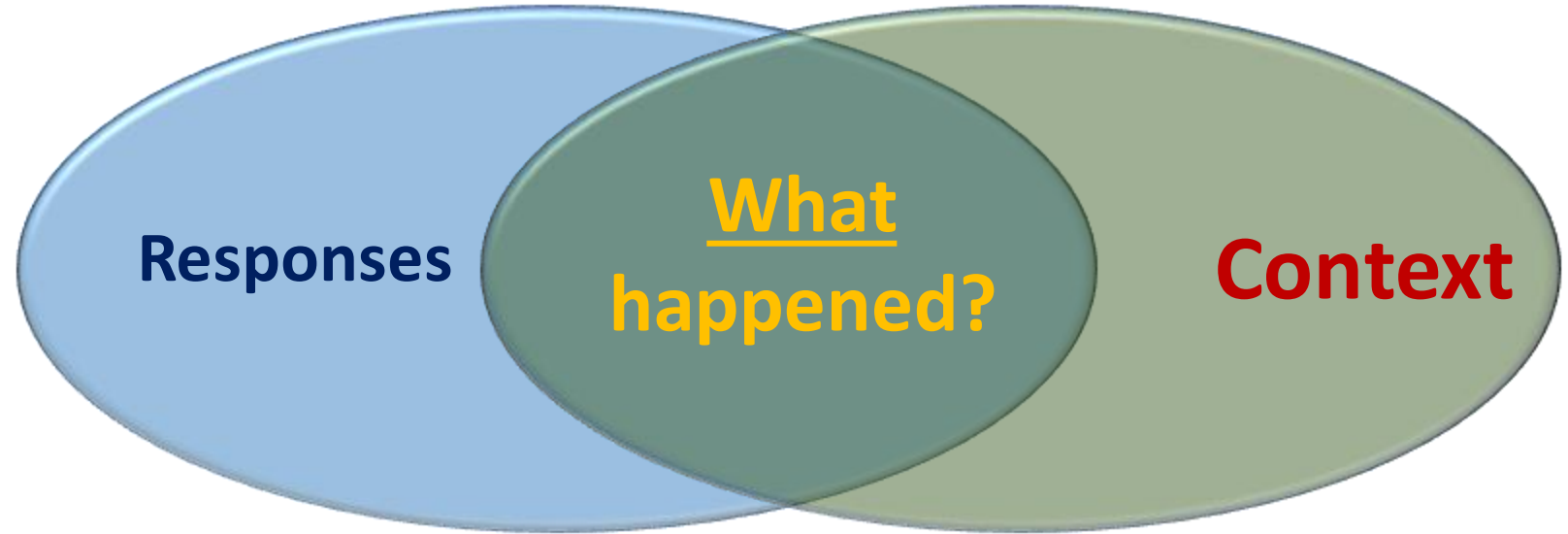


Other reporting enhancements in Blue 7

- ❖ Full cascaded questionnaire support in reports (Question Bank support)
- ❖ Breakdown section
- ❖ Spreadsheet block enhancements
- ❖ Bulk Edit in reports
- ❖ Dynamic Report Access



Blue Reports



Blue Dashboards





Instructor



Page 2

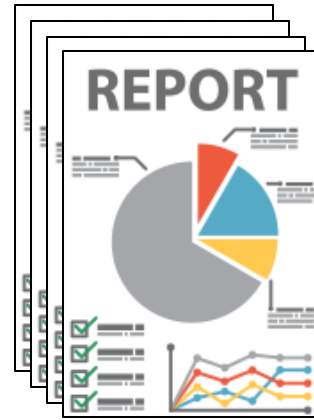
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Term 1



Term 2



Term 3

Year 1



Term 4



Term 5



Term 6

Year 2



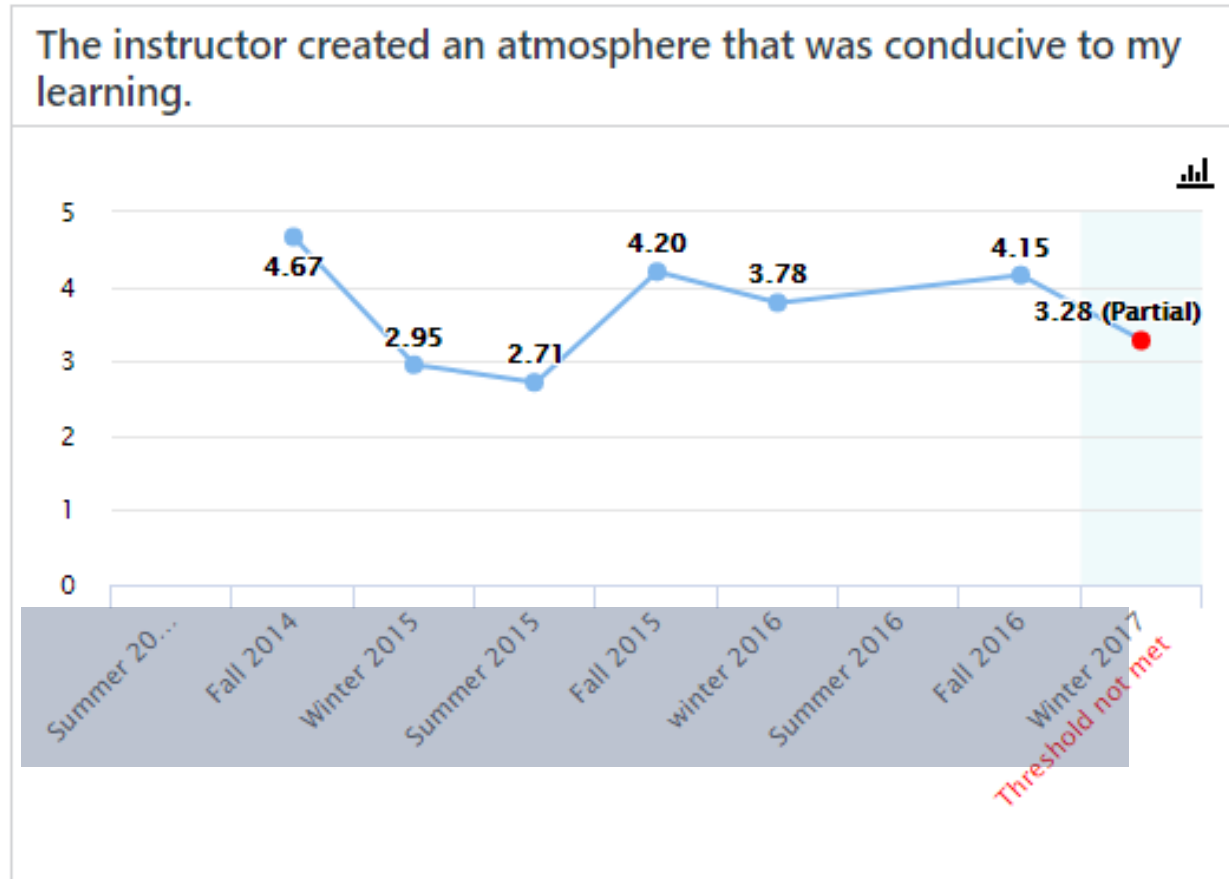
Help Instructors to interpret the data

I received a 3.7 on a question about my speech intonation in Math 101. I would like to know:

- ❖ Did I improve from the last time I taught this course?
- ❖ How is my communication overall for all my courses?
- ❖ How is my speech intonation for all courses in 1 term?
- ❖ Also, I have a theory as to why I got this result. How can I verify this theory?



Did I improve since I last taught this course?





How is my Classroom Experience overall for all my courses this term?

Fall 2016 - Courses			
Course	Examination Experience	Classroom Experience	Learning Experience
	4.13 / 5	3.89 / 5	3.95 / 5
STATISTICS FOR IR/HR IRE1002H-F-LEC0101 18 Invitations 8 Responses 44.44% Response rate	4.81	4.43	4.4
RESEARCH METHODS IRE2002H-F-LEC0101 31 Invitations 13 Responses 41.94% Response rate	3.48	3.36	3.33
RESEARCH METHODS IRE2002H-F-LEC0102 14 Invitations 6 Responses 42.86% Response rate	4.58	4.33	4.6



Diagnosis - I have a theory as to why I got this result...

Breakdown
Filtering Result
Comparison

Filtering

Course Filters Rater Filters

Course Code

- IRE1002H
- IRE1362H
- IRE2002H
- IRE2002Y
- IRE2004H
- IRE3615H

Course Name

- LEC0101#DATA ANALYTICS

Course Filters **Rater Filters**

FT/PT

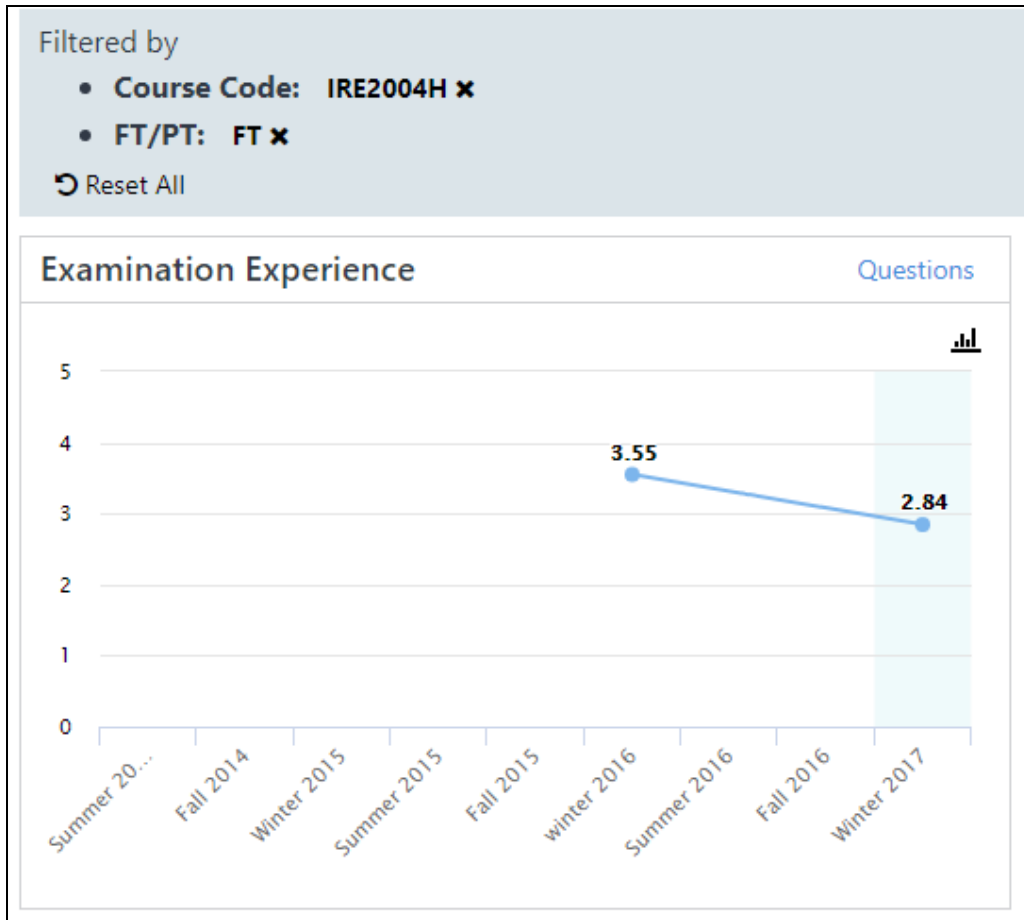
- N/A
- FT
- PT

Grad/UGrad

- N/A
- G

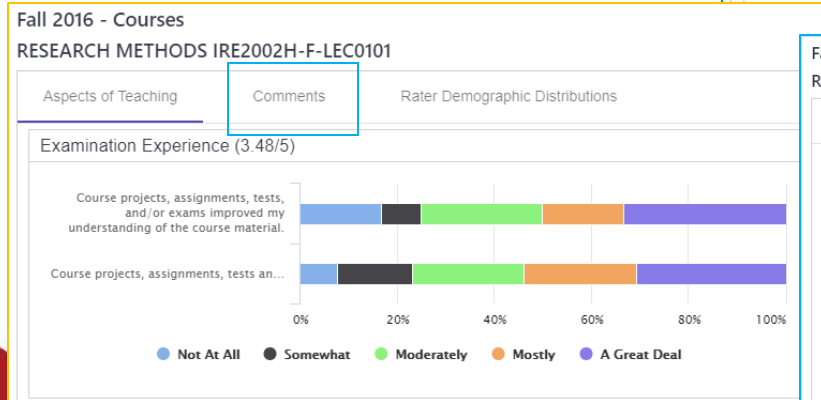
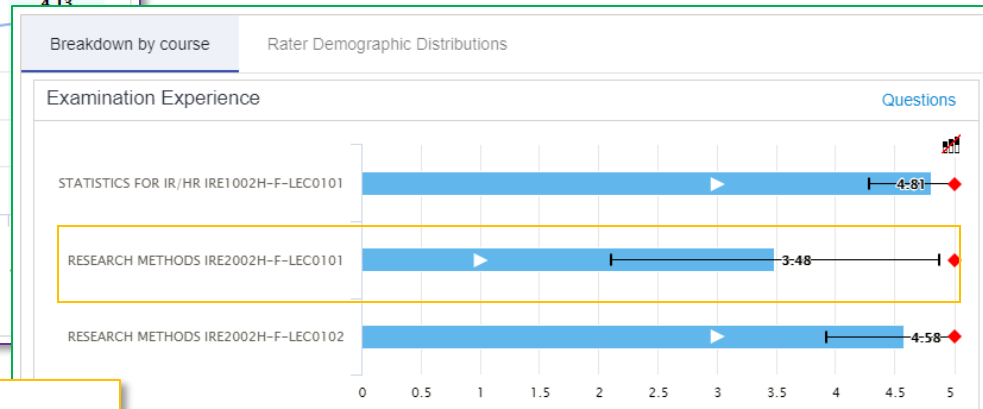
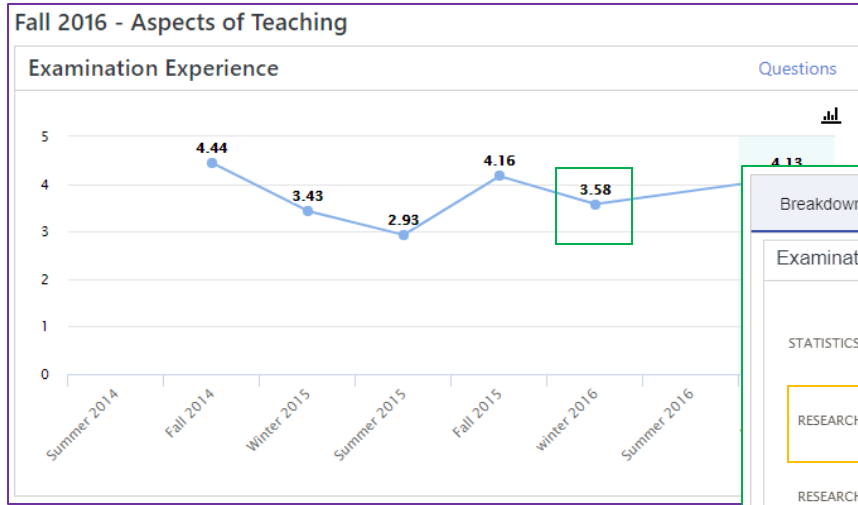
Gender

- F
- M





Diagnosis - Drilldown



Fall 2016 - Courses

RESEARCH METHODS IRE2002H-F-LEC0101

Aspects of Teaching

Comments

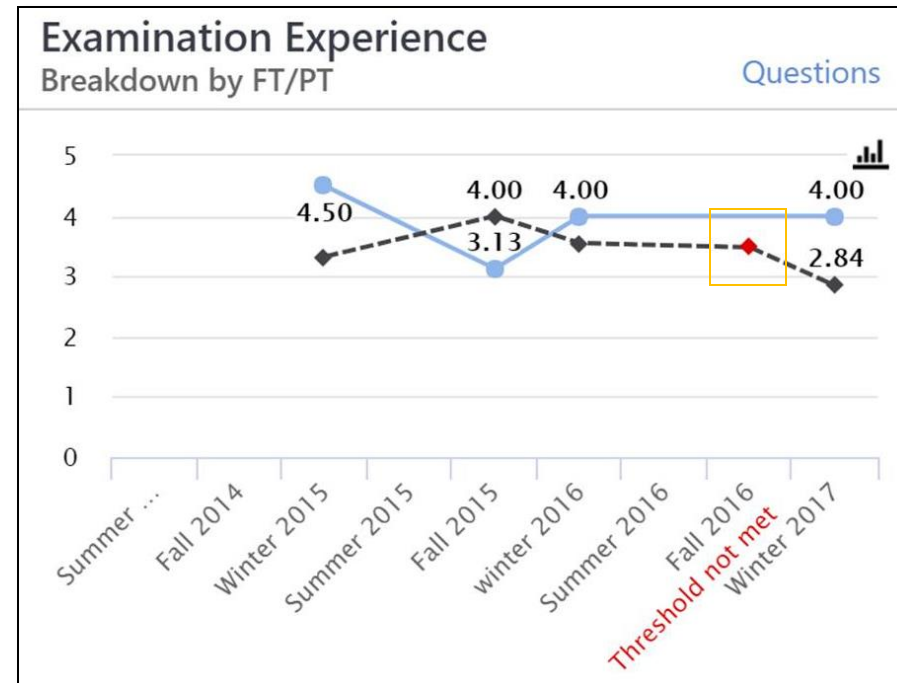
Rater Demographic Distributions

Please comment on the overall quality of the instruction in this course.

- Jane uses great examples and is an enthusiastic professor.
- Jane took a practical approach to research methods which helped us learn how to critically examine scholarly research, in addition to helping us construct our own research proposals. The proposal presentations were beneficial for receiving critical feedback about our ideas, and this assignment was ultimately helpful for writing the final paper. There should be a participation grade for this course, because at times it appeared students did not do the readings and the same handful were the ones participating every class. A participation grade would also prevent students from talking during class and presentations, which was often a distraction.
- knowledgeable of the course material and was clear in explanations
- Very broad, generalized lectures that did not provide meaningful, applicable information. When completing assignments, I used common sense and previous knowledge more than information from lectures. Her expectations and grading were unclear.
- The course would have been much more useful if we learned specifically which statistical models were applicable to what kind of research- too much time was spent going over minor aspects of conducting research and very little time was spent on this aspect.
- Jane is extremely knowledgeable in the subject, great professor

Protecting student confidentiality

- Threshold on number of responses per course
- Threshold on number of responses per student demographic
- Safe deep-dive filtering





Aspects of Teaching

- Q1. I found the course intellectually stimulating.
- Q2. The instructor created an atmosphere that was conducive to my learning.
- Q3. The course provided me with a deeper understanding of the subject matter.
- Q4. Course projects, assignments, tests, and/or exams improved my understanding of the course material.
- Q5. Course projects, assignments, tests and/or exams provided opportunity for me to demonstrate an understanding of the course material.

➤ Classroom experience

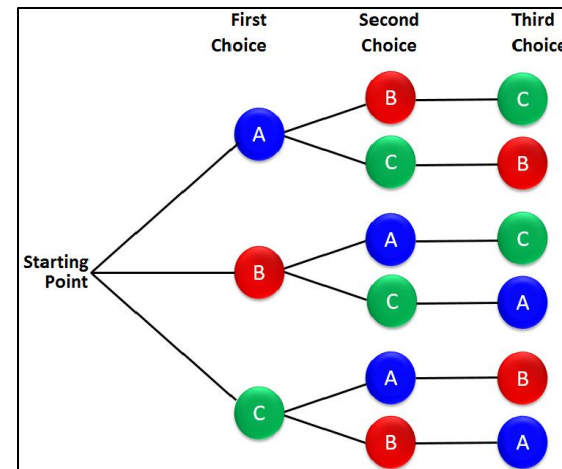
- Q1. I found the course intellectually stimulating.
- Q2. The instructor created an atmosphere that was conducive to my learning.
- Q3. The course provided me with a deeper understanding of the subject matter.

➤ Examination experience

- Q1. Course projects, assignments, tests, and/or exams improved my understanding of the course material.
- Q2. Course projects, assignments, tests and/or exams provided opportunity for me to demonstrate an understanding of the course material.

Course Evaluation Administrator

- ❖ Administrator must accommodate demands for ad hoc analysis requests or backlogs them.
- ❖ Administrator must maintain multiple versions of the same report for different departments/units.
- ❖ Difficult or impossible the admin to keep up with these demand resulting in the data not being serviced fully and the potential insights not being delivered.





Center for Teaching & Learning

- ❖ Support staff needs to access the data in order to help faculty improve (helping to improve in classroom dynamics, course design, delivery skills and new educational technologies and tools)





What's coming in Instructor Feedback Dashboards

Cascaded questionnaire and Question Personalization support

Enhanced Analytic Data Export

Printing for portfolio

Normative comparison and more statistical support

Dynamic role access

Relational demographic data

Blue Text Analytics support

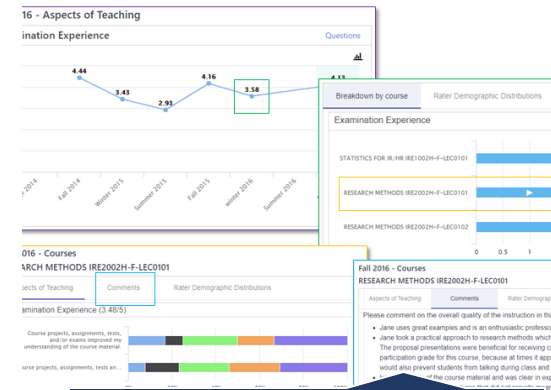
Enhanced project mapping process



Blue Analytics Concepts



Flexible Report Engine



Interactive Dashboards



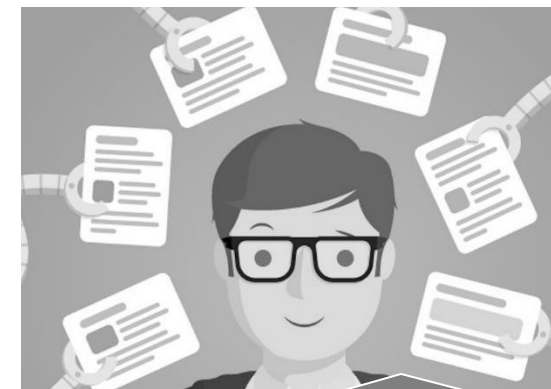
Text Analytics Engine



Integration Capabilities



Early Detection



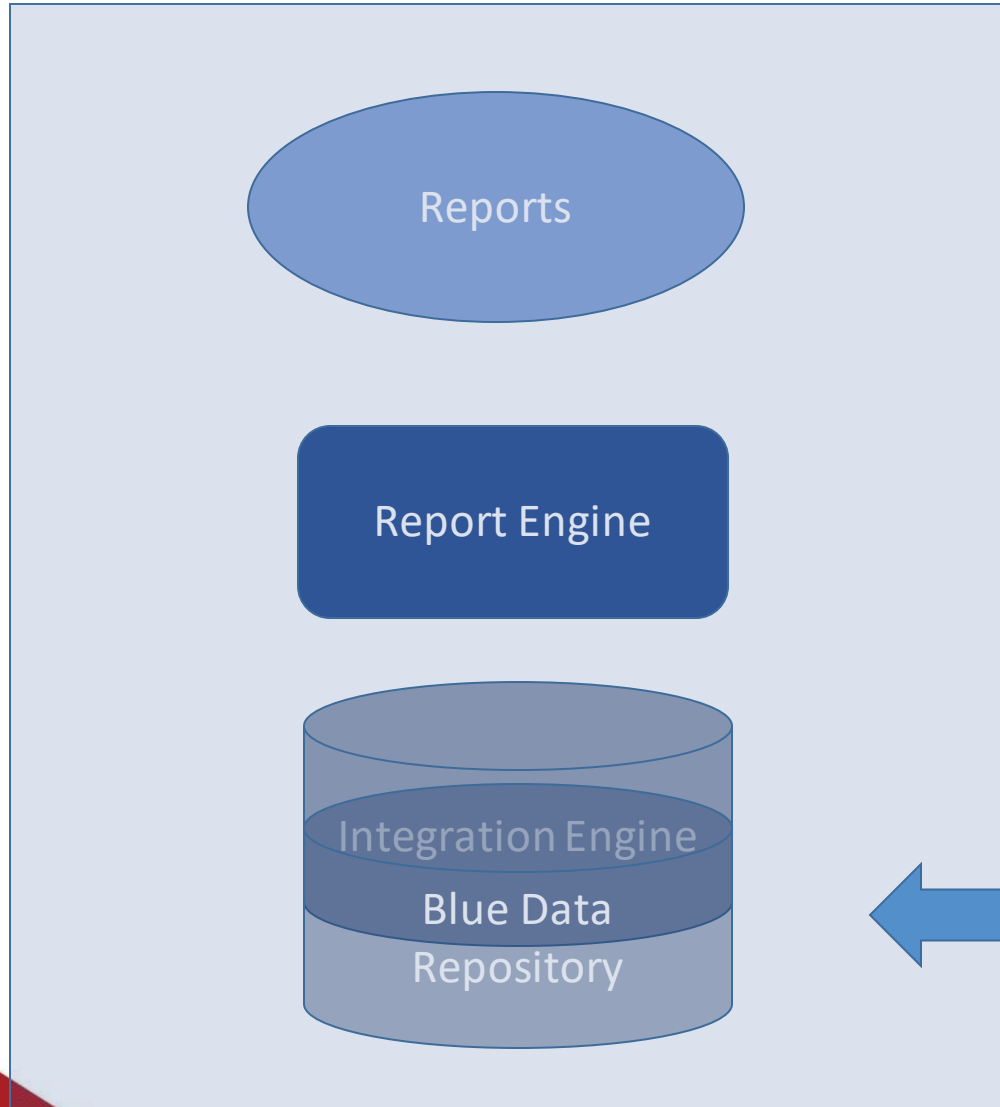
Recommendation



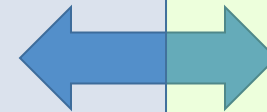
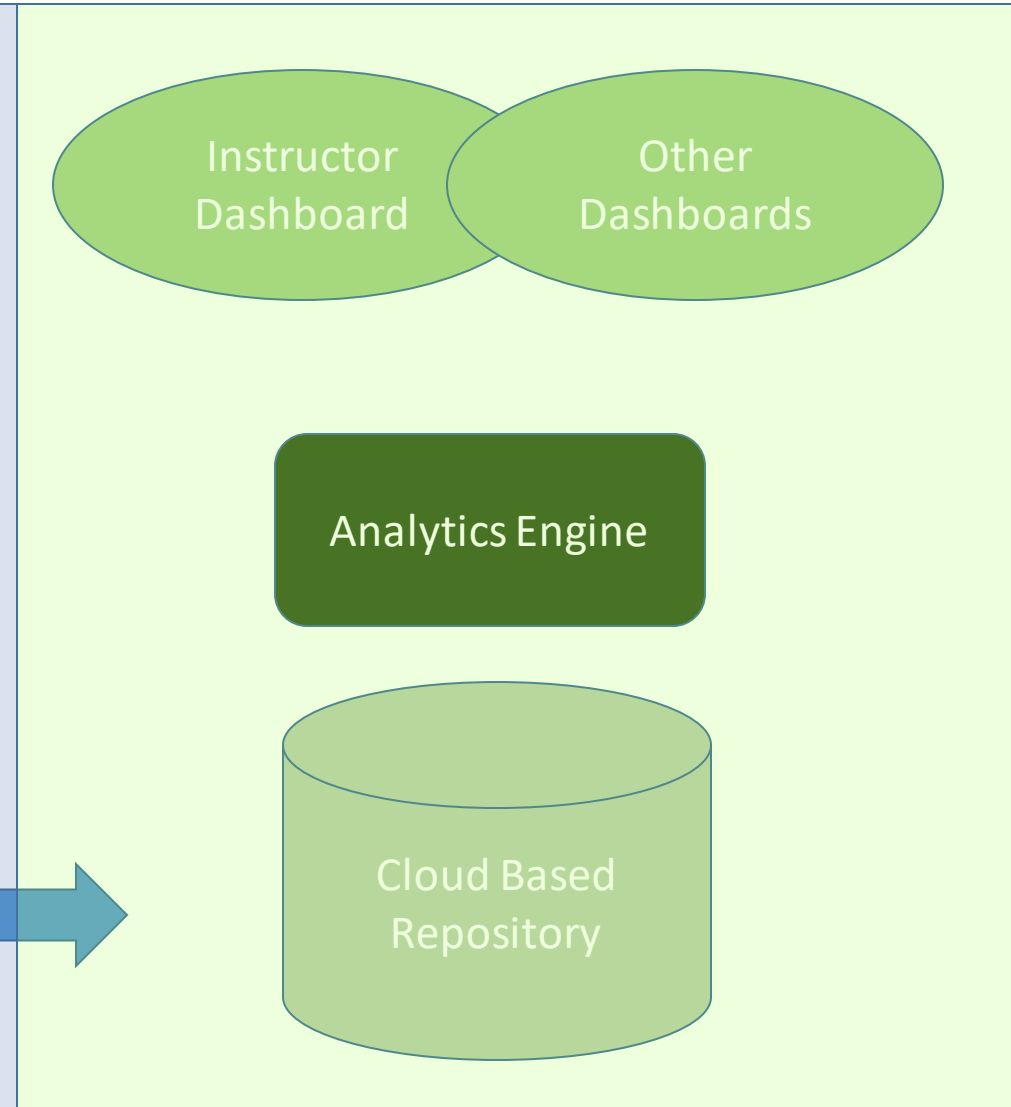


Blue Analytics Deployment

Blue (On-premises or Cloud)



Dashboards (Cloud only solution)





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Thank you!

- Questions?

