

HARMONIZIN
G

HIGHER EDUCATION WITH DATA ANALYTICS



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Performance Goals

- ♪ Understand how data analytics can enhance higher education decision making
- ♪ Create relationships to the examples provided that will allow for easy implementation



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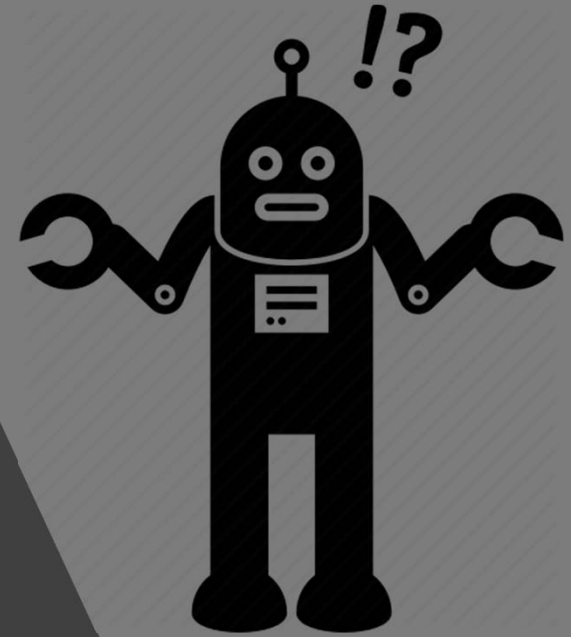
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What is Data Analytics?




Predictive Data Analysis



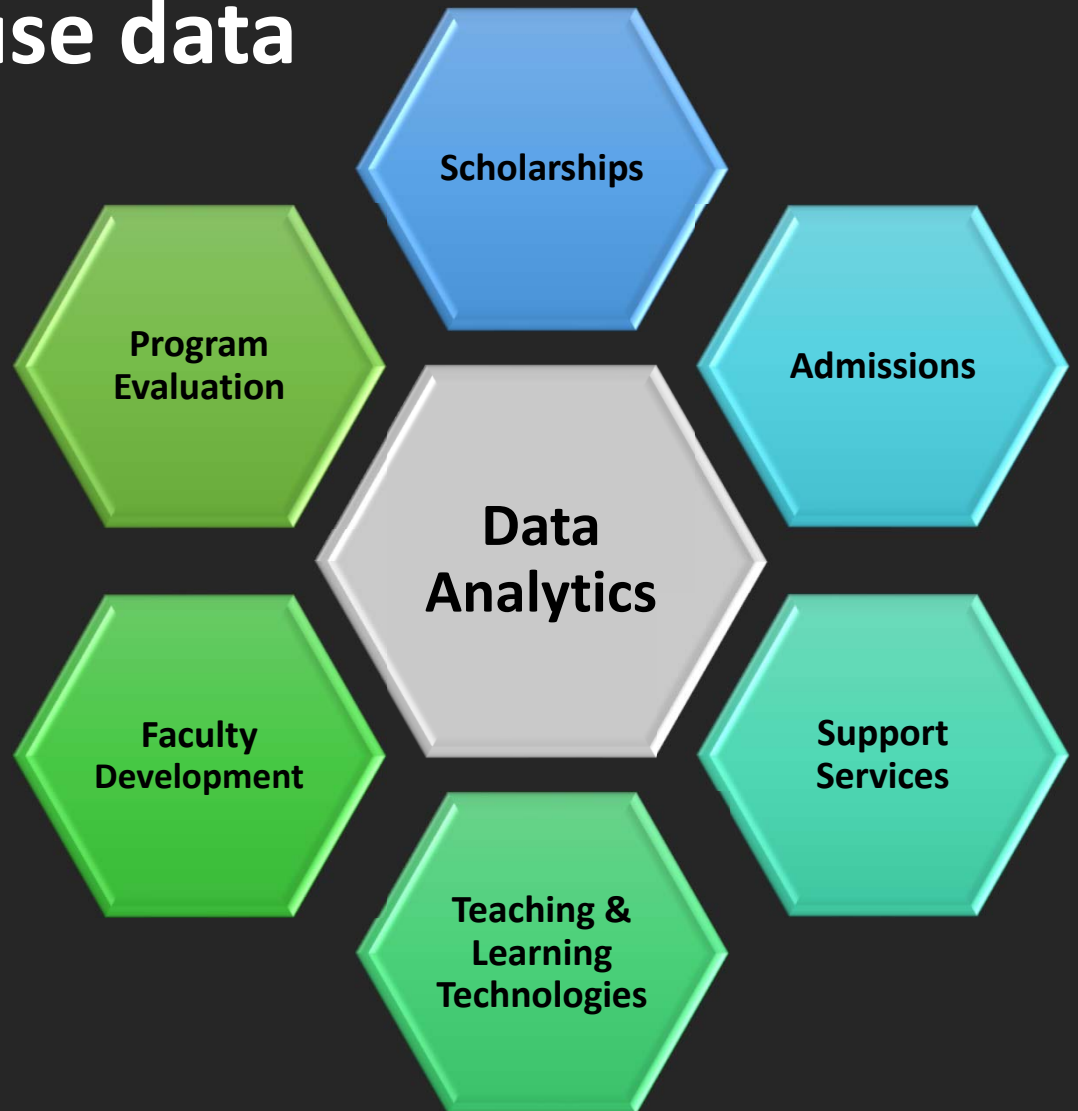
**Prescriptive Data
Analysis**



Two types of data analysis



How can you use data analytics?



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What we're sharing
with you today



♪ How we use analytics

♪ Analytic processes for:

- ♪ Assessing learner progress
- ♪ Course level performance
- ♪ Program assessment based on Learner & Course Performance
- ♪ Blackboard course Analytics with A4L

Assessing Learner Progress





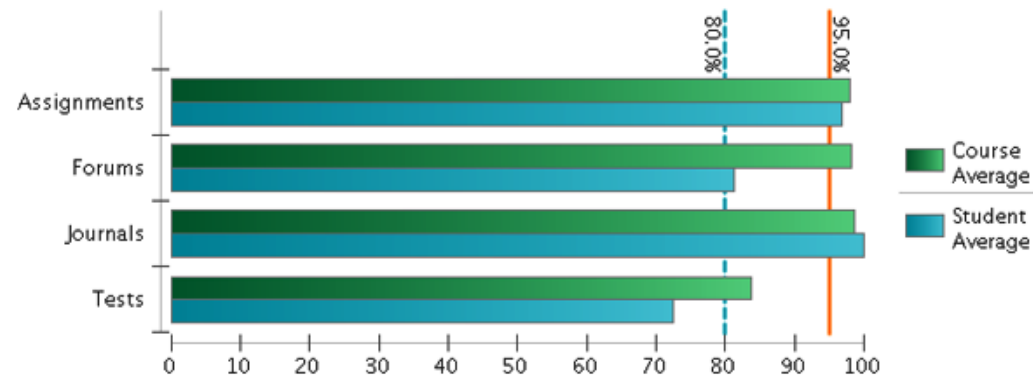
Course Performance Reports

Reports how learners in a single course perform against a selected set of standards.

Course performance report

Student Overview

Performance Target	Performance Range	Course		Student		
		Average	Average	Median	Mode	Standard Deviation
80.0%	+/- 5% (or 75% - 85%)	95.0%	88.3%	100.0%	100.0%	17.5%



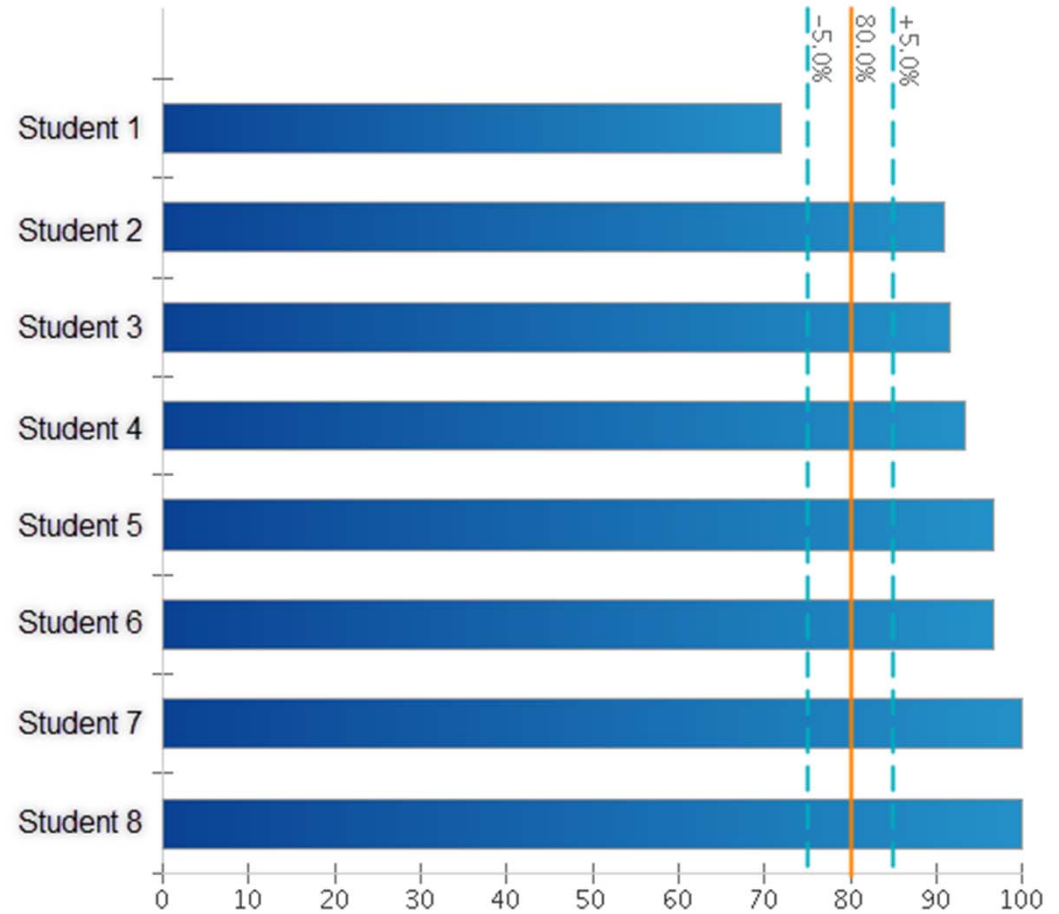
! Performance Average Below 75.0%

	Student			Course
	Average Score	Performance Offset	Count of Items	Average Score
Assignments	96.9%	16.9%	4	98.0%
Forums	81.2%	1.2%	2	98.1%

Course performance report (cont')

Student Overview

This chart is based on submission data. If submissions do not exist student details may be empty. Click on the bar to see performance for the learner.



Course performance report (cont')

Detail by Goal

! Performance Average Below 75.0%

	Overall Average	Assignments
		Student Avg (Count)
Counseling Doctoral Standards for Counselor Education		
Conceptualization of clients from multiple theoretical perspectives	! 57.8%	<u>57.8%</u> (3)
Current topical and political issues in counseling and how those issues affect the daily work of counselors and the counseling profession	86.7%	<u>86.7%</u> (2)
Ethical and culturally relevant counseling in multiple settings	86.7%	<u>86.7%</u> (1)
Evidence-based counseling practices	! 57.8%	<u>57.8%</u> (3)
Models and methods of program evaluation	100.0%	<u>100.0%</u> (1)

Standards Achievement Summary by Learner

Student 1

	Avg Grade	Graded Attempts
Counseling	95.7	5
Course One	95.7	5
C-1 - Foundations for Clinical Mental Health Counseling	100.0	1
C-1a - History and development of clinical mental health counseling	100.0	1
C-2 - Contextual Dimensions for Clinical Mental Health Counseling	92.8	3
C-2a - Roles and settings of clinical mental health counselors	88.3	1
C-2c - Mental health service delivery modalities within the continuum of care, such as inpatient, outpatient, partial treatment and aftercare, and th	93.3	1
C-2j - Cultural factors relevant to clinical mental health counseling	93.3	1
C-2k - Professional organizations, preparation standards, and credentials relevant to the practice of clinical mental health counseling	96.7	1
C-2l - Legal and ethical considerations specific to clinical mental health counseling	88.3	1
C-2m - Record keeping, third party reimbursement, and other practice and management issues in clinical mental health counseling	96.7	1
C-3 - Practice for Clinical Mental Health Counseling	100.0	2
C-3c - Strategies for interfacing with the legal system regarding court-referred clients	100.0	1
C-3d - Strategies for interfacing with integrated behavioral health care professionals	100.0	1
C-3e - Strategies to advocate for persons with mental health issues	100.0	1
Counseling	92.4	2
Course Two	92.4	2
F-1 - Foundations for Marriage, Couple and Family Counseling	92.4	2
F-1e - Principles and models of assessment and case conceptualization from a systems perspective	92.4	2
F-1f - Assessments relevant to marriage, couple, and family counseling	92.4	2
F-2 - Contextual Dimensions for Marriage, Couple, and Family Counseling	88.0	1
F-2m - F-2-m: cultural factors relevant to marriage, couple, and family functioning, including the impact of immigration	88.0	1

Student 2

Assessing Course Level Performance

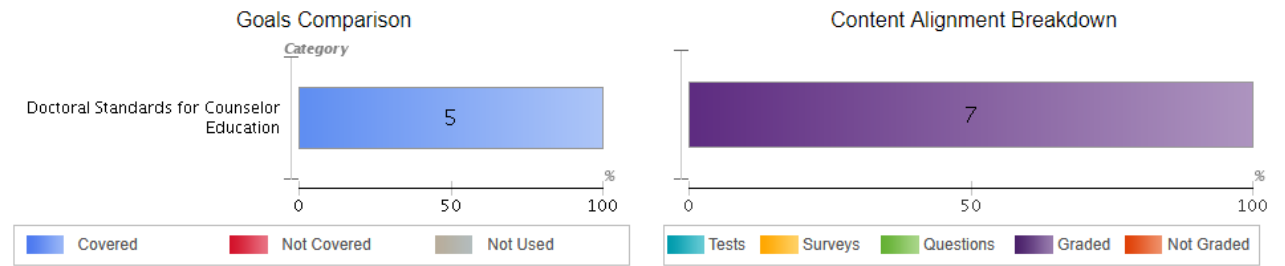


Course Reports

Displays data on course items that have been aligned to standards

Displays how learners in a single course perform against a selected set of standards.

Course coverage report



Category	Goals				Content				
	Total	Not Used	Covered	Not Covered	Tests	Surveys	Questions	Graded	Not Graded
Doctoral Standards for Counselor Education	5	0	5	0	0	0	0	7	0
		0%	100%	0%	0%	0%	0%	100%	0%

Doctoral Standards for Counselor Education

B-1f Ethical and culturally relevant counseling in multiple settings

Item Name	Type	Description	Place
Prevention/Intervention Program	<input checked="" type="checkbox"/> Course Content	Please post here once you have made desired changes using your peer reviewer's	Assignments and Examinations

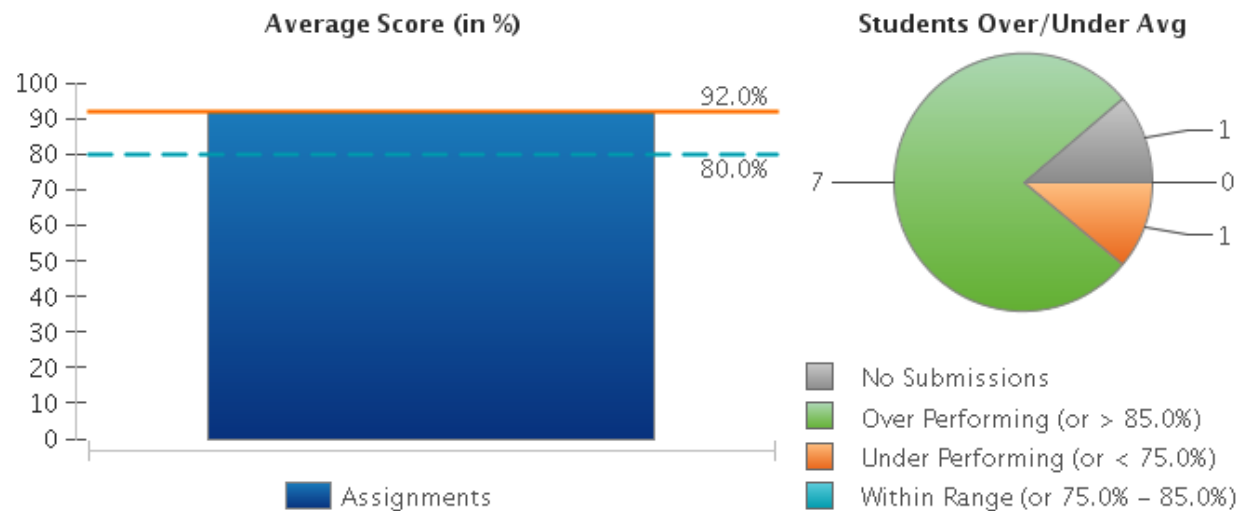
B-4f Models and methods of program evaluation

Item Name	Type	Description	Place
Critique of Peer Prevention Intervention Program	<input checked="" type="checkbox"/> Course Content	Please post here in addition to post to the peer whose program you have critiqued. Please post here in addition to post to the peer whose program you have critiqued.	Assignments and Examinations

Course Performance Report

Course Overview

Performance Target	Performance Range	Course Average	Median	Mode	Standard Deviation
80.0%	+/- 5% (or 75% - 85%)	92.0%	100.0%	100.0%	17.8%



	Average Score (in %)	Performance Offset	Count of Items
Assignments	92.0%	12.0%	5

Standard Achievement Summary by Course

		Avg Grade	Distinct Students ~
COUR 5325	A-1c - Principles and philosophies of addiction-related self-help	98.7	23
	A-2c - Factors that increase the likelihood for a person, community, or group to be at risk for or resilient to psychoactive substance use disorders	85.6	24
	A-2e - Importance of vocation, family, social networks, and community systems in the addiction treatment and recovery process	98.7	23
	A-2 f - Role of wellness and spirituality in the addiction recovery process	98.7	23
	A-2i - Diagnostic process, including differential diagnosis and the use of current diagnostic classification systems, including the Diagnostic and Statistical Manual of Mental Disorders (DSM) and the International Classification of Diseases (ICD)	85.6	24
	A-3c - Assessment for symptoms of psychoactive substance toxicity, intoxication, and withdrawal	85.6	24
COUR 5235	G-1b - Models of school counseling programs	89.5	7
	G-1c - Models of P-12 comprehensive career development	89.5	7
	G-1e - Assessments specific to P-12 education	96.9	7
	G-2a - School counselor roles as leaders, advocates, and systems change agents in P-12 schools	93.0	7
	G-2b - School counselor roles in consultation with families, P-12 and postsecondary school personnel, and community agencies	90.1	7
	G-2d - School counselor roles in school leadership and multidisciplinary teams	88.0	7
	G-2e - School counselor roles and responsibilities in relation to the school emergency management plans, and crises, disasters, and trauma	83.7	7
	G-2f - Competencies to advocate for school counseling roles	89.8	7
	G-2g - Characteristics, risk factors, and warning signs of students at risk for mental health and behavioral disorders	87.9	7
	G-2k - Community resources and referral sources	96.4	7
	G-2m - Legislation and government policy relevant to school counseling	79.4	7
	G-2n - Legal and ethical considerations specific to school counseling	79.4	7
	G-3a - Development of school counseling program mission statements and objectives	93.2	7
	G-3b - Design and evaluation of school counseling programs	93.2	7
	G-3c - Core curriculum design, lesson plan development, classroom management strategies, and differentiated instructional strategies	93.2	7
	G-3g - Strategies to facilitate school and postsecondary transitions	89.5	7

Program Assessment Based on Learner & Course Performance



A4L facilitates analysis of learner progress through courses across the program:

Success rate - % of learners who graduate

Retention rates - % of learners enrolled after specified terms

Completion rates - # of credits completed/# of credits attempted

Comparison between learner demographics



Faculty and administrators can assess progress

Assessing learner & course progress at the program level
Blackboard's Analytics for Learn (A4L)

Standard Achievement Summary by Program

	Avg Grade	Graded Attempts
Counseling	92.1	285
Course One	90.6	80
A-1 - Foundations For Addiction Counseling	98.7	25
A-1c - Principles and philosophies of addiction-related self-help	98.7	25
A-2 - Contextual Dimensions for Addiction Counseling	90.6	80
A-2c - Factors that increase the likelihood for a person, community, or group to be at risk for or resilient to psychoactive substance use disorders	86.6	55
A-2e - Importance of vocation, family, social networks, and community systems in the addiction treatment and recovery process	98.7	25
A-2f - Role of wellness and spirituality in the addiction recovery process	98.7	25
A-2i - Diagnostic process, including differential diagnosis and the use of current diagnostic classification systems, including the Diagnostic and Statistical Manual of Mental Disorders (DSM) and the International Classification of Diseases (ICD)	86.6	55
A-3 - Practice for Addiction Counseling	86.6	55
A-3c - Assessment for symptoms of psychoactive substance toxicity, intoxication, and withdrawal	86.6	55
Course Two	93.3	163
B-1 - Curricular Standards for Doctorate in Counselor Education	89.9	25
B-1c - Conceptualization of clients from multiple theoretical perspectives	87.4	17
B-1d - Evidence-based counseling practices	87.4	17
B-1f - Ethical and culturally relevant counseling in multiple settings	95.0	8
B-4 - Research and Scholarship Standards for Doctoral Students in Counselor Education	93.9	138
B-4a - Research designs appropriate to quantitative and qualitative research questions	93.6	80
B-4b - Univariate and multivariate research designs and data analysis methods	92.0	30
B-4c - Qualitative designs and approaches to qualitative data analysis	97.5	40
B-4d - Emergent research practices and processes	89.4	20
B-4e - Models and methods of program evaluation	88.8	8

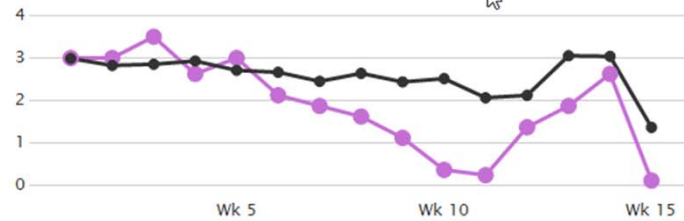
Blackboard Course Analytics with A4L

4 Reports for Program
Assessment Based on
Courses

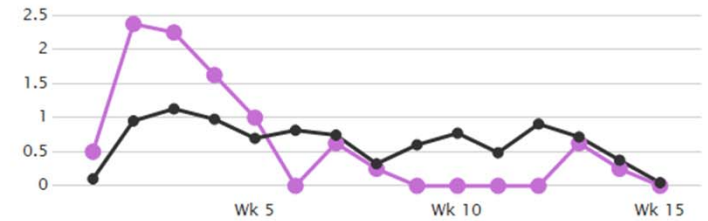


■ This Section ■ Dept of Counseling – Ed Psyc (31 Sections)

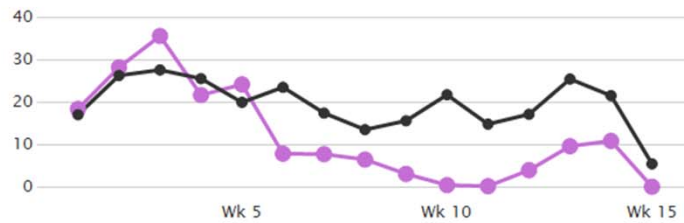
Accesses Average vs Department Average



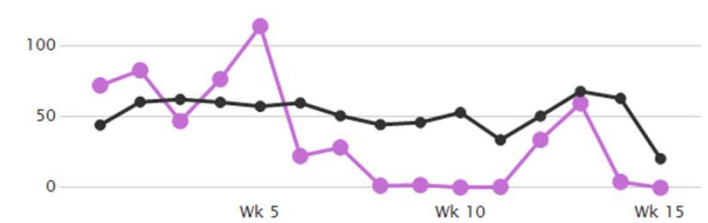
Submissions Average vs Department Average



Interactions Average vs Department Average



Minutes Average vs Department Average



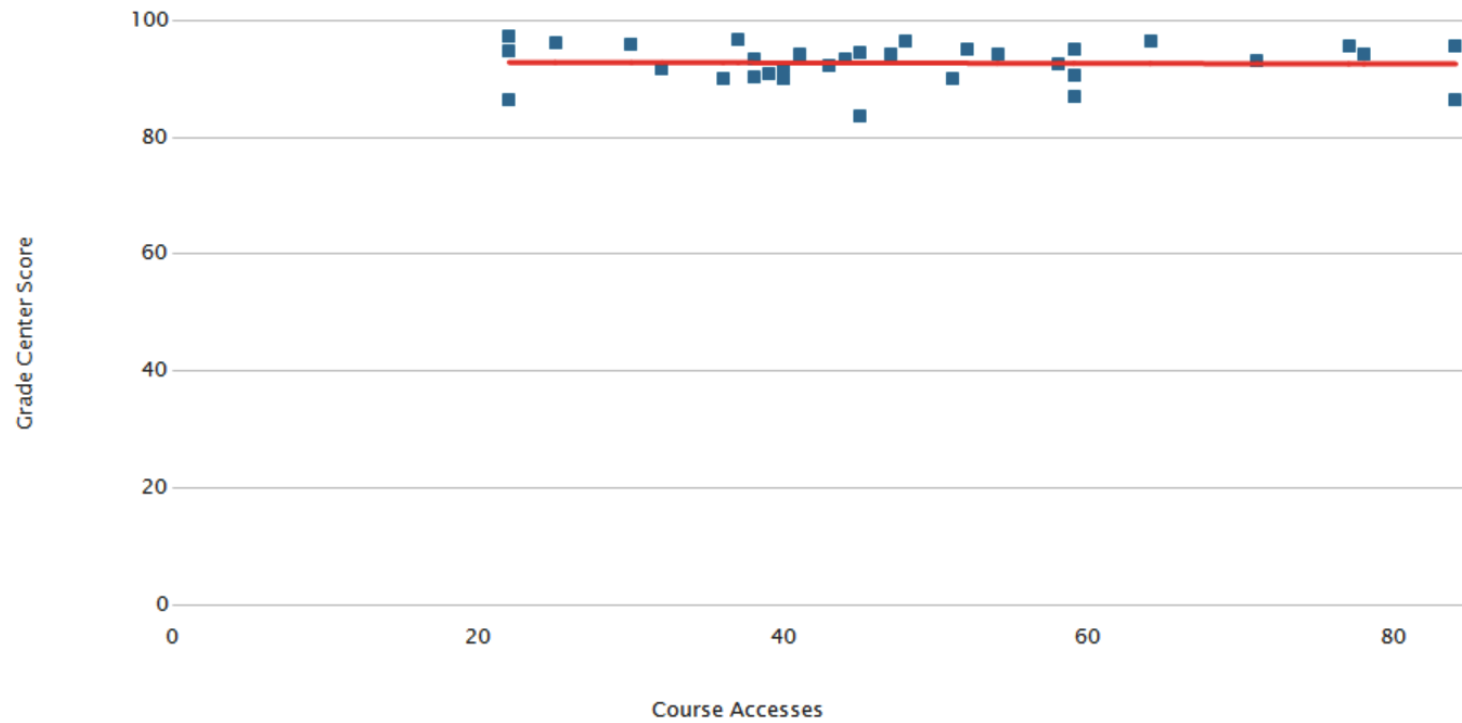
Student Activity Summary (8 Students)

↑ > Avg. + 10%
 ↓ < Avg. - 10%
 → Within Avg. +/- 10%
 ● NA

STUDENT NAME ↕	DATE OF LAST ACCESS	DATE OF LAST SUBMISSION	COURSE ACCESSES		MINUTES		INTERACTIONS		SUBMISSIONS		GRADE CENTER SCORE	
			STUDENT ↕	AVG	STUDENT ↕	AVG	STUDENT ↕	AVG	STUDENT ↕	AVG	STUDENT ↕	AVG
Student 1	12/03/2017	12/03/2017	14 ↓	29	334 ↓	544	115 ↓	180	10 →	10	100% →	95%
Student 2	12/07/2017	11/28/2017	43 ↑	29	1093 ↑	544	278 ↑	180	10 →	10	84% ↓	95%
Student 3	12/11/2017	12/05/2017	44 ↑	29	477 ↓	544	275 ↑	180	8 ↓	10	98% →	95%
Student 4	12/11/2017	10/24/2017	36 ↑	29	659 ↑	544	203 ↑	180	7 ↓	10	88% →	95%
Student 5	12/11/2017	12/03/2017	21 ↓	29	274 ↓	544	114 ↓	180	13 ↑	10	97% →	95%
Student 6	12/10/2017	12/04/2017	20 ↓	29	307 ↓	544	136 ↓	180	10 →	10	100% →	95%
Student 7	12/11/2017	12/04/2017	34 ↑	29	608 ↑	544	172 →	180	10 →	10	95% →	95%
Student 8	12/10/2017	12/10/2017	16 ↓	29	600 ↑	544	149 ↓	180	8 ↓	10	95% →	95%

Course Access & Grade Scatter Plot

Activity and
grade scatter
plot



Course Submission Summary

Learn Course At A Glance

Learn Course Information

Instructor: Instructor One
Course ID: 10001.102030
Term: Fall 2017 (Full Term)
Status: Available
Instruction Method: 1-24% Online/Face to Face
Students Enrolled: 8
College: Education & Human Development
Department: Department One

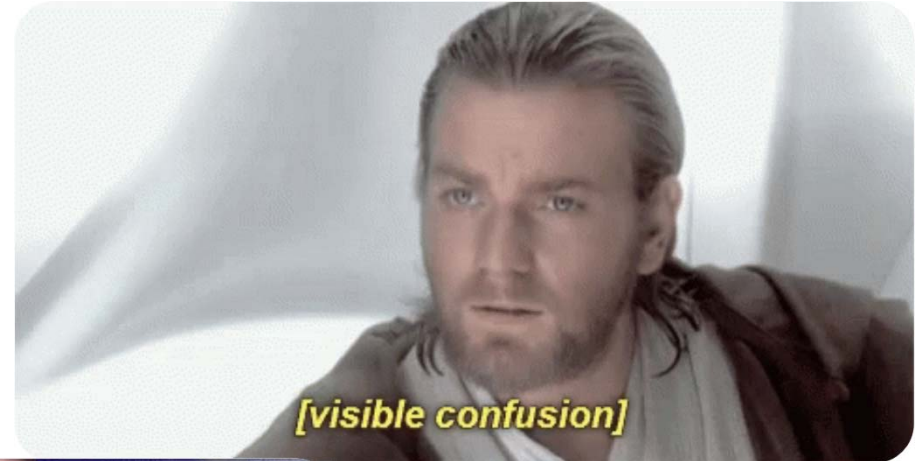
ITEM COUNT (SAME INSTRUCTION METHOD)				
ITEM	COURSE ITEMS		DEPARTMENT AVG	% DIFFERENCE
	TOTAL	AVAILABLE		
Assessment	18	7	18.8	
Content	19	18	40.1	
Tool	19	0	6.4	
% OF ITEMS ACCESSED (SAME INSTRUCTION METHOD)				
ITEM	COURSE		DEPARTMENT AVG	% DIFFERENCE
Assessment	0.0 (0%)		0.0 (0%)	
Content	0.0 (0%)		0.0 (0%)	
Tool	0.0 (0%)		0.0 (0%)	
ACTIVITY (SAME INSTRUCTION METHOD)				
ITEM	COURSE AVG		DEPARTMENT AVG	% DIFFERENCE
Accesses	29		38.7	
Minutes	544		773.2	
Interactions	180		294.0	
Submissions	10		9.6	

-200% -100% 0% 100% 200%

Share Your
EXPERIENCE



Any questions?



Thank
you!

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