



Driving Student Success through Information Discovery

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Strategic Goals

1. Strategic business intelligence for student success
2. Improve academic success with analytics
3. Proactive intervention strategies
4. Automatic alerts and notifications
5. Improve faculty and support staff communications
6. Leverage innovations in technology to automate key business strategies



Improve Reporting

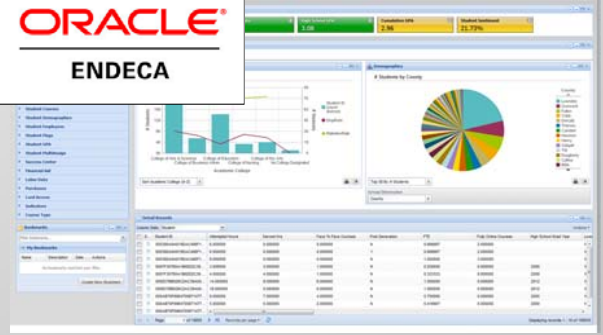
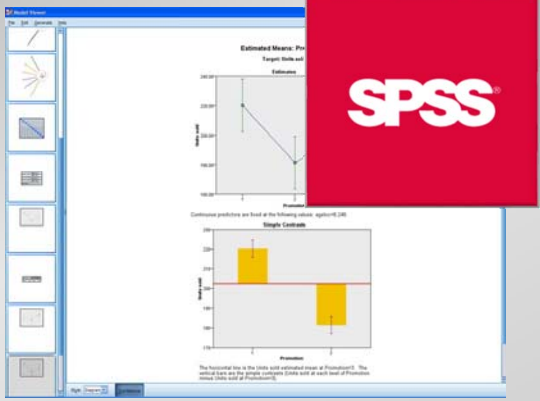
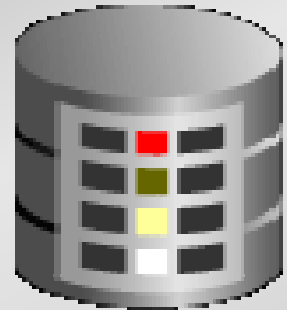
- Improve information access for faculty and advisors
- Provide key reports and analysis
- Interactive class roster with photos and at-risk metrics
- Drag-n-Drop reporting
- Historical trends and patterns



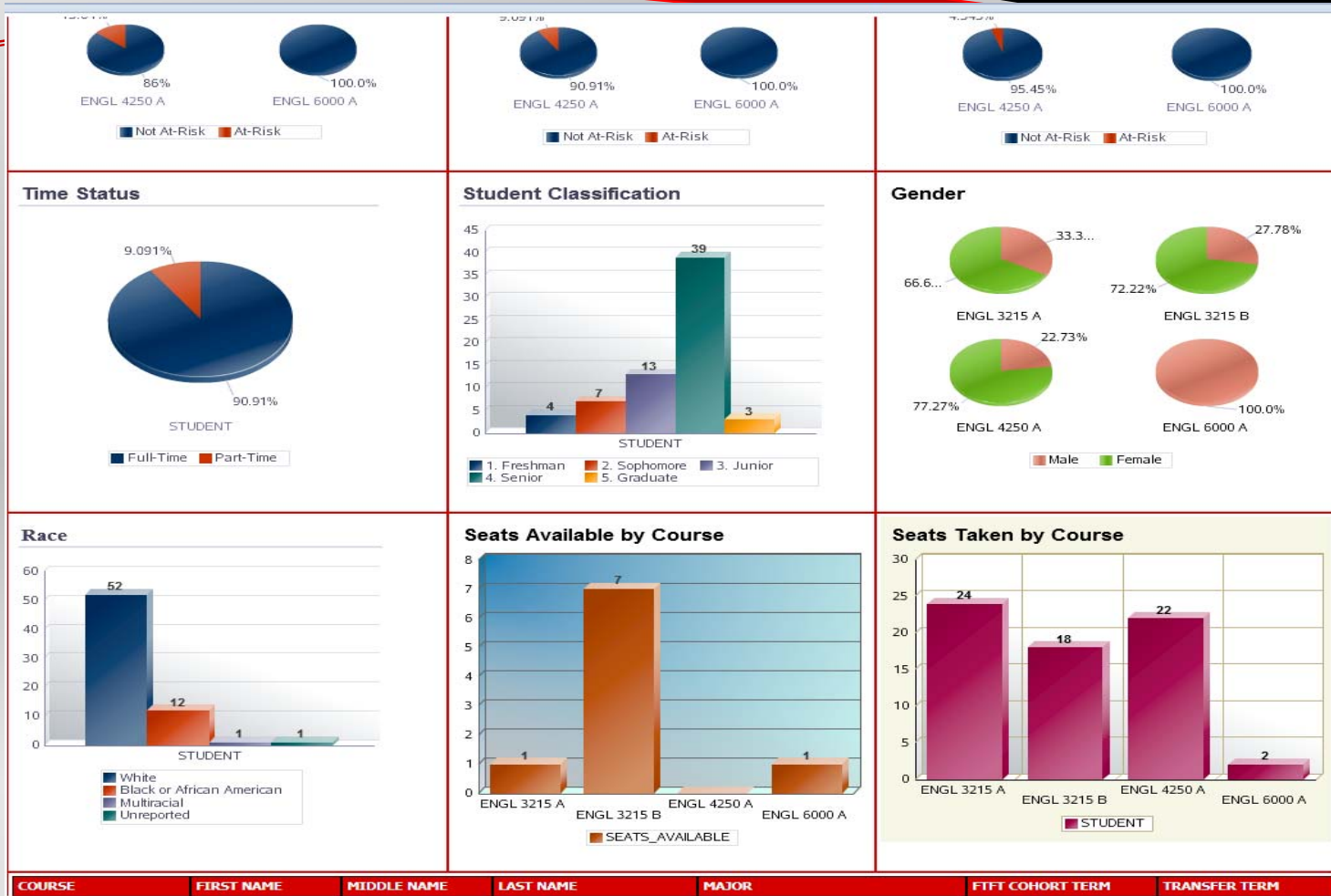
Valdosta State Current Business Intelligence Architecture



Custom Data Warehouse



- Business Intelligence Solutions**
- OBIEE
 - Endeca
 - SPSS
 - ETL
 - ODI
 - ERP/CRM
 - Ellucian
 - Oracle PeopleSoft



Oracle (OBIEE) Business Intelligence



Class Roster Highlights

Students At-Risk

[Back to Course List](#)

Course ACCT 2101 A - Principles of Accounting I

Rows 100

- At Risk General = 'Yes'
- At Risk Reading = 'Yes'
- At Risk Math = 'Yes'

1 - 84 of 84

Student Photo	Last Name	First Name	Middle Name	Attendance/Course Progress	Email	At Risk General	At Risk Math	At Risk Reading	DegreeWorks
	Doe	J	Tanner	Attendance/Course Progress Flags	bahaugab@valdosta.edu	Yes	Yes	No	DegreeWorks
	Doe	J	Jahmeem	Attendance/Course Progress Flags	bahaugab@valdosta.edu	No	No	No	DegreeWorks
	Doe	J	Qamar	Attendance/Course Progress Flags	bahaugab@valdosta.edu	No	No	No	DegreeWorks



VALDOSTA STATE UNIVERSITY

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July 9, 2013 | Message from your Advisor: Please contact me ASAP 229.333.1500

+ EXPAND

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Math Tutoring
229.333.1500

- Math Study Tips
- Tutoring Schedule
- Course Catalog
- Choosing a Major



English Tutoring
229.333.1500

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VSU E-mail



Banner Registration



BlazeView



Information Technology
Service Desk



Password Management

Registrar's
Office



English Tutoring
229.333.1500

- English Study Tips
- Tutoring Schedule
- Course Catalog
- Choosing a Major

Fall Registration
July 8 @ 7am



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Advanced and Predictive Analytics

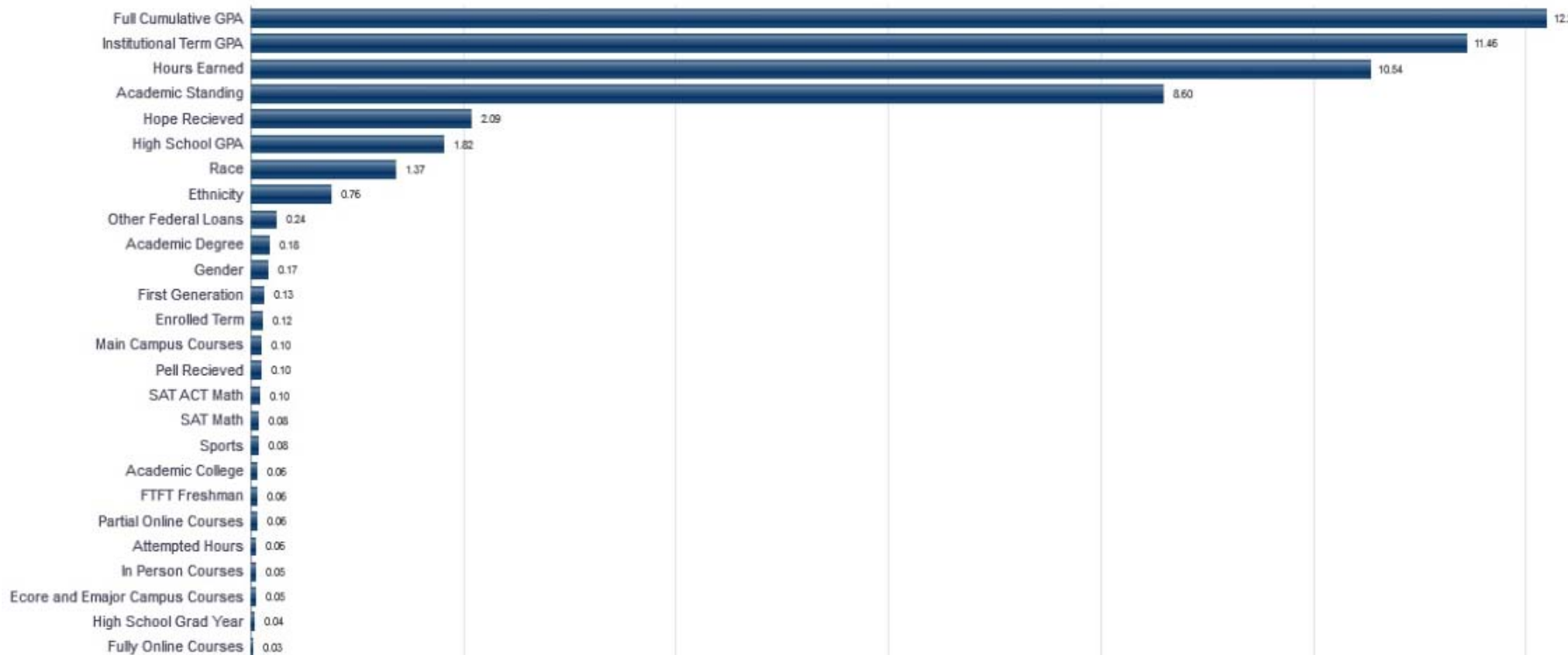
- Identify key attributes to improve student success
- Create decision trees for individual success probability
- Provide real-time analytics
- Data mining and full access to models
- Provide students with predicted course and program difficulty
- Compare predictions with historic patterns to ensure accuracy

Student Attributes Ranked by Predictive Importance

Displays attributes included in AI model that contribute to student success

Time run: 8/13/2014 12:21:02 PM

Student Attributes Ranked by Predictive Importance





Decision Tree Rules with Drill to Student ID

Displays Decision Tree Rules which drill into the Student ID's that fall into those rules

Time run: 8/13/2014 12:26:48 PM

Shantelle Loomer

Rule Number	Full_splits
10	(HIGH_SCHOOL_GPA <= 2.2549999999999999) AND (SAT_ACT_MATH > 407.5)
11	(HIGH_SCHOOL_GPA <= 2.615) AND (HIGH_SCHOOL_GPA > 2.2549999999999999) AND (SAT_ACT_VERBAL <= 535)
12	(HIGH_SCHOOL_GPA <= 2.615) AND (HIGH_SCHOOL_GPA > 2.2549999999999999) AND (SAT_ACT_VERBAL > 535)
13	(HIGH_SCHOOL_GPA <= 2.9850000000000001) AND (HIGH_SCHOOL_GPA > 2.615) AND (SAT_ACT_VERBAL <= 462.5)
14	(HIGH_SCHOOL_GPA <= 2.9850000000000001) AND (HIGH_SCHOOL_GPA > 2.615) AND (SAT_ACT_VERBAL > 462.5)
15	(HIGH_SCHOOL_GPA > 2.9850000000000001) AND (HIGH_SCHOOL_GPA <= 3.4550000000000001) AND (SAT_ACT_VERBAL <= 415)
16	(HIGH_SCHOOL_GPA > 2.9850000000000001) AND (HIGH_SCHOOL_GPA <= 3.4550000000000001) AND (SAT_ACT_VERBAL > 415)
17	(HIGH_SCHOOL_GPA > 3.4550000000000001) AND (HIGH_SCHOOL_GPA <= 3.885)
18	(HIGH_SCHOOL_GPA > 3.885)

[Analyze](#) - [Edit](#) - [Refresh](#) - [Add to Briefing Book](#) - [Copy](#)

Data Mining Decision Tree for At-Risk Students



Real-Time Math At-Risk Models

Decision Tree Model that Determines At-Risk in Math

Displays rules that were generated from decision tree model to determine if a student is at risk
Time run: 8/13/2014 10:38:35 AM

Rule Number	Rule that Determines At-Risk
10	(HSGPA in ("2")) AND (HSRank in ("1" "2"))
11	(HSGPA in ("2")) AND (HSRank in ("3" "4" "9"))
12	(SAT_MATH <= 485) AND (HSGPA in ("3")) AND (HSRank in ("1" "2"))
13	(SAT_MATH <= 485) AND (HSGPA in ("3")) AND (HSRank in ("3" "4" "9"))
14	(SAT_MATH <= 485) AND (HSGPA in ("4"))
15	(SAT_MATH > 485) AND (HSGPA in ("3"))
16	(SAT_MATH > 485) AND (HSGPA in ("4"))
8	(HSGPA in ("1")) AND (SAT_MATH <= 485)
9	(HSGPA in ("1")) AND (SAT_MATH > 485)

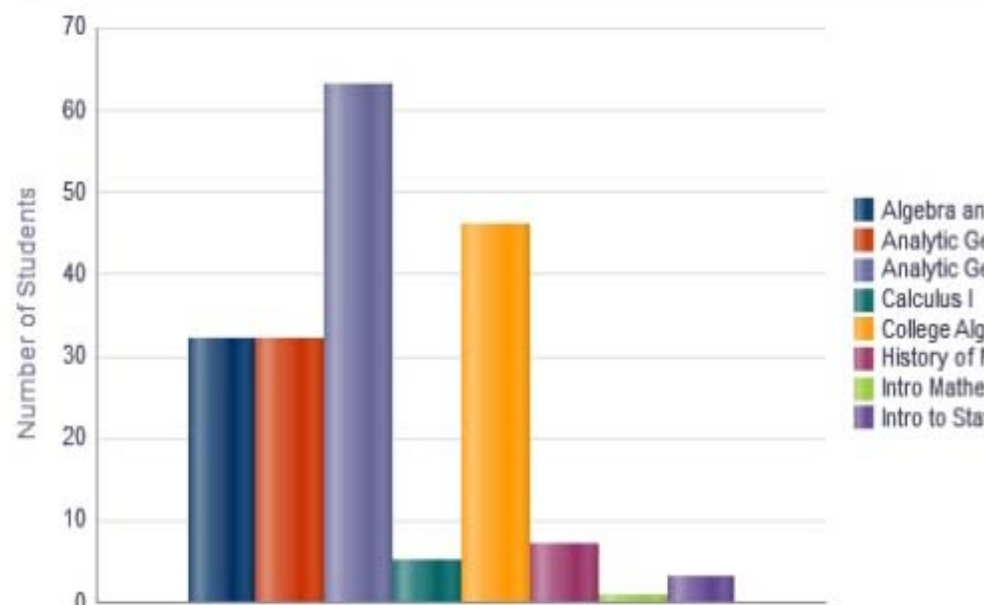
[Analyze](#) - [Edit](#) - [Refresh](#) - [Print](#) - [Add to Briefing Book](#) - [Copy](#)

At-Risk Students by Course Name



Displays At-Risk Students by Course Name
Time run: 8/13/2014 10:38:35 AM

Number of At-Risk Students by Class





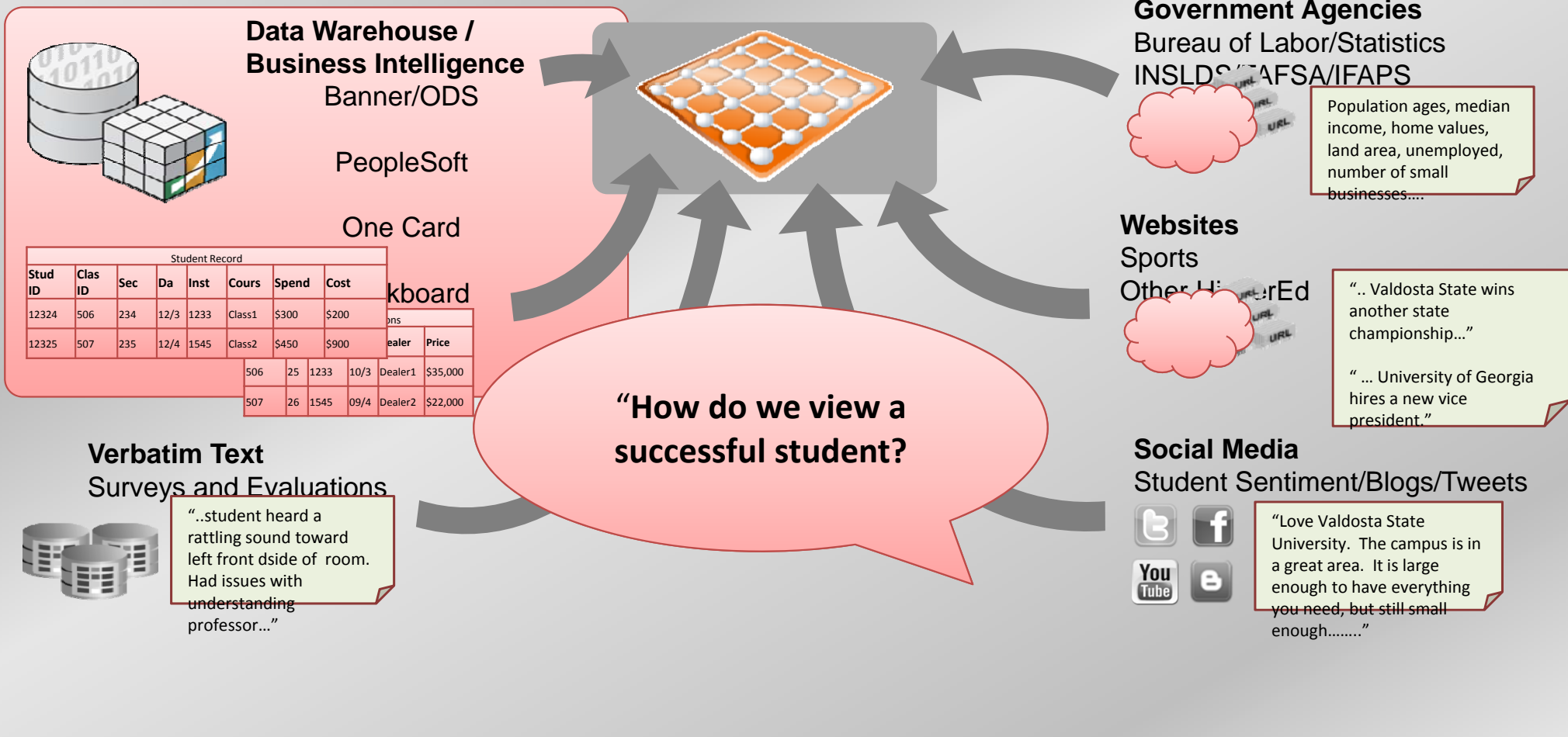
Information Discovery

- Analyze data from any source
- Measure and quantify student engagement
- Combine both structured and unstructured data
- Provide sentiment analysis on surveys and social media
- Measure the impact social and engagement metrics have on retention and graduation rates



Oracle Endeca Information Discovery

Understand the Complete Picture with Context from Any Source



▼ Enrolled Term

Search for specific value...

- Fall 2012 (1178)
- Spring 2013 (1090)
- Fall 2013 (885)
- Spring 2014 (843)
- Fall 2014 (729)
- Summer 2014 (302)
- Summer 2013 (198)

Select All

▼ Student GPA

- ▶ High School GPA
- ▶ Institutional Term GPA
- ▼ Full Cumulative GPA

Between -

0 - 4

5224 results

Submit

- ▶ SAT Verbal
- ▼ Purchases
 - ▶ Enrolled Term
 - ▶ Purchase Amount
- ▼ Financial Aid
 - ▶ Parent Marital Status
 - ▶ Parent Taxes Paid
 - ▶ Parent Adjusted Income
 - ▶ Enrolled Family Members
 - ▶ Total Parent Contribution
 - ▶ Other Fed Grants
 - ▶ Other Fed Loans
 - ▶ Other Loans
 - ▶ Pell Received
 - ▶ Hope Received
 - ▶ Private Scholarships
 - ▶ Primary Parent Contr
 - ▶ Par 2 Adj Avail Income
 - ▶ Secondary Parent Contr
- ▼ Student Flags
 - ▶ Graduated This Term
 - ▶ At Risk General
 - ▶ At Risk Math
 - ▶ Registered Full Time
 - ▶ Transfer Student

- ▶ Enrolled Term
- ▼ Student Demographics
 - ▶ County Residence
 - ▶ High School
 - ▶ Citizen
 - ▶ Ethnicity
 - ▶ Gender
 - ▶ Race
 - ▼ Sport
 - Search for specific value...
 - Football (57)
 - Soccer (40)
 - Dance (39)
 - Cheerleader (30)
 - Baseball (18)
 - Softball (17)
 - Women-Cross Country (10)
 - Men-Cross Country (8)
 - Men-Tennis (5)
 - Women-Basketball (5)
 - Volleyball (4)

- ▼ Course Type
 - ▶ Hybrid Courses
 - ▶ Partially Online Courses
 - ▶ Vista Online Courses
 - ▶ Tech Enhanced Courses
 - ▶ Kingsbay Campus
 - ▶ Military Campus Courses
 - ▶ Offsite Campus Courses
 - ▶ Online Campus Courses
 - ▶ Gomi Campus Courses
 - ▶ Ecore Campus Courses
 - ▶ Emajor Campus Courses
 - ▶ Webmba Campus Courses
- ▼ Student Courses
 - ▶ Enrolled Term
 - ▶ Freshman Learning
 - ▶ Student Athlete
 - ▶ Student Class
 - ▶ Student Level
 - ▶ Student Type
 - ▶ Academic College

Search Box

Search within

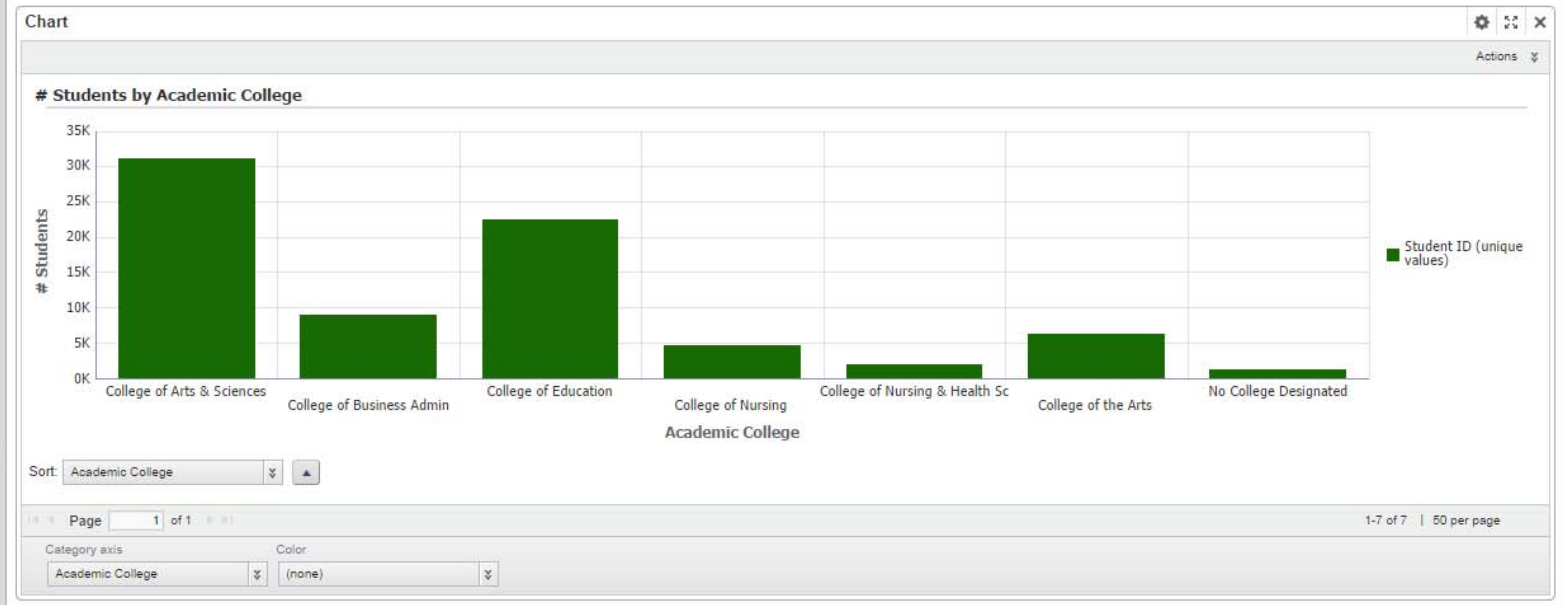
Student 360 Metrics

62,155	20.97%	14.44%	10.68%	5.72%	12.81%
# Students	Retention Rate Yr1	Retention Rate Yr2	Retention Rate Yr3	Retention Rate Yr4	At Risk All Rate

Selected Refinements
 No refinements have been selected.

- Available Refinements
- Other
 - Test Scores
 - Indicators
 - Financial Aid
 - Student Demographics
 - Course Type
 - Student GPA
 - Student Employees
 - Student Flags
 - Card Access
 - Success Center
 - Purchases
 - Student
 - Student Courses
 - Student Admission Standards

Student Comparison Enrollment Financial Aid Demographics Retention



Bookmarks

Filter bookmarks...

- My Bookmarks
- Community Bookmarks

+ Bookmark



Search Box
Search within

Student Metrics

12.81%	3.06	2.84
At Risk Rate	High School GPA	Cumulative GPA

Selected Refinements
No refinements have been selected.

- ### Available Refinements
- Indicators
 - Financial Aid
 - Student Demographics
 - Course Type
 - Student GPA
 - Student Employees
 - Student Flags
 - Card Access
 - Success Center
 - Purchases
 - Student
 - Student Courses
 - Student Admission Standards

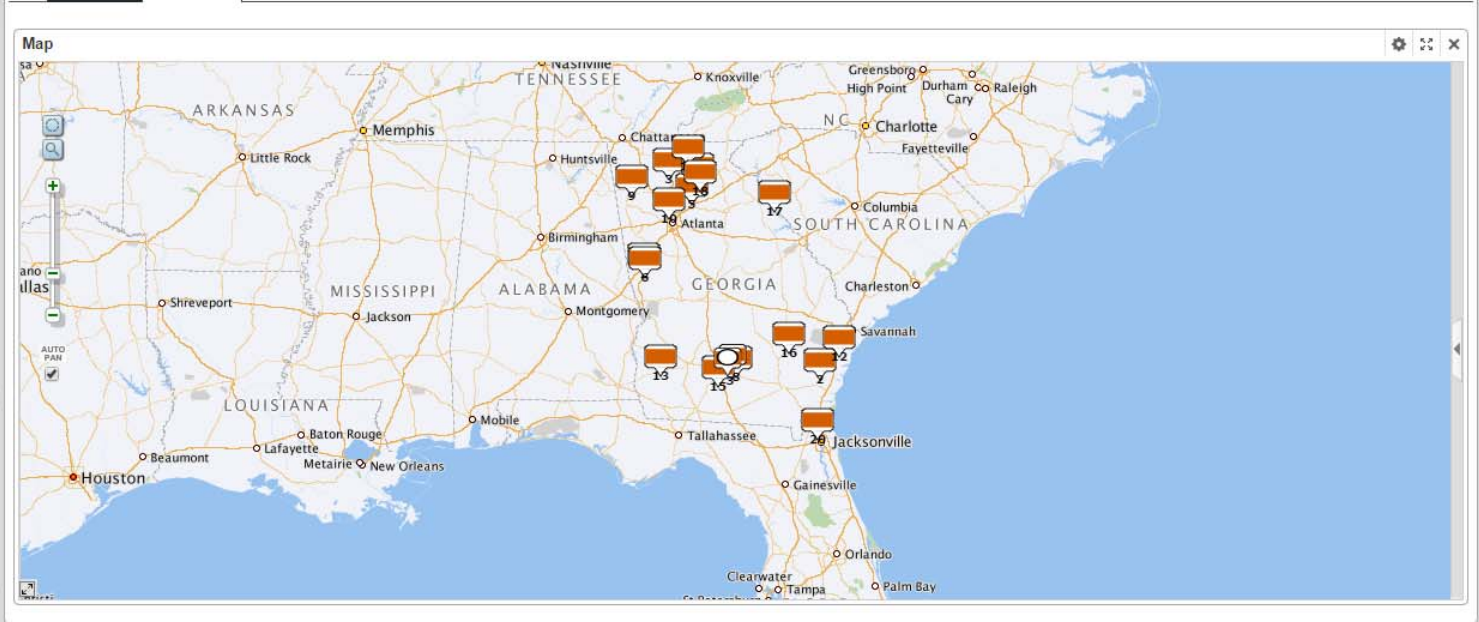
Bookmarks

Filter bookmarks...

- My Bookmarks
- Community Bookmarks

+ Bookmark

Student Location



Results Table



Search Box

kr

Search within

Course Metrics

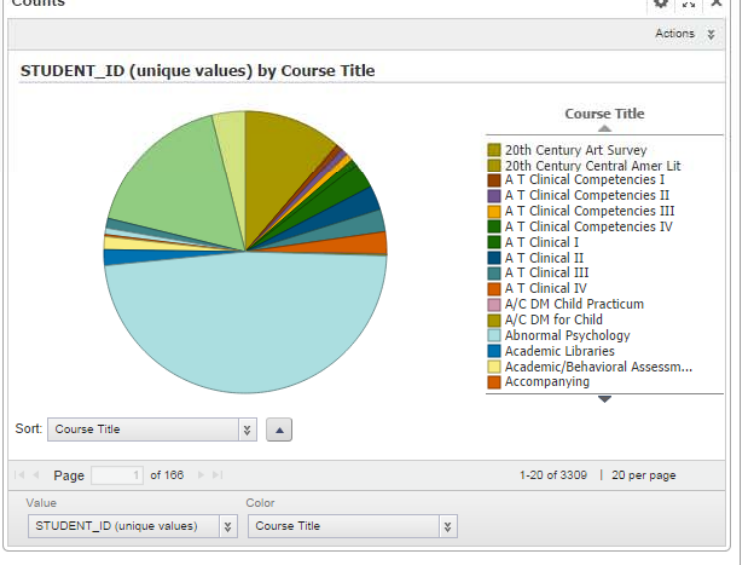
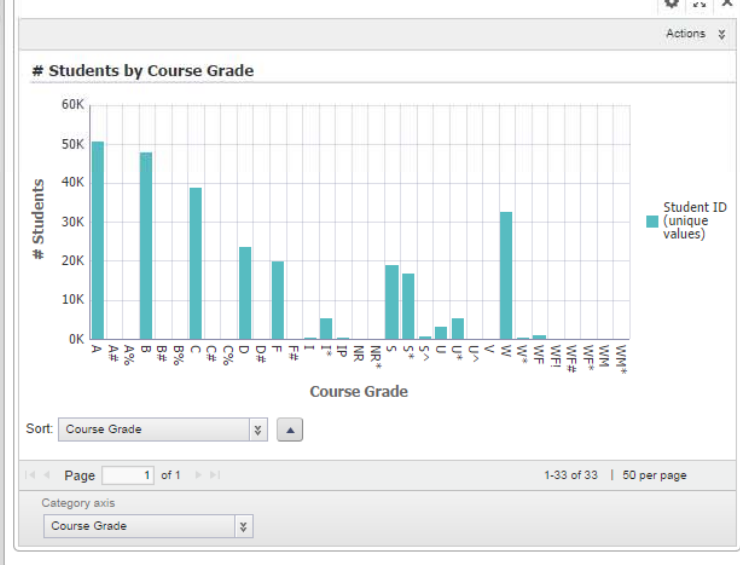
62,152 # Students 3,309 Number of Courses

Selected Refinements

No refinements have been selected.

Component Container

- Available Refinements**
- ▶ Student Demographics
 - ▶ Student Flags
 - ▶ Success Center
 - ▶ Student
 - ▼ Student Courses
 - ▶ Course Attributes
 - ▶ Course Campus
 - ▶ Course Cipc Desc
 - ▶ Course College
 - ▶ Course Credit Hours
 - ▶ Course Department
 - ▶ Course Description
 - ▶ Course Grade
 - ▶ Course Number
 - ▶ Course Online Type
 - ▶ Course Quality Points
 - ▶ Course Section
 - ▶ Course Subject
 - ▶ Course Title
 - ▶ Course Type
 - ▶ Enrolled Term
 - ▶ Freshman Learning
 - ▶ FTFT Freshman



Results Table

0 records selected

RECORDSPEC	Term	RECORDSPEC	Course Quality Points	Noshow Cancel Counts	Course Type	Course Credit Hours	Course Campu
[Empty table body]							

View Options Actions



Search Box

Search within

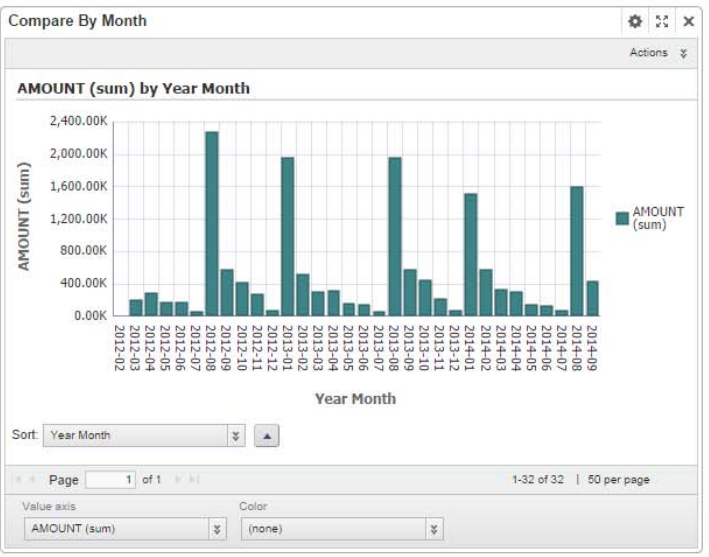
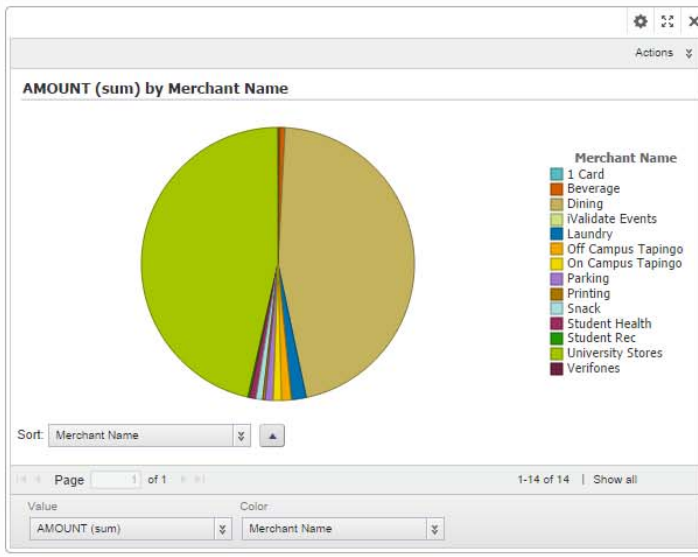
Purchase Metrics

14,596 # Students \$15,946,183 Total \$ Amount 1,890,695 Total Transactions \$8.43 Avg \$ per Transaction 2,024 Transactions Per Day

Selected Refinements

No refinements have been selected.

- Available Refinements**
- Student Flags
 - Purchases
 - Enrolled Term
 - Student ID
 - Amount
 - Merchant Name
 - Merchant Short Name
 - Profitcenter Name
- Search for specific value...
- Chick Fil A (351936)
 - Starbucks (145608)
 - Langdale Market (130868)
 - Main/tech/V Store (111917)
 - Sustella Market (109951)
 - Moes (96522)
 - Nathans Famous (78995)
 - Hopper Laundry (76662)
 - Georgia Laundry (75234)
 - Odum Library Printing (75208)
 - Centennial Laundry (72792)
 - UC Food Court (69797)
 - Einsteins (65456)
 - Papa Johns (65343)
 - Palms Dining (65260)
 - Landgate Laundry (60571)



Results Table

TERM	RECORDSPEC	RETN_1YR	RECORDTYPE	Year Month	Profitcenter Name	Year	Purchase Desc
View Options Actions							

2 Data Sets (Last loaded 9/18/2014) Bookmark



Access Card | Student 360 x

kraken.valdosta.edu:8101/eid/web/student-360/access-card

VSU OIR Webpage VSU Data Warehouse VSU Data Cookbook Banner INB Clarizen Project Ma... IPEDS Survey GZI: ADC Website USG RPA USG by the Numbers ADP Approve Time Travel Reimburse...

Endeca Information Discovery | Student 360 Admin Admin

Students 360 Students Course Purchases Access Card Evaluation JK Sandbox + Add Component

Search Box [] Search within

Summarization Bar

14,676 Students 4,687,418 Access Card Entries 926 Days on Campus

Selected Refinements No refinements have been selected.

Available Refinements

- Student Flags
- Card Access
 - Enrolled Term
 - Student ID
 - Access Date
 - Building
 - Building Access
 - Dayaccess
 - Between [] - []
 - 1 - 47
 - 208939 results
 - [] Submit
- Door Description
 - Search for specific value... []
 - Hopper East Tower (335925)
 - Elevator Orig. Right (276914)
 - Hopper West Tower (256404)
 - Langdale South (256392)
 - Rec. Center Exit Five (229266)
 - ...

Record Count by Building

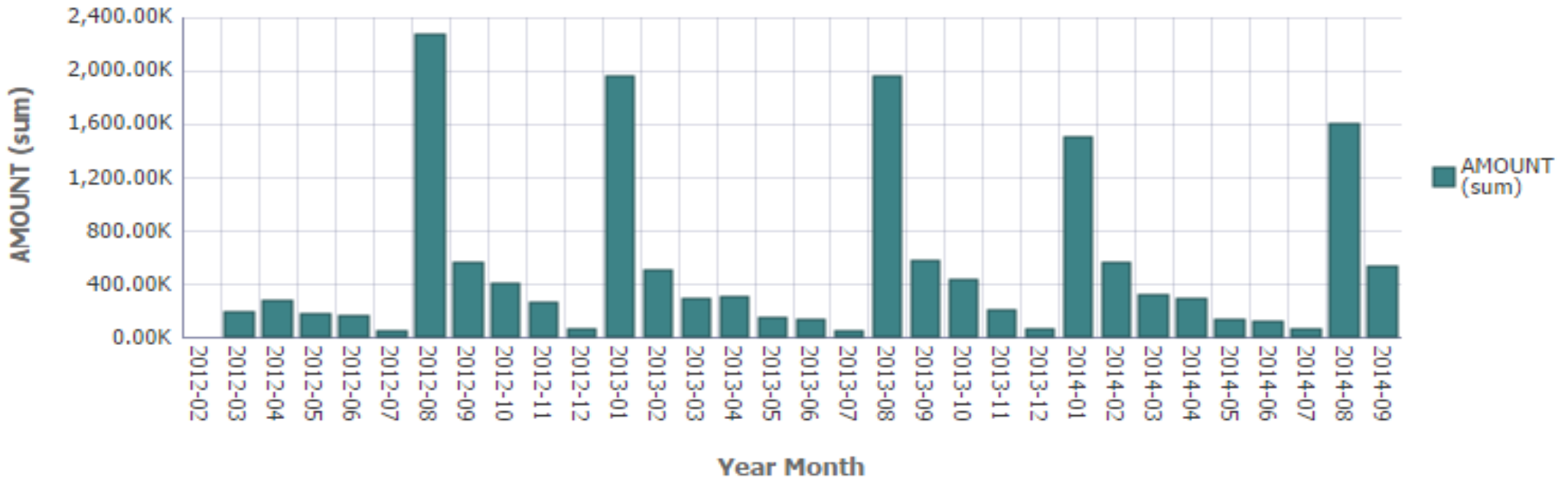
Building Entries by Year Month

Results Table

TERM	Door Description	RECORDSPEC	RETN_1YR	Building	RECORDTYPE	Year Month	Year
------	------------------	------------	----------	----------	------------	------------	------

2 Data Sets (Last loaded 9/18/2014)

AMOUNT (sum) by Year Month



Sort: Year Month

Value axis: AMOUNT (sum) Color: (none)



course material

due dates extra credit good teacher

good work great class

great teacher group work

little bit power points study guides

subject matter

teaching style

Explore Themes by Number of records

Search Box

Search within

Selected Refinements

No refinements have been selected.

Available Refinements

▼ Evaluation

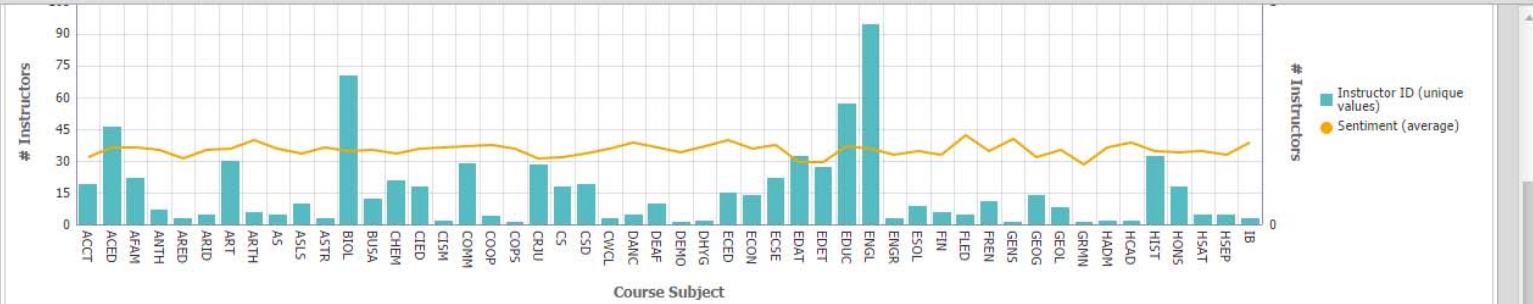
- ▶ Instructor ID
- ▶ Comments
- ▼ Sentiment

Between [dropdown]

-2.73 - 2.13

63548 results

Submit



Sort: Course Subject

Page 1 of 3

Category axis: Course Subject

1-50 of 112 | 50 per page

Tabbed Component Container

Tag Cloud Result Table

Positive

always available always prepared always willing answering questions busy work

class discussion class discussions class fun class period

class time course content course material

course work due dates enough time entire class everyday life excellent job excellent teacher

explained everything explained things explaining things extra credit extremely helpful

extremely knowledgeable good teacher good work great class Great class great course

great professor **great teacher** Great teacher group work little bit office hours

online class online course power points real life real life examples real life situations really good

Negative

asking questions busy work class assignments class discussion class discussions class period

class time course content course material course work critical thinking due dates

enough time entire class entire semester extremely difficult extremely hard final exam

final grade grading criteria grading scale group project group projects group work

homework assignments homework problems last minute little bit little difficult little time

much information much material much work multiple choice office hours

online class online course power point power points practice problems really hard

study guide study guides subject matter teaching style test questions time consuming

always willing busy work

class discussions class fun

class time

course content

course material

due dates extra credit good teacher

good work great class

great teacher group work

little bit power points study guides

subject matter

teaching style

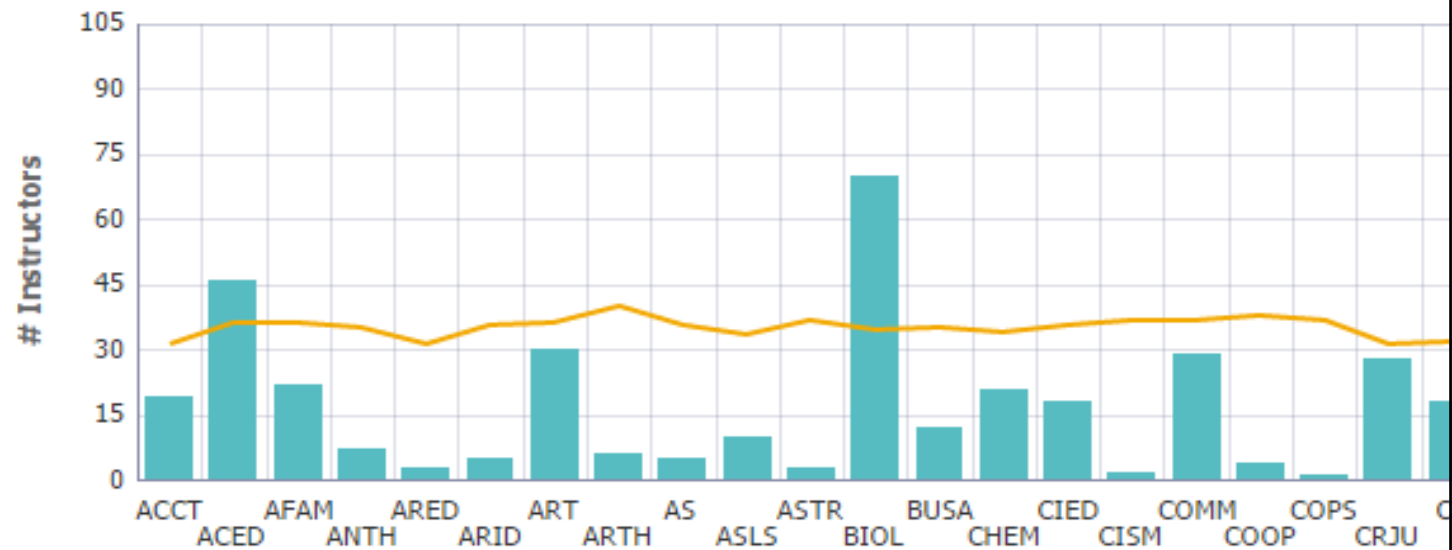


Explore Themes by Number of records

Sentiment

Chart

Instructors by Course Subject



Sort: Course Subject

Page 1 of 3

Positive



always available always prepared **always willing** answering questions busy work class discussion

class discussions class fun class period **class time** course content

course material course work due dates enough time entire class everyday life excellent job

excellent teacher explained everything explained things explaining things extra credit extremely helpful good teacher

good work great class great course great professor **great teacher** Great teacher group work little bit

office hours online class online course positive attitude power points professional manner real life real life examples

real life situations really good study guide study guides **subject matter** sure everyone teaching style

Negative

asking questions **busy work** class discussion cla

course content course material critical thinking due dates e

extremely hard final exam final grade grading criteria

homework assignments homework problems la

much information much mater

online class online course power point power points

study guides subject matter teaching style **test ques**



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