

Using Analytics to Increase (At-risk) Student Retention and Success

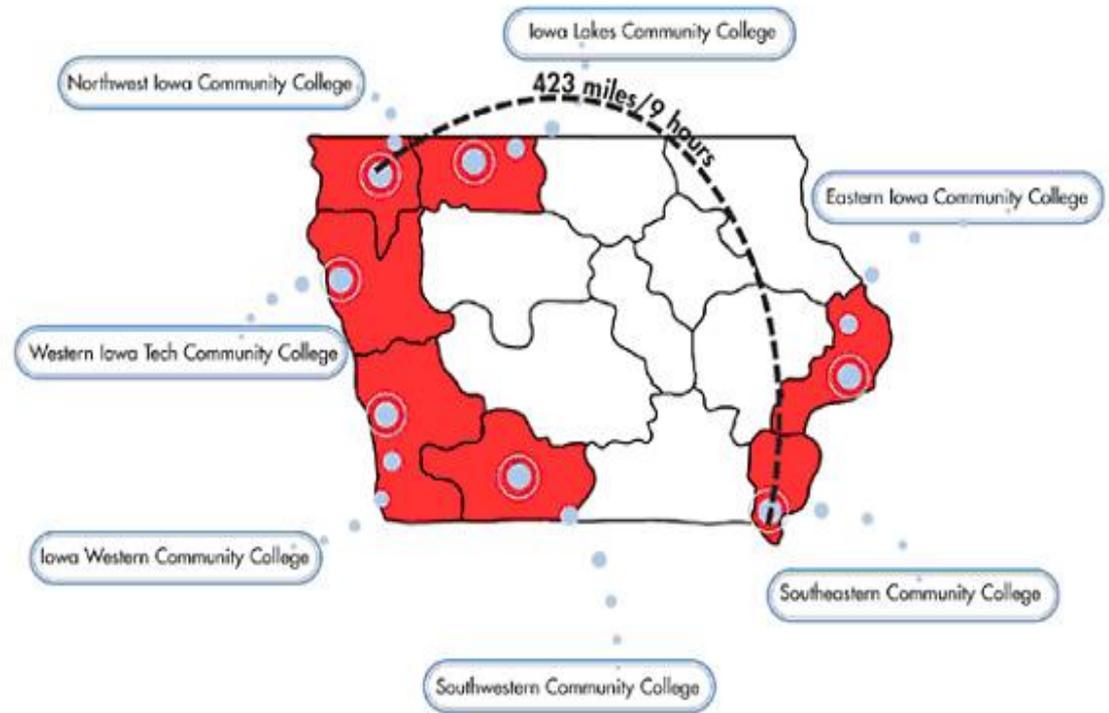


Iowa Community College Online Consortium

Iowa Community College Online Consortium

In 1999, the ICCOC was formed. First classes were offered Fall 2000.

- Eastern Iowa Community Colleges
- Iowa Lakes
- Iowa Western
- Northwest Iowa
- Southeastern
- Southwestern
- Western Iowa Tech



“Offer quality educational opportunities to online students supported by a comprehensive set of student support services.”

There are a total of 15 Community Colleges in Iowa.

Online Demographics – Spring 2012

■ Online Student Enrollments:	23,162
■ Unique Online Students:	11,703
■ Unique Course Titles:	373
■ Online Course Sections:	1,058
■ Online Instructors:	492
■ Annual Online Student Enrollment:	57,223
■ Annual Blended Enrollment:	61,041
■ Annual Total Enrollment:	118,264

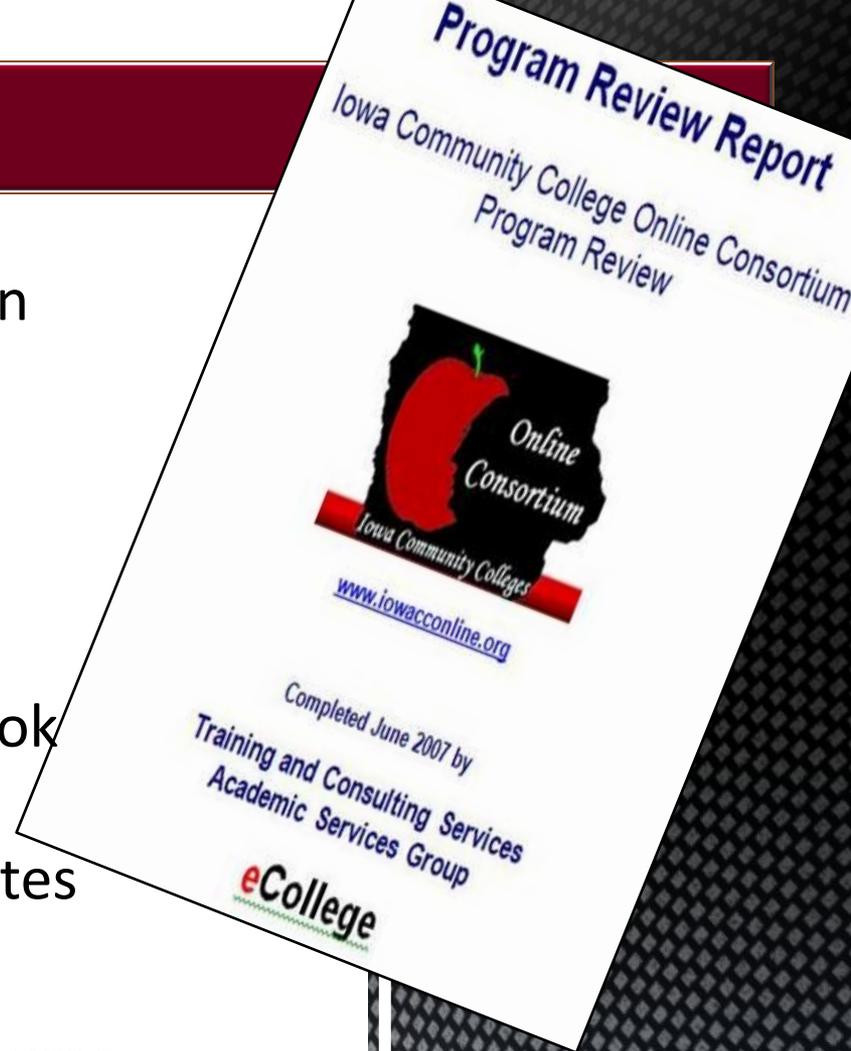
Analyzing Our Data

Student and instructor course interaction data from 2004, 2005, 2006 for June 2007 Program Review

Actionable:

-Faculty activity in Discussions, Gradebook and other interactive elements has a positive impact on course completion rates

-Student activity in the first week of a course has an impact on course completion rates



Student Activity: Hours

First Week of Class

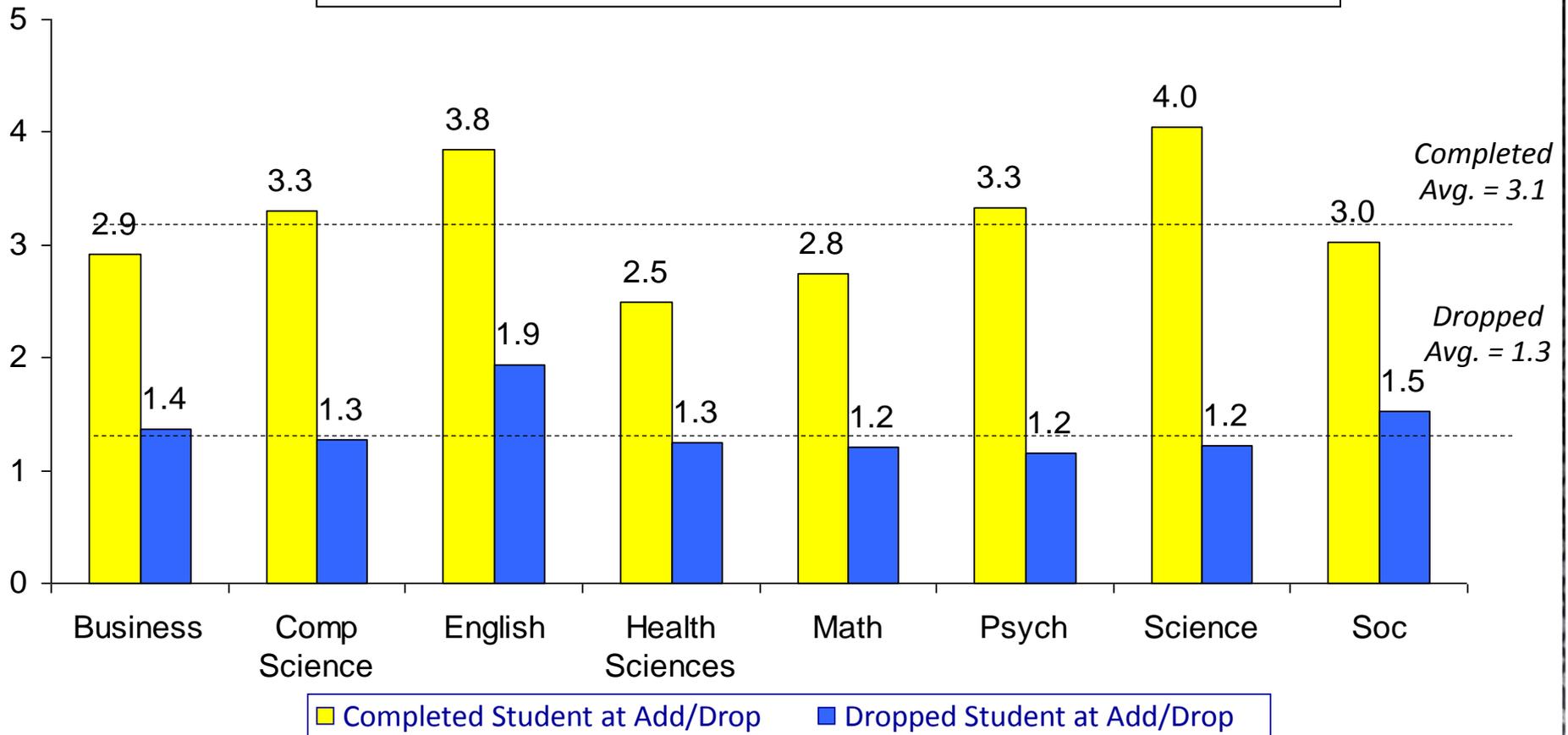
Average Activity Hours

Completers **3.1 hours**

Non-completers **1.3 hours**

Week 1 Activity – Completed vs. Dropped Student

Avg. Student Activity/Section by Department (hrs)



Student Activity: Log-ins

First Week of Class

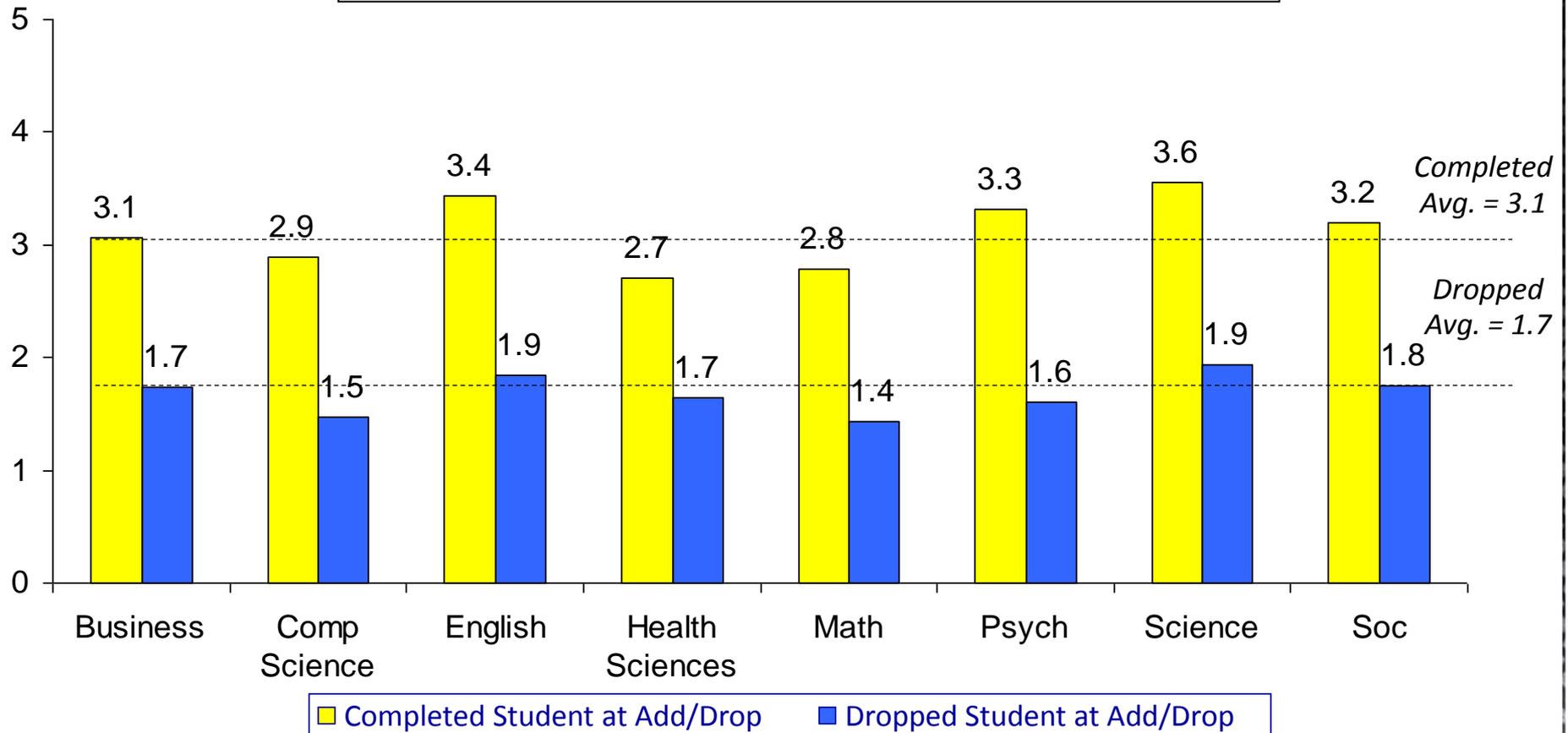
Average Days Logged In

Completers **3.1 days**

Non-completers **1.7 days**

Week 1 Days Logged In: Completed vs. Dropped Student

Avg. Days Logged In/Section by Department



Initial Data Review

85% of all online students were completing courses

77% of completed students passed course with grade of “C” or better

77% of at-risk students completed courses

57% of at-risk students earned a “C” or better



At-Risk Definition

Pre-Term versus After Start of Term

- First-time Online Student
- Enrollment Overload; registered for 3 or more classes during summer (10-week term), or 4 or more during 16-week term
- Failed course(s) during previous two terms, not including summer
- Did not log in during first week or had < 5 minutes of activity during first week
- Registered late
- Instructor expresses concerns (not participating, not understanding material, etc.)
- Grade of “D” or “F” at Midterm

Challenges

- Process was manual
- Had to create document to capture emails from instructors
- Grade reports, Enrollment Reports and Student Participation Reports that were custom reports generated out of eCollege had to be assembled into new documents

At-Risk Report

Last	First	ID	Email	Phone Number	College	Completed ICCOC Demo Course	First Time Online Student	ICCOC's Reason for At Risk before Start of Term	ICCOC Reason for At Risk After Start of Term	Name of Course	Instructor Concern	Instructor Name	Date
Last	First	loginID	email address	(xxx)xxx-xxx	ICCOC					Allied Health Statistics (section 01) - Barb Foster	Not fully participating in this course.	Barb Foster	9/21/2007
Last	First	loginID	email address	(xxx)xxx-xxx	ICCOC			Registered for 4 or more courses					
Last	First	loginID	email address	(xxx)xxx-xxx	ICCOC		X						
Last	First	loginID	email address	(xxx)xxx-xxx	ICCOC		X						
Last	First	loginID	email address	(xxx)xxx-xxx	ICCOC				Did not log into online course(s) the first week	Introduction to Psychology (section 11) - Deb Gifford			
Last	First	loginID	email address	(xxx)xxx-xxx	ICCOC				Did not log into online course(s) the first week	Nutrition (section 5) - Corrine Muske			
Last	First	loginID	email address	(xxx)xxx-xxx	ICCOC		X						
Last	First	loginID	email address	(xxx)xxx-xxx	ICCOC		X		Did not log into online course(s) the first week	General Physics I (Fall 2007) - Dr. Huett			
Last	First	loginID	email address	(xxx)xxx-xxx	ICCOC		X		Did not log into online course(s) the first week	General Physics I lab (Fall 2007) - Dr. Huett			
Last	First	loginID	email address	(xxx)xxx-xxx	ICCOC				Did not log into online course(s) the first week	Western Civilization: Early Modern to Present (section 01) - Jeff Peiffer			

Student Participation Report

Initially, it was a custom report within LMS that had to be requested the day before it was needed. Report would run overnight and be available the next morning.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Term Name	Role in Course	Last Name	First Name	Login ID	Email Address	Telephone Number	User Creation Date	Display Course Code	Course Name	Course First Login Date	Course Last Login Date	Activity Minutes
2	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	4/3/2008	Course Co	Course Na	1/1/1970	1/1/1970	
3	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	12/8/2009	Course Co	Course Na	1/1/1970	1/1/1970	
4	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	1/6/2010	Course Co	Course Na	1/18/2010	1/18/2010	5.348
5	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	8/15/2008	Course Co	Course Na	1/18/2010	1/18/2010	12.067
6	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	8/13/2009	Course Co	Course Na	1/19/2010	1/19/2010	11.4
7	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	8/13/2009	Course Co	Course Na	1/19/2010	1/19/2010	14.666
8	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	11/19/2009	Course Co	Course Na	1/19/2010	1/30/2010	311.7
9	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	8/5/2008	Course Co	Course Na	1/18/2010	1/31/2010	142.567
10	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	1/2/2009	Course Co	Course Na	1/31/2010	1/31/2010	1.268
11	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	1/9/2009	Course Co	Course Na	1/18/2010	1/31/2010	233.871
12	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	8/21/2008	Course Co	Course Na	1/18/2010	1/31/2010	176.119
13	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	8/14/2008	Course Co	Course Na	1/27/2010	2/1/2010	48.885
14	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	8/14/2008	Course Co	Course Na	1/21/2010	2/1/2010	6.519
15	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	7/21/2009	Course Co	Course Na	1/20/2010	2/1/2010	669.472
16	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	7/20/2009	Course Co	Course Na	1/18/2010	2/2/2010	705.37
17	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	8/14/2008	Course Co	Course Na	1/19/2010	3/5/2010	788.302
18	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	12/4/2009	Course Co	Course Na	1/19/2010	3/5/2010	1689.69
19	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	12/4/2009	Course Co	Course Na	1/19/2010	3/5/2010	2004.297
20	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	6/23/2009	Course Co	Course Na	1/19/2010	3/7/2010	2657.329
21	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	8/15/2008	Course Co	Course Na	1/18/2010	3/7/2010	1020.978
22	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	8/21/2008	Course Co	Course Na	1/18/2010	3/7/2010	1043.59
23	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	8/14/2008	Course Co	Course Na	1/18/2010	3/7/2010	880.362
24	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	8/3/2009	Course Co	Course Na	1/18/2010	3/7/2010	2209.145
25	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	8/3/2009	Course Co	Course Na	1/18/2010	3/7/2010	2069.087
26	Spring 2010	College	Last Name	First Name	Login ID	Email	Phone	11/24/2009	Course Co	Course Na	1/18/2010	3/7/2010	747.936

Review of the Data – Fall 2007

82% of at-risk students completed their courses

5% Improvement = 801 additional students at census
for the year



66% of at-risk students earned
grade of “C” or better
9% Improvement

At-Risk Notification Tool - Form

Fall 2007 - Custom form/report created by eCollege with Title III Funds
Available for use in online courses Spring 2008

At Risk Student Identification Form - Windows Internet Explorer

http://atrisk.nen.ecollege.com/AddAtRiskStudent/AddAtRiskStudent.ed

At Risk Student Identification Form

Select At Risk Student:

Select At Risk Reason:

Additional Information:

- Select Reason
- Stopped Participating
- Struggling to understand course concepts
- Having a hard time navigating and understanding the computer
- Has a D in the course
- Failing the Course
- Low test scores
- Not completing assignments
- Missed Quizzes or Exams
- Not participating in threaded discussions
- Blocked from the course due to tuition payment issues
- eLab registration and participation
- Other

➤ Form is located in every course

➤ Hidden to the student

➤ Report can be pulled daily or weekly

At-Risk Notification Tool—Report

Student Name	Instructor Name	Reason for At Risk	Other Explanations	At Risk Date
Heather	Lori	Other	Did not complete Unit 1. I did get an e-mail doesn't understand how class works, needs some help.	1/23/2011
Ann	Steve	Not completing assignments	missed first quiz and first lab assignment	1/26/2011
Courtney Rose		Other	Did not participate in Week 1.	1/26/2011
		Stopped Participating	She participated through week 6, has since dropped off the map and I have not received any work from her. She's not responded to e-mail.	3/16/2011

Reports are pulled & sent to team of individuals at each college

Enterprise Reporting

Student Activity Report

- Course first login date
- Course last login date
- Activity minutes
- Activity submission count
- Course points earned
- Course points possible to date
- Course average to date



Student Detail Report

Students with < 1 hour activity in the past 7 days.

Accounting Specialist Courses

Term: 2010 Spring Term

Dates: Apr 29, 2010 to May 5, 2010

Display Course Code	Course Name/ID	Full Name	Login ID	Email Address	Activity Minutes	Threads Minutes	Drop Box Minutes	Homepage Minutes	Gradebook Minutes	Activity Submission Count	Threads Submission Count	Activity Date	Course Average Grade To Date
BUS1410XA	Principles of Accounting I XA (4084124)	Mclemore, Alethia	978850	mclmorealethia@yahoo.com	0			0				5/5/10	0%
BUS1410XC	Principles of Accounting I XC (4084150)	Stramiello, Gina	1338845	gfunk_error@yahoo.com	0			0	0			5/3/10	39%
BUS1410XA	Principles of Accounting I XA (4084124)	Fair, Cheryl	61057	SWEETSULTRY1@AOL.COM	0			0				5/3/10	0%
BUS1410XK	Principles of Accounting I BUS1410XK (4084119)	Harrison, Regina	1530010	regina.harrison67@yahoo.com	1			1				4/30/10	0%
BUS1460XD	Computerized Accounting (4079952)	Shupe, Donna	1411552	pheonix24374@yahoo.com	1	0		0				4/29/10	11%
BUS1410XC	Principles of Accounting I XC (4084150)	Shaw, Hazel	630521	babygirlshaw2003@yahoo.com	1			1				5/3/10	0%
BUS1460XA	Computerized Accounting XA (4079841)	Bouse, Tiffany	1280159	tiffeg79@yahoo.com	1			0	0			5/4/10	51%
BUS1410XL	Principles of Accounting I (4084127)	Rothe, Lori	1575429	dlrothe@msn.com	1			0	0			5/3/10	32%
BUS1420XB	Principles of Accounting II BUS1420B (4079811)	Traylor, Joni	1257801	joni_tray05@yahoo.com	1			0	1			5/1/10	26%
BUS1420XC	Principles of Accounting II BUS1420C (4079799)	Cross, Kimberly	845487	cross.kim84@yahoo.com	1	1		1	0			5/1/10	0%
BUS1410XD	Principles of Accounting I	Brown, Amber	1358505	shawtyshawty_05@yahoo.com	2			0				5/2/10	55%

Current Data Review – Fall 2010

84% of at-risk students completed their courses

Additional 2% improvement in 3 years

68% of successful at-risk students completed courses with a grade of “C” or better

Additional 2% improvement in 3 years



NGLC Project—Wave I

NEXT GENERATION | LEARNING CHALLENGES

Transforming education through technology

- ▶▶ Focus on further improving Success and Completion in English Composition, College Algebra and Math for Liberal Arts
- ▶▶ Provide simple, visual Dashboard identifying at-risk students for instructors
- ▶▶ Enhance At-Risk Student Case Management at our colleges
- ▶▶ Share our story with others

At-risk Success Gatekeeper Courses

At-risk Student Success:

- All Courses: 68%
- College Composition I: 70% **55%**
- Math for Liberal Arts: 56% **50%**
- College Algebra: 52% **31%**

Average Course Success - All Students: 74%

Instructor At-Risk Dashboard

At Risk Indicators:

1. If user has **not logged in** to the course for 5 consecutive days (120 hours) or more.
2. If user has **not submitted an assignment** for the past 10 days.
3. If a student's **Grade to Date** falls below 72% for the course.

Note: A student may be at risk in one or more categories. Any student that is deemed at risk in any category will be shown in the dashboard.

Instructor At-Risk Dashboard

E-mail:

A student's e-mail address, as stored in the eCollege system, is listed so students can be contacted to address at risk behavior.

- Instructors may send an email to one student by clicking on the student's email address; or
- Instructors may send one email message to multiple students by selecting the checkbox next to each student's name, then clicking on the "Email Selected Students" link.

The data in the dashboard can be downloaded to a .csv file and opened with Excel.

Instructor At-Risk Dashboard

File Edit View Favorites Tools Help

Ann Jenkins

Spring 2012 eCourse (1/16/12-5/4/12)

▲ CSC-110-006/Introduction to Computers (section 06) - Ann Jenkins (9 at risk students)

Last Name	First Name	Last Login Date	Last Submit Date ▲	Activity (min)		Submissions		Grade To Date
				Last 10 Days	Total	Last 10 Days	Total	
		3/20/2012 ⚠	2/25/2012	0	1277	0 ⚠	23	69.1% ⚠
		2/25/2012 ⚠	2/25/2012	0	933	0 ⚠	10	45.6% ⚠
		3/20/2012 ⚠	3/12/2012	1	282	0 ⚠	23	59.0% ⚠
		3/12/2012 ⚠	3/12/2012	0	808	0 ⚠	21	47.3% ⚠
		3/25/2012	3/12/2012	3	1902	0 ⚠	28	86.5%
		3/26/2012	3/26/2012	293	1833	7	36	67.0% ⚠
		3/26/2012	3/26/2012	156	884	4	26	45.7% ⚠
		3/26/2012	3/26/2012	637	2780	4	28	66.5% ⚠
		3/26/2012	3/26/2012	153	802	6	31	60.6% ⚠

▼ CSC-110-010/Introduction to Computers (section 10) - Ann Jenkins (8 at risk students)

▼ CSC-110-013/Introduction to Computers (section 13) - Ann Jenkins (14 at risk students)

Spring 2012 Restricted eCourse (1/16/12 - 5/4/12)

▼ CSC-110-RD05/Introduction to Computers (section RD05) - Ann Jenkins (15 at risk students)

▼ CSC-110-RN1/Introduction to Computers (section RN1) - Ann Jenkins (1 at risk students)

Retention Alert

- ➔ Purchased Retention Alert for 6 of 7 colleges using Datatel; will work with 7th college on custom needs
- ➔ Send Student Participation Report Data to secure FTP Folder on a daily basis
- ➔ Pull data into Retention Alert Module
- ➔ Can establish own parameters for “at-risk” including data from SIS
- ➔ Creates a case file for the student
- ➔ Investigating whether there are other options for instructor-reported data

Retention Alert – Sample Report

SourcedID	Term Name	Role in Course	Last Name	First Name	Login ID	Email Address	Telephone Number	Display Course Code	Course First Login Date	Course Last Login Date	Activity Minutes	Activity Submission Count	Course Points Earned	Course Points Possible to Date	Course Average Grade To Date
1234567	Spring 2012	eCourse Stu	Smith	John	loginid	email	phone	BCA-109-C	01/16/2012	02/17/2012	398	27	234	255	0.92
7654321	Spring 2012	eCourse Stu	Woo	Frank	loginid	email	phone	ENG-105-C	01/17/2012	02/19/2012	1868	9	177	175	1.01
7418529	Spring 2012	eCourse Stu	Brow n	Lucy	loginid	email	phone	HSC-105-C	01/21/2012	02/01/2012	54	0	0	250	0.00
3692587	Spring 2012	eCourse Stu	Dabir	Mary	loginid	email	phone	HSC-111-C	01/21/2012	02/01/2012	135	0	0	91	0.00



Challenges

Closing the feedback loop

Encouraging instructors to use the Dashboard to reach out to “at-risk” students

Encouraging instructors to design courses that effectively identify at-risk students

Helping our colleges understand their processes to effectively implement the Retention Alert Module

Helping our colleges identify the most efficient and effective ways to use their scarce resources— (i.e. people)

“The effectiveness of early intervention is that it’s early.”

Dr. Vince Tinto - NISOD 2012

“We should be thinking deeply about how to develop the right infrastructure to get the right data to the right people in the right way.”

Dr. Mark Milliron - Cite 2012

Announcement

Registration for the Fall 2011 term ends tomorrow. Make sure you've registered for you classes before then.



Mary Anderson

[Edit My Profile](#)

Recent Activity



Amanda Simmons says:

"Just finished my psych report and now I'm psyched."

Feb. 2, 2011 11:12am



PSY 101 - Introduction to Psych...

3 students have submitted the assignment: **Behavioral Example**.

Feb. 2, 2011 11:00am



Matt Davis says:

PSY 101 - Introduction to Psych...
Anyone want to meet to review today's class notes?

Feb. 2, 2011 10:34am



Allison Scott says:

PSY 290 - Research Method
Are our papers due this Monday? I thought we were getting an extension.

Feb. 2, 2011 10:20am



PSY 230 - Introduction to Statist...

6 students have submitted the assignment: **Real World Examples**.

Feb. 2, 2011 11:00am

[Show More](#)

Current Courses

Courses by Term

PSY 101 - Introduction to Psychology 1A

[Go to Course](#)

Grade to Date

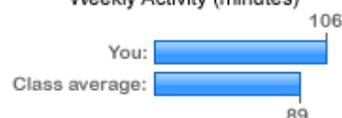


[Hide Details](#)

Course Progress



Weekly Activity (minutes)



PSY 290 - Research Method

[Go to Course](#)

Grade to Date



[Hide Details](#)

Course Progress



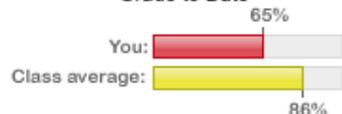
Weekly Activity (minutes)



PSY 230 - Introduction to Statistics 1B

[Go to Course](#)

Grade to Date



[Hide Details](#)

Course Progress



Weekly Activity (minutes)



Questions ?

Using Analytics to Increase (At-risk) Student Retention and Success

www.iowacconline.org/NGLC



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