

Analytics: The Game Changer

2014 Educational Leadership Conference

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i4Solutions



**DATA ARE CHANGING
EVERYTHING**

Challenge: How do you find the student at risk?



Challenge: How do you find the student at risk?



How do you know if students are learning?

- Measurement and learning outcomes
- Competencies
- Use of tools to track
- Action and interventions
- Ongoing assessment

Learning Analytics

- **Learning analytics** - measurement, collection, analysis and reporting of data about learners and their contexts, for understanding and optimizing learning.
- **Academic analytics** - application of business intelligence in education and at course, program and institutional levels
- Data **produces 'actionable intelligence'** by combining large data sets, statistical techniques, and predictive modeling.

Strategic Intelligence for Higher Education



What is Predictive Analytics?

Descriptive Analytics

- What has happened?
- Informative
- Reports & dashboards
- Describing information or data

Predictive Analytics

- What is most likely to happen?
- Potentially transformative
- Targeted alerts
- Delivering actionable, real-time insights

MORE ACTIONABLE DATA

Cross Functional Intervention Team



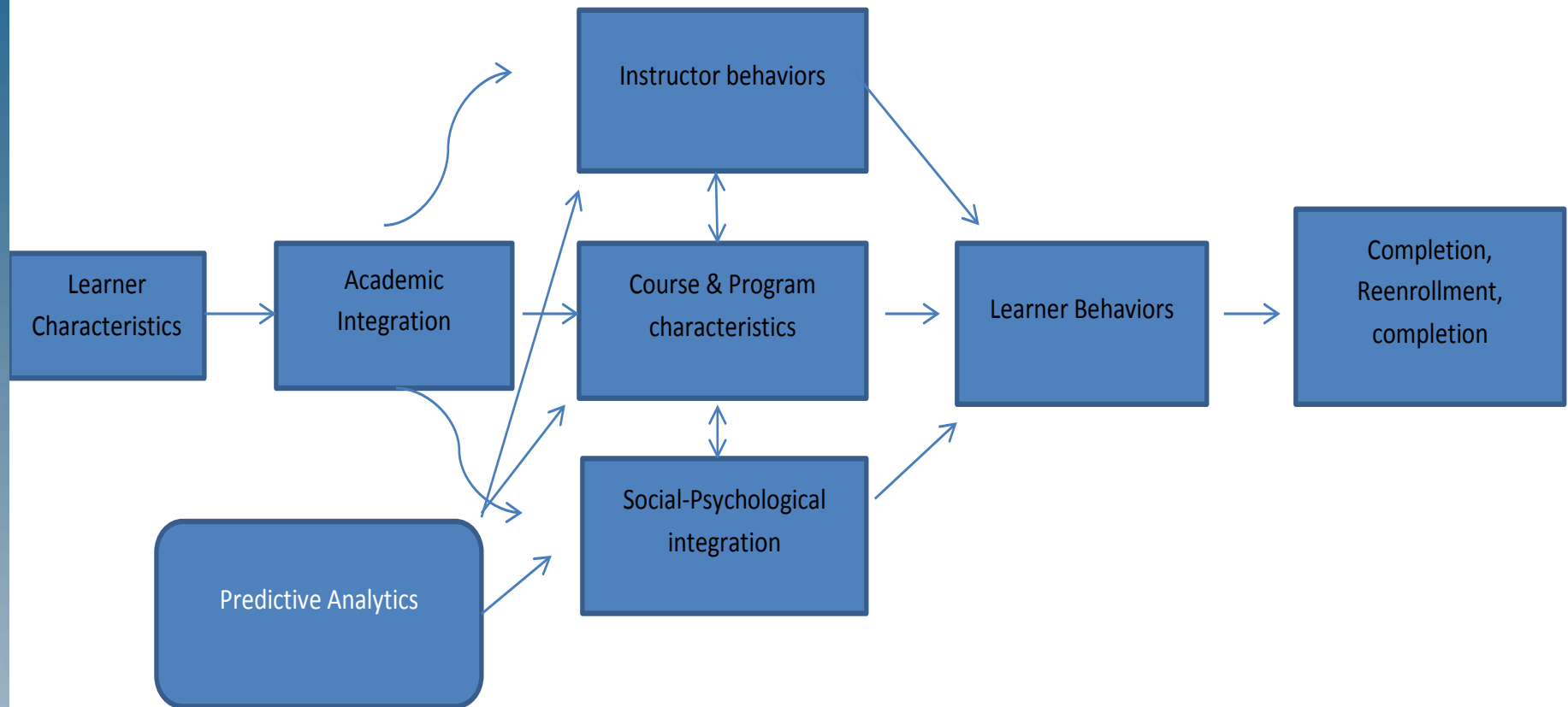
Predictive Analytics Reporting Key Predictors

- Learner characteristics
- Learner behaviors
- Academic integration
- Social/psychological integration
- Other learner support
- Course/program characteristics
- Instructor characteristics and behaviors

Student Success Matrix

PREDICTORS <i>italics</i> = research literature regular = partner experience bold = POC findings	CONNECTION application to enrollment (advising to enrollment)	ENTRY completion of gatekeeper courses (beginning of class)	PROGRESS entry into program to 75% of requirements complete (middle of class)	COMPLETION of course of study & credential w/ market value (end of class)
learner characteristics				
learner behaviors				
academic integration				
social/psychological integration				
other learner support				
course/program characteristics				
instructor characteristics/ behaviors				

Can We Change the Equation?



Ph.D. Completion and Attrition: Policies and Practices to Promote Student Success

- Student selection and admissions
- Mentoring and advising
- Financial support
- Program environment
- Research experience
- Curricular and administrative processes and procedures

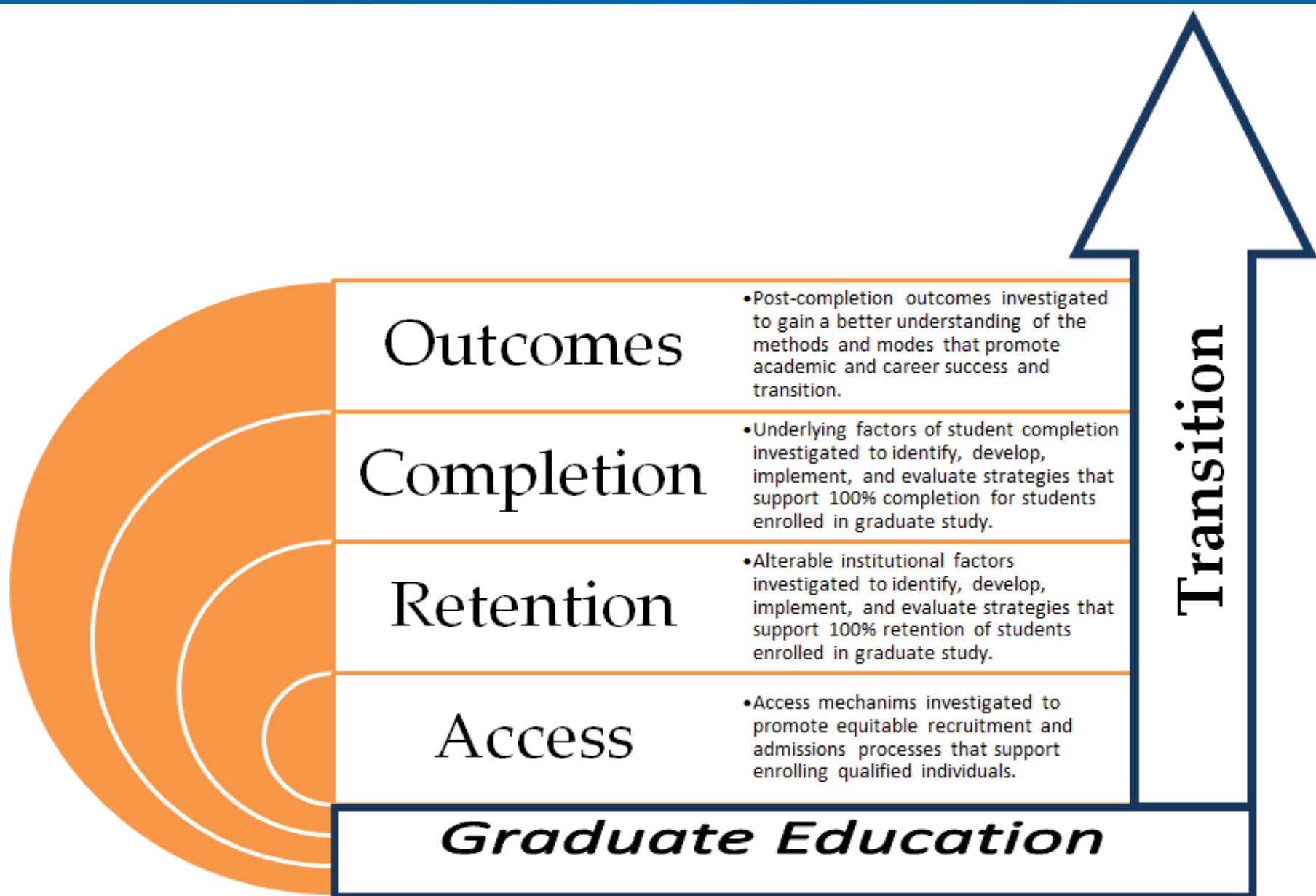
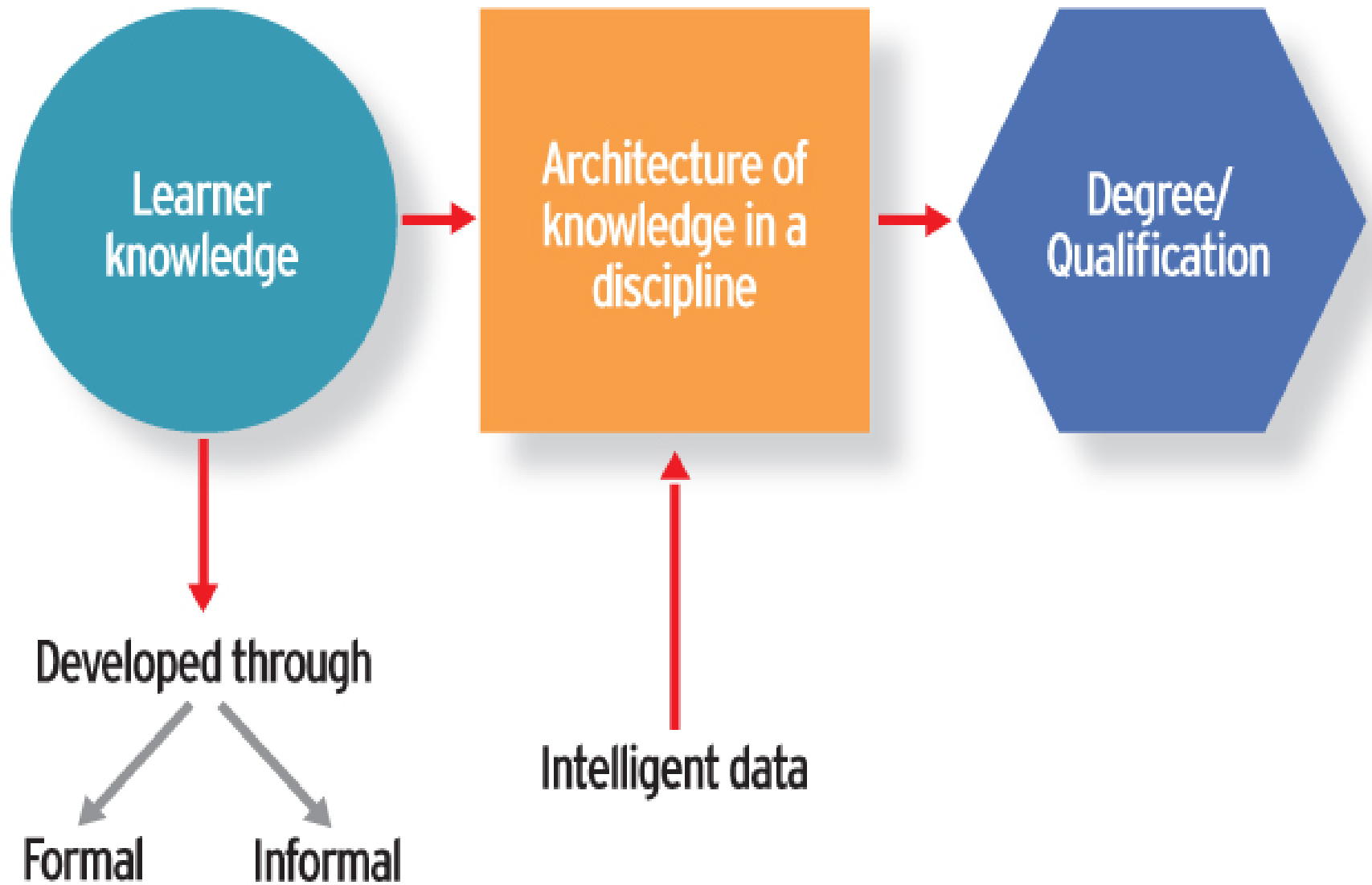
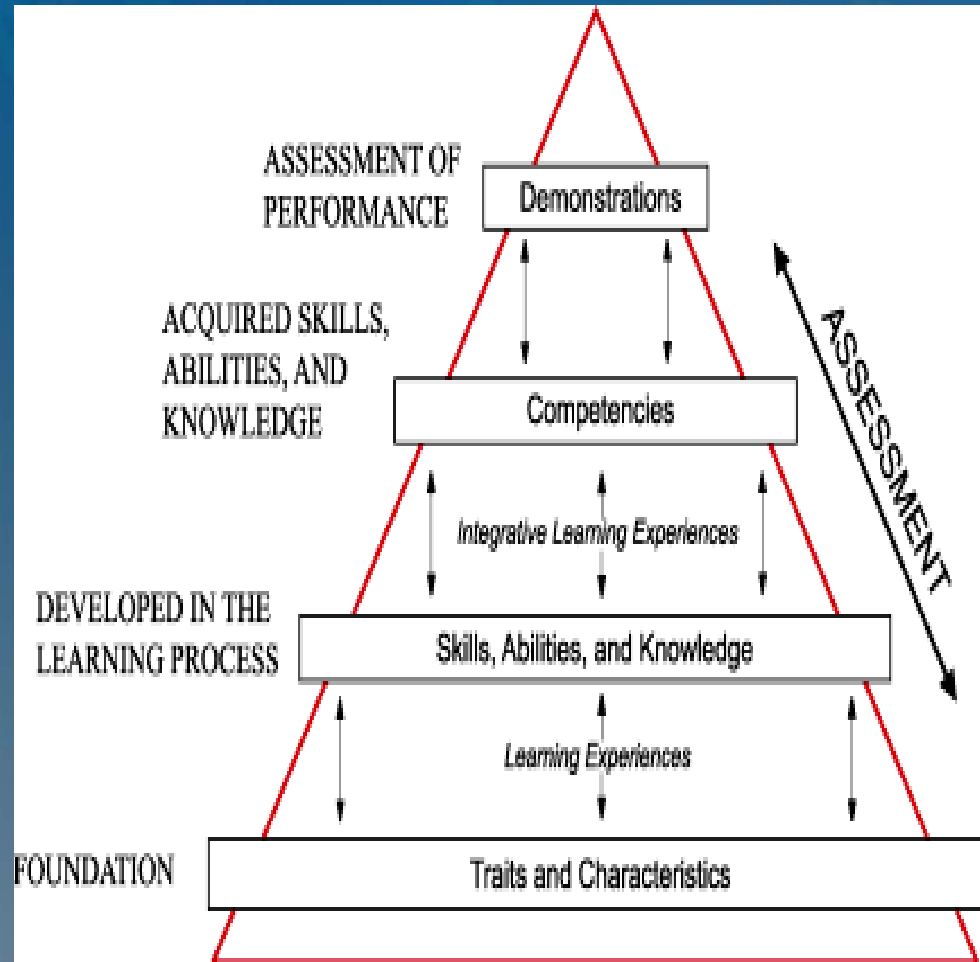


FIGURE 1: ASSESSMENT THROUGH ANALYTICS



Competency Defined

- A *competency* is “a combination of skills, abilities, and knowledge needed to perform a specific task”



National Postsecondary Education Cooperative (NPEC) (2001)

- Emerging now are a set of rapidly developing technology tools to support students as they progress through a course and program.
- Depending on the individual student's understanding of specific ideas, concepts, and operations, these tools have the capacity to
 - personalize the learning experience for every student
 - chart individual pathways through course materials
 - Enable interventions from faculty, advisors and mentors
 - Improve student progress and success

The market is immature, but multiple solutions are emerging in each application category

	Education Planning	Counseling and coaching	Risk Targeting and Intervention	Transfer and Articulation
Legacy ERP/SIS/LMS	     			
Vendor point solutions	  	  	 	 
Homegrown point solutions	   	 	 	
Direct-to-student	 			

Fall 2012 Cohort ▼

Term Completion

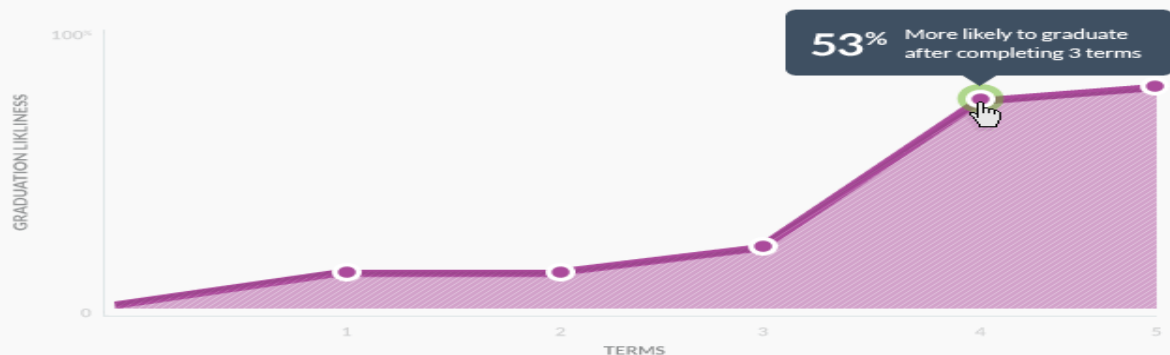
Credits Earned

Consecutive Terms

Credit Hours Per Term

>

Momentum Points



Key Student Clusters

Successful Clusters

Graduation Probability



Slow and Steady

91%



1st Time 1st Term

48%



Treading Water

19%

2014 Graduation Forecast

ON TIME GRADUATION

150% GRADUATION

2.0%

1.2%

2012
4,949
GRADUATES

2013
5,210
GRADUATES

2014
5,529
GRADUATES

Insights

53%

More likely to graduate:
Full-time students that do not work during the term

24%

More likely to graduate:
Overall GPA is greater than 2.5 and term enrollment credits average more than 6

12%

More likely to graduate:
Students who are enrolled in at least one online class during the summer term

45%

Less likely to graduate:
Students who are required to take both developmental English and math

Degree Comparison

Betty Edwards

04471803

General Studies

Associate of Arts — Catalog Year 2014



My current degree is:

General Studies



Degree
Area of Study

Change my degree to:

Information Technology App



☐ Include Certificates

% Complete
(Required credits/All)



14

2

3

\$1054

Completed
In-Progress
Remaining
Estimated
Tuition
Savings

The information shown here should not be considered as an advising tool so that you may track your progress to and Records Graduation Desk performs official degree at college or university, please make sure you check the app

Attendance

NEW



Improve my Score

Timeliness

NEW



Improve my Score

My Goal

[Set a goal](#)



Class Interaction



Improve my Score

Focus



Improve my Score

My Badges



Badges currently earned - 03/2013

Learning in a
Digital World

Washington, DC • September 13-16, 2014

My Cases

Assigned to Me 8

Awaiting Response 2

Contacted in Last 24 hrs. 8

Contact Today 12

Alert Lists

Course Withdrawal 8

Course Failure 12

Institution Withdrawal 26

Low Engagement 18

Course Recommendation 28

[Add New Alert](#)

Course Withdrawal Risk Alert

Students at risk of withdrawing from a course in the next 14 days. Call the student to determine how to help them be successful and persist to the upcoming term.

Email Selected	Text Selected	Mark Resolved	1-30 of 768				
☐	Name		Last Contact		Contacted by		
Very High Priority							
☐	Beverly Robinson		11/22/3333		kgreenan		
☒	Nancy Ramsey	ON CALL	11/22/3333		kgreenan		
☐	Daryl Mcdonald		11/22/3333		kgreenan		
☐	Melinda Vasquez		11/22/3333		kgreenan		

High Priority	
☐	Beverly Robinson
☐	Nancy Ramsey
Low Priority	
☐	Beverly Robinson
☐	Nancy Ramsey
☐	Daryl Mcdonald
☐	Nancy Ramsey

Overview

Last Updated: 11/22/2014 4:40:50 am

BUS 100: Intro To Business

Section #: BUS10006000110-1106-001 Credit Hours: 4.0



Demo User
Instructor

At a Glance

Class Performance

Engagement Overview

1 STUDENT



[See All Active Students](#)

Recommended Outreach



4 students have low attendance and low engagement



1 student has recently moved to 2 official absences



6 students have low discussion board responses and low engagement

[See All](#)

Shifts in Public Policy

Competency-Based Education

- US Department of Education approves certain programs not offered in credit or clock hours 3-13
- College for America S. New Hampshire University approved by DOE 4-13
 - Project-based competencies
 - Partners with employers
 - \$2500/year
- Capella University FlexPath competency-based bachelor's and Master's degree approved using direct assessment learning model 8-13
- N. Arizona University's Personalized Learning program receives HLC approval for three competency-based programs
 - 120 competencies
 - Pay flat rate of \$2500 per six month period vs. \$8,000 per semester
- U of Wisconsin's UW Flex
 - Collaboration between UW System and the UW Extension 13 2-year colleges
 - Flexible routes to degrees
 - Working adults with families

Convergence

- Right learning model
- Right technologies
- Right customers/learners
- Right business model

QUESTIONS & COMMENTS

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