II. Identifying At-Risk Students

Practice #3: Early Academic Performance Reports

Description

Instead of relying exclusively on midterm grades, some universities are identifying academically struggling students via a range of academic performance indicators such as absenteeism and class participation. Instructors submit alerts through an interface built directly into the online course roster. The checkbox-style, exceptions-based reporting tool allows faculty members to quickly alert advisors to those students exhibiting risky academic behavior. Reporting at some universities occurs on a rolling basis, while other schools request that alerts be submitted at a single moment four weeks into the semester.

Follow-up typically is managed by the retention management office (if one exists) or by the central advising office (or by the individual colleges' advising offices at larger universities). Some progressive universities have developed automated systems that notify the referring instructor of the outcome of the advising meeting, encouraging future participation.

Recommended For: All colleges and universities

Council Assessment of Practice Effectiveness

Midterm grades are widely regarded as too blunt an instrument that comes too late in the semester to be effective as an academic intervention tool. In addition, most universities find it difficult to attain the rates of faculty response necessary to ensure comprehensive midterm grade coverage for the first-year class.

Early academic performance reports allow instructors to provide information on a wider range of academic risk factors that can be tracked much earlier in the semester. The range of choices affords instructors the flexibility to decide which risk factors are relevant to their courses—for example "class participation" would be relevant to a small seminar but not a large lecture. Faculty no longer need to modify their syllabi to include graded assignments in the early weeks of the semester or submit information on those students not exhibiting concerning behavior.

Implementation Tips

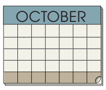
Most universities ask their IT staff to build the reporting tool directly into the electronic course rosters to minimize the burden on instructors. A link next to each student's name takes the instructor to the reporting form, which auto-populates with the relevant course and student data. Upon submission, the reporting tool sends an automated message notifying the advising office to initiate follow-up.

Implementation Toolkit

Midterm grades are insufficient as a stand-alone academic early warning system. Most universities rely on midterm grades as the primary mechanism for surfacing academic struggles among first-year students. The consensus among retention administrators is that midterm grades are too difficult to collect, occur too late in the semester, and offer too little information.

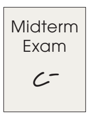
Too Little, Too Late

The Problem with Midterm Grades



Not Early Enough

Interventions launched after mid semester succeed far less often than those begun as soon as the student's performance begins lagging



Not Detailed Enough

Grade on a single assignment (typically the first paper or exam) offers little insight into root cause of student's academic struggles

Low Response Rates

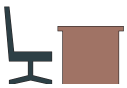
At many institutions, low levels of faculty participation leave as much as 50%–80% of the first-year class unmonitored

Source: University Leadership Council interviews and analysis.

Universities are beginning to supplement or replace midterm grade reports with next-generation early alert mechanisms. Progressive universities are pulling forward the alert process much earlier in the semester, collecting more robust information to identify students at risk, and looking for creative ways to mine pre-existing data streams instead of relying exclusively on faculty reports.

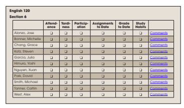
Three Options for Moving Beyond Midterm Grades

Focus on Attendance



- Concentrate efforts on getting faculty to report throughout the first half of the semester first-year students who have missed two or more classes
- Attendance data can be reported very early and is highly predictive of student success

Make Reporting Comprehensive, Yet Flexible



- Create an interface that prompts faculty to report on multiple facets of student performance—attendance, preparedness, performance on assignments—without requiring precision
- Faculty can be prompted to report either once early in the semester (typically in week four) or at multiple points across the first nine weeks

Obviate the Need for Faculty Reporting

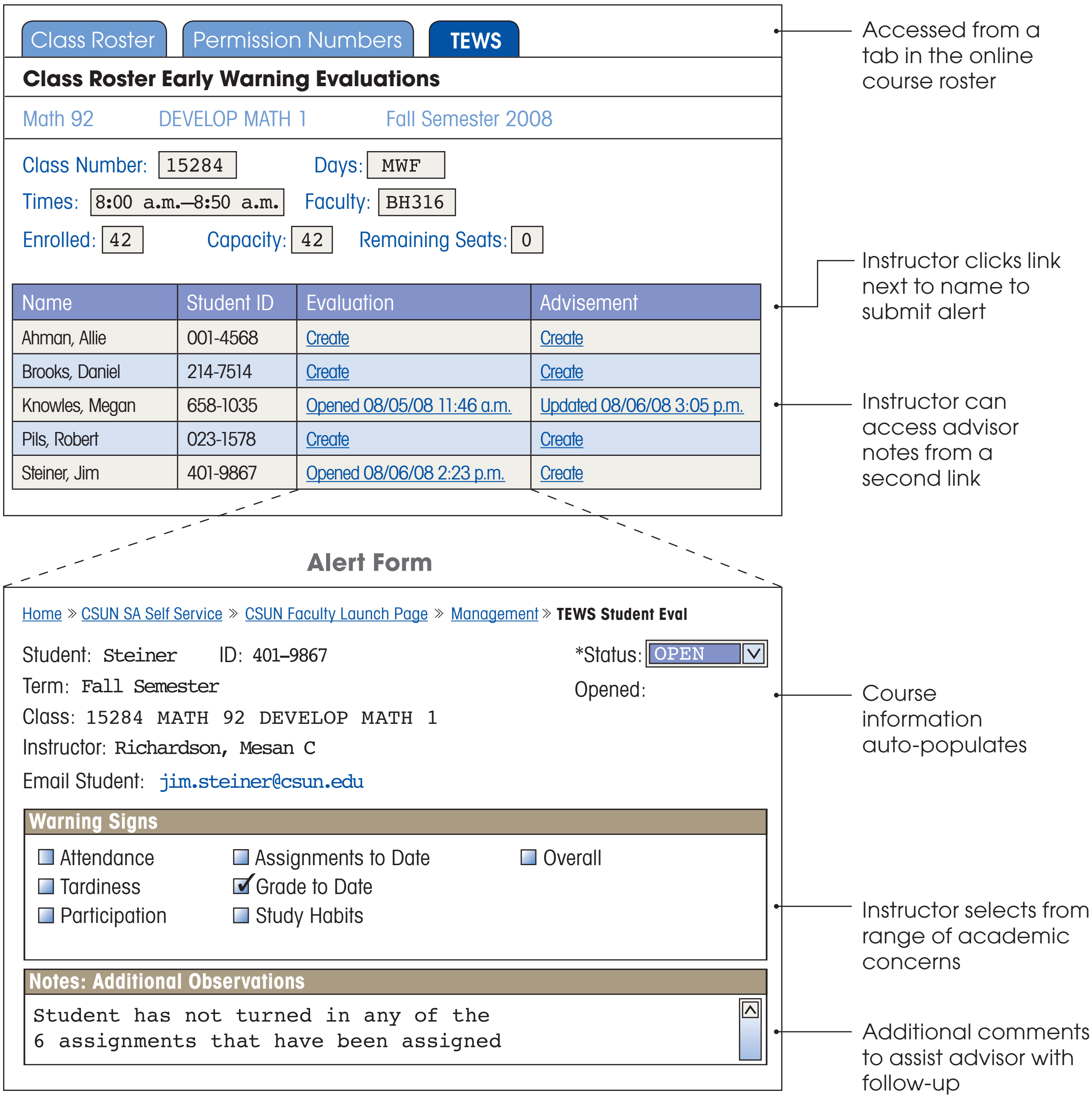
- Identify students likely to perform poorly based on students' usage of the class's course management software
- System automatically provides students with direct and ongoing feedback on performance

Source: University Leadership Council interviews and analysis.

Reporting tools built into the online course roster allow faculty to submit alerts on a wide range of early warning signs. These warning signs are easily observable in the first weeks of the semester, and faculty may choose to report only on those behaviors that appropriately represent risk in their specific course. A comments section encourages the instructor to add additional details.

The Early Warning System (TEWS)

California State University, Northridge



Class Roster | Permission Numbers | TEWS

Class Roster Early Warning Evaluations

Math 92 DEVELOP MATH 1 Fall Semester 2008

Class Number: 15284 Days: MWF

Times: 8:00 a.m.–8:50 a.m. Faculty: BH316

Enrolled: 42 Capacity: 42 Remaining Seats: 0

Name	Student ID	Evaluation	Advisement
Ahman, Allie	001-4568	Create	Create
Brooks, Daniel	214-7514	Create	Create
Knowles, Megan	658-1035	Opened 08/05/08 11:46 a.m.	Updated 08/06/08 3:05 p.m.
Pils, Robert	023-1578	Create	Create
Steiner, Jim	401-9867	Opened 08/06/08 2:23 p.m.	Create

Alert Form

Home » CSUN SA Self Service » CSUN Faculty Launch Page » Management » **TEWS Student Eval**

Student: Steiner ID: 401-9867 *Status: OPEN

Term: Fall Semester Opened:

Class: 15284 MATH 92 DEVELOP MATH 1

Instructor: Richardson, Mesan C

Email Student: jim.steiner@csun.edu

Warning Signs

- ☐ Attendance
- ☐ Tardiness
- ☐ Participation
- ☐ Assignments to Date
- ☑ Grade to Date
- ☐ Study Habits
- ☐ Overall

Notes: Additional Observations

Student has not turned in any of the 6 assignments that have been assigned

Source: University Leadership Council interviews and analysis.

Alerts may be collected on a rolling basis or called for at a single point in the semester. This is a tradeoff. Rolling alerts allow for more rapid identification and intervention, while one-time alerts provide a more comprehensive picture of a student's performance across all courses and allow advisors to triage the most severe cases.

Two Approaches to Alert Collection and Follow-Up

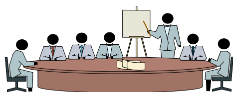
	Single Submission Deadline XAVIER UNIVERSITY *(3,900 Undergraduates)*	Rolling Submission California State University Northridge *(29,800 Undergraduates)*
Reporting Schedule	Faculty asked to report on any students exhibiting concerning behavior in the fifth week of the semester	Faculty asked to report on students as concerns arise; reminders to use system sent in weeks 0, 3, and 6
Alert Recipient	Office of Student Success and Retention	Advising office in student's college
Follow-Up	Program coordinator triages alerts; program staff of 2 FTEs and 2 part-time graduate students follow up on alerts	Advisors decide appropriate outreach, contact over 90% of students within three days
Advantages	• With all faculty submitting alerts in same window, students performing poorly in multiple courses are easily identified • Evaluation of all alerts at same time maximizes efficiency of triage process • Face-to-face meetings reserved for students with greatest risk of attrition • Fixed deadline facilitates follow-up on faculty participation	• Encouragement of reporting from beginning of semester increases opportunities to identify, intervene in student problems as early as possible • Submission of alerts directly to advisors obviates need for additional staff to evaluate alerts and conduct interventions
Caveats	• Separate efforts required to encourage faculty to send alerts on students whose problems materialize after the submission window • Larger universities likely to have too many alerts for a single centralized person to evaluate; most suitable for smaller institutions	• Asynchronous reporting in most cases leaves advisor with only partial data on student's performance across courses • Large number of advisors involved in outreach necessitates centralized monitoring of advisor follow-through • Rolling deadline prolongs follow-up with faculty who fail to submit alerts

Source: University Leadership Council interviews and analysis.

Universities are investing in a wide range of strategies to encourage faculty participation in the early alert program. In combination, these strategies can shift faculty attitudes and formalize alert reporting as part of campus culture.

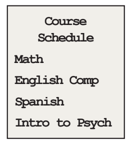
Increasing Faculty Participation in Alert Reporting

Six Strategies for Securing Faculty Buy-In



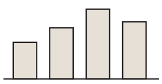
1 Messaging During Faculty Orientation

Training sessions teach new faculty to use the early warning system and clearly state that reporting is an expected part of their job



2 Focus on First-Year Courses

Efforts to partner with instructors teaching first-year students reduce the reporting burden on the faculty at-large



3 Making the Case with Data

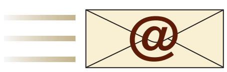
Data collected by the university demonstrate to faculty the correlation between alert reporting and student success

(See Practice #4: Absence Tracking, pgs. 46–56)

4 Encouragement from the Provost

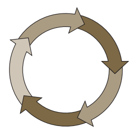
A special message from the provost at the beginning of each semester re-emphasizes the importance of alert reporting

(See an example on page 45)



5 Periodic E-mail Prompts

Instructors teaching first-year courses receive automated e-mails every two weeks reminding them to submit alerts.



6 Close the Loop on Reporting

E-mails update instructors on the outcome of advising meetings triggered by the alerts they submit

(See Practice #9: Intervention Tracking System, pgs. 92–96)

Source: University Leadership Council interviews and analysis.

Tool #3A: Early Alert FAQ for Faculty—Cal State Northridge

The EARLY WARNING System (TEWS)

California State University Northridge

Educational Opportunity Program
www.csun.edu/eop/tews

—TEWS Protocol—
—FAQs for Faculty Users—

Q: When do I use TEWS?

A: After you have had contact with the student and you discern the student has additional needs.

Q: After I initiate a TEWS alert for one of my students, where will it go?

A: The TEWS alert will go directly to the Student Service Center/EOP satellite contact person of the student's current major.

Q: What if a student never shows to class?

A: Attempt contact with the student, and then utilize TEWS

Q: What if a student does not return to class after several meetings?

A: Attempt contact with the student, and then utilize TEWS.

Q: Can I refer a student directly to a student service center?

A: Absolutely, although TEWS will provide a method of tracking this interaction.

Q: How will I know I have a TEWS alert or a TEWS response e-mail?

A: You should check your CSUN portal as well as your e-mail on a regular basis.

Q: What should I do if I do not receive a response from the Student Service Center/EOP Satellite contact within the three day allotted time frame?

A: It is advised you go around the TEWS system and send an e-mail to the designated Student Service Center/EOP satellite contact to inquire about the student.

Q: Is TEWS the only way I can interact with the Student Service Center/EOP Satellites or other student services regarding TEWS students?

A: No, TEWS is not a replacement for faculty interaction, it is merely a supplement.

Source: TEWS website, http://www.csun.edu/eop/tews/ (accessed December 1. 2009); University Leadership Council interviews and analysis.

Tool #3A: Early Alert FAQ for Faculty—Cal State Northridge (cont.)

The EARLY WARNING System [TEWS]

California State University Northridge

Educational Opportunity Program

www.csun.edu/eop/tews

Q: If I receive a midterm evaluation for a student, will I have to complete the paper evaluation as well as TEWS?

A: No, utilize the TEWS system only for your TEWS linked courses.

Q: What happens if the student contacts the Student Service Center/EOP Satellite after day three?

A: The Student Service Center/EOP Satellite contact person will continue the TEWS process by responding to you via e-mail.

Q: Do I use TEWS if I have a disruptive student?

A: No, TEWS is only a tool. It should not circumvent processes that the university already has in place, i.e., campus police, etc.

Q: What happens to the TEWS ticket after the advisor responds?

A: The Advisor will "close" a TEWS ticket if: (1) the advisor has made contact with the student and had delivered necessary services, or (2) the advisor has received feedback from a student services referral indicating the student has made contact with them.

Q: What should I do if I need to send a second TEWS alert for a student with a "closed" ticket?

A: You can change the status of the ticket from "closed" to "open" and then it's an open ticket again.

Source: TEWS website, http://www.csun.edu/eop/tews/ (accessed December 1. 2009); University Leadership Council interviews and analysis.

Tool #3B: Early Alert System Description for Course Syllabus—Cal State Northridge

The
EARLY
WARNING
System (TEWS)

California State University
Northridge

Educational Opportunity Program
www.csun.edu/eop/tews

—Facts for Faculty—

Statement about TEWS for course syllabus:

This class is linked with The Early Warning System (TEWS), a student centered support system. This tool was created with the sole purpose of helping student retention by facilitating early interaction of faculty, students, advisors and other student service areas.

Answers to Students Questions Regarding TEWS:

✓ This class is linked to The Early Warning System or TEWS.

✓ CSUN loses almost 21% of first year students by the end of the first year. Retention is a pressing problem for the vast majority of the country's higher education institutions—CSUN included.

✓ TEWS is an integrated student centered support system, created with the sole purpose of helping students with any need that may arise during their first year.

✓ TEWS facilitates early interaction of faculty, students, advisors, and other student service areas.

✓ As a student in a TEWS linked course you may receive e-mails or telephone calls from me and/or your advisor in your college Student Service Center/EOP satellite or the Advising Resource Center/EOP if you are an undecided student.

✓ You are encouraged to utilize the services outlined on your TEWS handout. TEWS is a tool for faculty to use as a resource to communicate with student support services areas in the university about students who may be in need of some level of intervention to ensure their persistence and academic success at the university.

✓ TEWS recognizes the importance of:
- Easing the new student's transition into the college environment
- Early systematic identification of those students who may be academically at risk
- Early identification of students who may be having difficulties in and out of the classroom
- Establishing a common communication link between students and their instructors, advisors, and relevant support services.

Source: TEWS website, http://www.csun.edu/eop/tews/ (accessed December 1. 2009); University Leadership Council interviews and analysis.

Tool #3C: Provost Letter to Faculty—Creighton University

Creighton
UNIVERSITY

Dear Colleague:

As you know, at Creighton we pride ourselves on individual attention to students. Recently you received a survey from Mary Higgins regarding potential warning signals regarding students in your courses (low quiz scores, absences, etc.). It is very important that you complete the survey and return it promptly. Even if you feel that you are addressing the issues in your course with any students who are having difficulty, it is important that we get a clear picture as to whether students are having difficulties in multiple courses. As you know, our chances of helping a student succeed are exponentially greater if we can address the issues at this juncture rather than later.

Sincerely,

Patrick J. Borchers
Vice President for Academic Affairs and Professor of Law

Source: Personal communication; University Leadership Council interviews and analysis.

Practice #4: Absence Tracking

Description

Instructors use an electronic form to submit alerts on first-year students missing two or more class sessions. A specially trained team of resident advisors deliver brief, carefully scripted, in-person interventions designed to communicate the importance of class attendance.

Recommended For: All colleges and universities

Council Assessment of Practice Effectiveness

Data shows that first-year students with class attendance issues earn lower GPAs and experience higher rates of attrition, despite being academically indistinguishable from their peers based on standardized test scores. This suggests that absenteeism in the first year is more a function of irresponsibility and immaturity in the face of newfound freedoms than one of academic quality. By tracking class absenteeism early in the first semester, the university can quickly and inexpensively intervene with wayward students before poor class attendance habits reduce their chances for success. This practice is cost-effective and thus recommended for all universities; however, practitioners caution that absentee tracking will not be sufficient as a stand-alone practice at universities with large populations of non-traditional or remedial students requiring more extensive academic support.

Implementation Tips

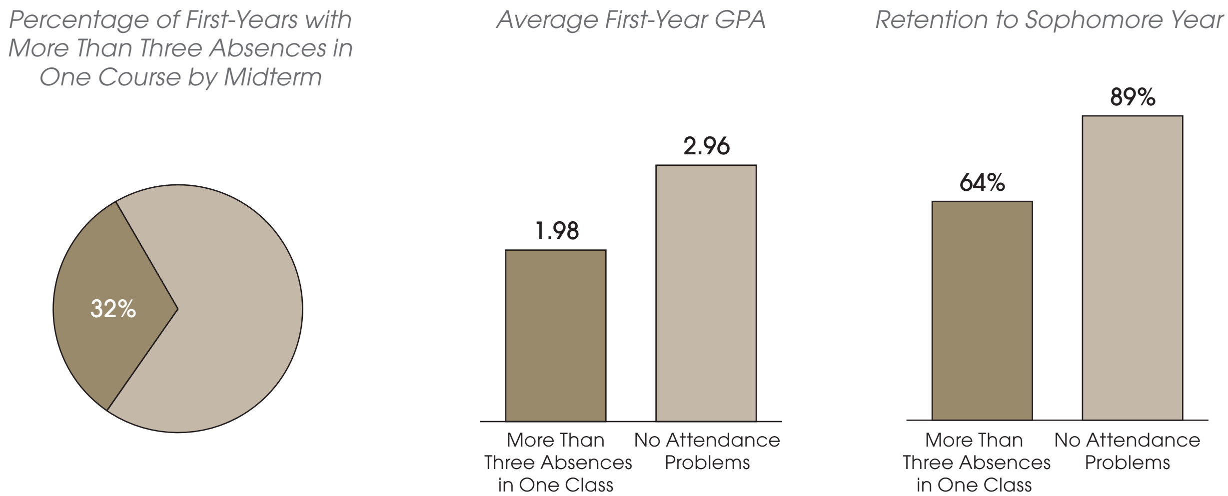
University IT resources should find it straightforward to set up the necessary electronic reporting tools. The intervention team should be selected from the existing pool of RAs. The toughest challenge will be in convincing faculty to participate. Mississippi State University succeeded in securing faculty buy-in by presenting department heads with data that clearly showed the link between absenteeism and attrition. The Council recommends starting with humanities departments that tend to offer small classes in which attendance is easiest to track.

Implementation Toolkit

The Council recommends that universities put a special emphasis on class attendance as an early warning indicator. Attendance problems are readily identified very early in the semester and are highly correlated with success. Researchers at Mississippi State University found that nearly one-third of first-year students exhibited attendance problems and that these students earned worse grades and persisted at a rate far below that of their peers.

Class Attendance Highly Predictive of Persistence

First-Year Students at Mississippi State University, 2005–2006



Case in Brief

Pathfinders Program
Mississippi State University
Starkville, MS

- Rural public research university with 13,200 undergraduates
- Instructors in all first-year courses report names of students who have missed two or more classes
- Team of specially-trained RAs conduct brief, non-confrontational, scripted face-to-face check-ins to remind students of the importance of attending class
- Program produced an immediate 3 percent gain in first-year persistence, growing to 8 percent over the last decade as faculty participation increased

Source: Pathfinders Website, http://www.msstate.edu/org/pathfinders/ (accessed May 15, 2009); University Leadership Council analysis.

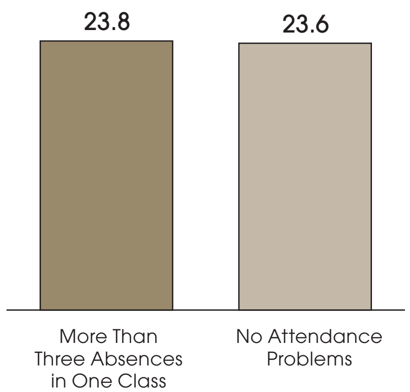
Contrary to prevailing faculty attitudes, students who struggle due to absenteeism are just as well-prepared as their peers. Mississippi State drew the conclusion that many students lost in the first year are academically qualified for college but have yet to develop the discipline and maturity necessary to complete the adjustment from the more structured life of high school.

It's Effort, Not Aptitude

Students Missing Class Are Just as Well Prepared as Peers

First-Year Students at Mississippi State University

Average ACT Scores, 2005–2006

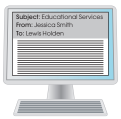


Source: Pathfinders Website, http://www.msstate.edu/org/pathfinders/ (accessed May 15, 2009); University Leadership Council analysis.

Mississippi State aggressively intervenes to reduce first-year absenteeism. Instructors in first-year classes report students with repeated absences to an office that coordinates outreach designed to reinforce the importance of attendance for success. The goal is to give students a wake-up call and gently nudge them back on course.

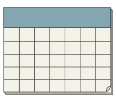
Reaching Out to Students with Two or More Absences

Mississippi State's "Pathfinders" Program



1 Faculty Prompted to Submit Alerts

- Every two weeks through midterms, department head e-mails faculty reminder to submit alerts on any first-year student missing two or more classes
- Faculty also encouraged to submit alerts on rolling basis
- Deans and chairs contact faculty who do not submit alerts



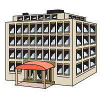
2 Pathfinders Office Processes Alerts

- Program coordinator processes alerts daily, creating spreadsheets with flagged students' contact information
- A student receives only one class attendance intervention per semester
- 60–100 alerts received per day at beginning of semester; by late semester, volume drops to 20 per day (first-year class size: 2,400 students)

3 Residency Status Determines Intervention Delivery Method

On-Campus Students

- Specially-trained RAs contact students living in residence halls
- 80 percent of alerts



Off-Campus Students

- Program coordinator contacts students living off campus
- 20 percent of alerts

Two Simple Reporting Mechanisms

Banner Overlay

- IT–designed overlay for Banner enables faculty to check attendance alert box next to student name on course roster

Pathfinders Website

- Reports also submitted via web-based submission form
- Enables teaching assistants, who do not have access to Banner, to submit alerts

Source: University Leadership Council interviews and analysis.

Resident advisors inexpensively deliver quick and effective interventions. MSU has found that students respond positively to non-threatening attendance interventions delivered by peers instead of administrators. Brief scripting assures these students that the university is looking out for them, and that this is not a punitive action. RAs require no incremental staffing investment and are highly effective.

Leveraging RAs for Low-Cost Interventions

Key Elements of Pathfinders Interventions

Delivered by Peer

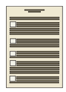
- Ten specially chosen and trained RAs meet face-to-face with students

Brief

- Discussions last no longer than two minutes

Supportive and Non-Threatening

- RA knocks on student's door for unscheduled, informal conversation
- With upbeat tone, RA communicates concern for student; critical or confrontational tone assiduously avoided



Carefully Scripted

- RAs undergo rigorous training and closely follow approved script
- Students with questions extending beyond script are referred to academic support offices

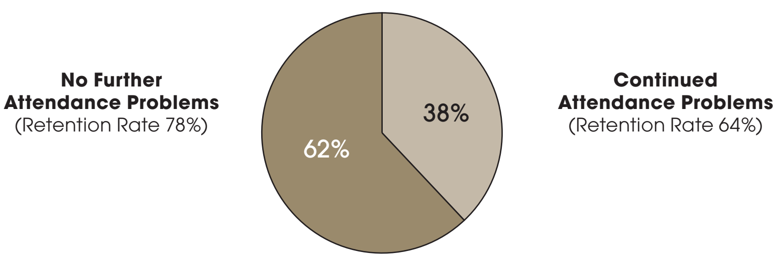
(See scripting on page 54)

A Three-Part Message

1. Greeting and explanation of Pathfinders program
2. Connection between attending class and academic success
3. Presentation of information card detailing support services

Making an Impact on Student Behavior

Student Attendance Following Pathfinders Intervention



Source: Pathfinders Website, http://www.msstate.edu/org/pathfinders/ (accessed May 15, 2009); University Leadership Council analysis.

Faculty resistance is the main obstacle to practice adoption. Unsurprisingly, Mississippi State experienced pushback from instructors. The most common objections were over issues of student autonomy and the misperception that students with attendance issues do not belong in college.

Facing Faculty Opposition

Why Faculty Don't Want to Take Attendance

"I Don't Want to Be a Police Officer"

"Policing" class attendance conflicts with the friendly, supportive persona I want to present to my students.

"We Have to Respect Students' Autonomy"

Students are adults. Don't they have a right to choose whether or not they come to class?

"I Don't See How It's Worth the Trouble"

It's a lot of work. Why bother?

"Aren't We Better Off Without These Lazy Students?"

Perhaps these students shouldn't be at this institution in the first place.

No Excuse to Let Them Fail

"Faculty tend to think attendance is solely the responsibility of the student. I certainly used to think this when I started teaching. Over time, I learned that although first-year students should be more responsible, many are not. This isn't an excuse to let them fail."

David McMillen
Pathfinders Program Director
Mississippi State University

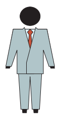
Source: University Leadership Council interviews and analysis.

Faculty resistance can be overcome with compelling data and a tight focus on first-year courses. An MSU faculty member led the charge, department-by-department, armed with data demonstrating the clear connection between attendance and success. Recruitment efforts began in departments hosting small first-year courses where attendance tracking is easiest. Absentee data also convinced stakeholders to emphasize attendance at key events attended by incoming students.

Winning Faculty Support

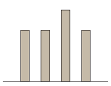
Key Elements to Attendance Tracking at Mississippi State

Making the Right Case



Faculty Champion

- Respected faculty member, not administrator, leads the charge
- Meets individually with chairs and faculty



Research-Focused Approach

- Data demonstrates impact of attendance
- Faculty asked to support continued research through reports

ACT Score: 23.8

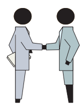
Challenge to Persistent Myths

- Data shows faculty they are losing qualified students

Targeting the Right Courses

Focus on First-Year Students

- Faculty asked to submit absence alerts on first-year students only



Starting with Likely Allies

- Efforts begin with departments and individual faculty most inclined to support student success initiatives
- Early efforts also target small first-year courses (e.g., English composition) where attendance tracking is easiest

Creating a Culture That Values Attendance

Importance of Attendance Emphasized at:

Orientation

Convocation

Residence Hall Welcome Meetings

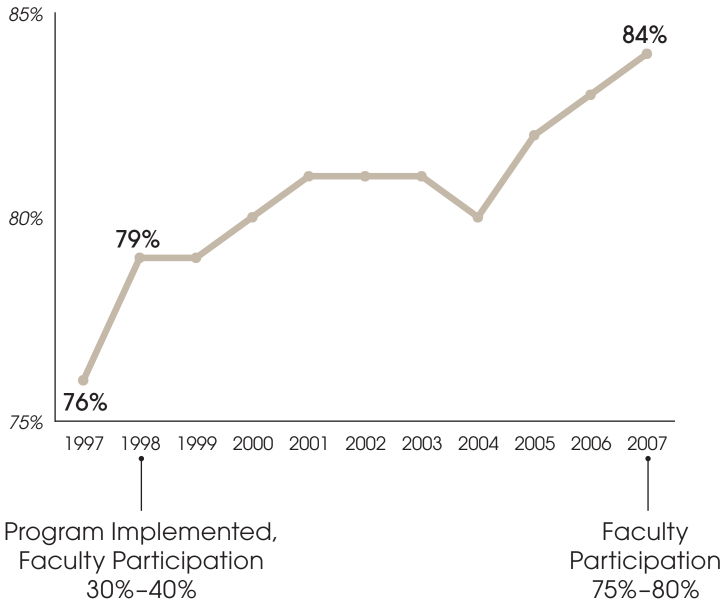
The First Session of Class

Source: University Leadership Council interviews and analysis.

MSU's retention rate is rising while admission standards remain constant. Mississippi State's retention rate rose by 3 percent in the first year of the Pathfinders program, with further gains made as faculty participation in the program has increased. However, the mean ACT score of entering students has held constant over the same time period, suggesting that Mississippi State's retention gains are not attributable to a change in the academic background of the student body.

Driving Impressive Results

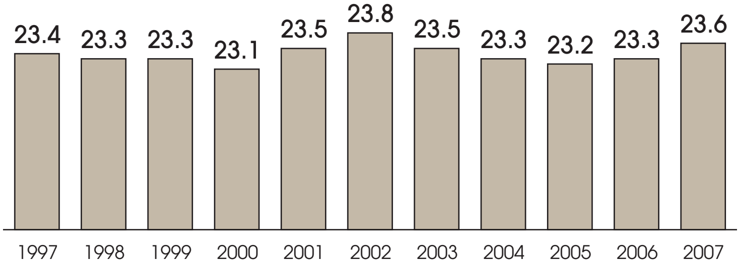
Mississippi State First-to-Second-Year Retention, 1997–2007



Retention Rising While Student Academic Preparation Remains Constant

Median ACT Scores of Entering Class

Mississippi State University



Source: Pathfinders Website, http://www.msstate.edu/org/pathfinders/ (accessed May 15, 2009); University Leadership Council analysis.

Tool #4A: Contact Process and Scripting for RA Intervention—Mississippi State

PATHFINDERS
MISSISSIPPI STATE UNIVERSITY

Ty Abernathy
325-0595
ty@ra.msstate.edu

Amanda Butts
325-9590
pathfinders@org.msstate.edu

http://www.msstate.edu/org/pathfinders/

Resident Contact Procedure (1 minute)

Step 1 - Greeting

- Introduce yourself (Resident Advisor on the first floor) and tell the resident that you work with Pathfinders. Then, ask the resident if they've heard of Pathfinders? Yes/No
- Response—Pathfinders is a program that attempts to help freshman students be successful at Mississippi State.

Step 2 - Absence Information

- One of the things Pathfinders does is monitor class attendance because going to class for freshman students is important for them to do well and make it here at Mississippi State.

Missing class is the first sign that a freshman student is having trouble or about to have trouble in school.

Please talk to your instructor if you are having any academic problems in a course.

Please make class attendance a top priority.

Step 3 - Academic Resource Card

- Present the card to the resident and encourage him/her to contact any of the people or academic resources listed on it if he/she needs help with anything.
- Remind the resident how important class attendance is and tell him/her that if you, in any way, can be of any further help to him/her to let you know.

We're just here to help.

We just want you to do well.

We just care about freshman students.

Please be familiar with the Pathfinders weekly schedule, and please know what you are responsible for doing each day of the week.

Source: Pathfinders Program, Mississippi State University; University Leadership Council interviews and analysis.

Tool #4A: Contact Process and Scripting for RA Intervention—Mississippi State (cont.)

Common Student Responses and Questions

- I haven't missed that class.
  Talk to your instructor next class and let them know.
- I dropped that class.
  Check your schedule on line just to make sure.
- I'm not in that class.
  Check your schedule on line just to make sure.
- How many days did I miss that class?
  I'm not sure, but at least twice.
- I haven't missed that many days?
  Talk to your instructor next class and let them know.
- What days did I miss class?
  I'm not sure.
- Is someone else going to tell my parents?
  No, we're here to help you, not get you in trouble.
- What about this or that? Who? Why?
  Call or e-mail Amanda or Ty, they can give you more information.

Things to Remember

- Smile and keep smiling.
- Try not to alarm the resident, but get the message across to them.
- Always remain friendly and positive. cool---great---right---sure---good luck

If you don't know the answer to a question, don't know what to say, or don't know how to respond, simply tell the resident to call or e-mail Amanda or myself. We'll be glad to discuss the situation with the resident further and give them more information.

Source: Pathfinders Program, Mississippi State University; University Leadership Council interviews and analysis.

Tool #4B: Resource Information Card for RA Intervention—Mississippi State

PATHFINDERS
MISSISSIPPI STATE UNIVERSITY

N W E S

Welcome to Mississippi State University. MSU is committed to helping students make a productive transition to college life. Central to this commitment are various academic programs, resources and services that are **free** and available to **all** students, not just those having academic difficulties. Assistance is available in many areas, including tutoring in various subjects, preparing for tests, developing effective study skills, writing assignments, choosing a career, changing your major and using the library. Please call, e-mail, drop by, or visit the websites for further information. MSU looks forward to you having a great year and hopes you enjoy your time at State.

Pathfinders Advising Center (first house behind Rice Hall)
http://www.msstate.edu/org/pathfinders/
Ty Abernathy ty@ra.msstate.edu 325-0595
Amanda Butts pathfinders@org.msstate.edu 325-9590
Provides information concerning various academic assistance programs, resources and services. The primary focus of Pathfinders is class attendance by freshmen. Regular class attendance is a major factor in determining the academic success of freshmen.

The Math Domain Allen Hall Room 111
Ms. Marjorie Crittenden MCrittenden@math.msstate.edu 325-5805
Monday – Thursday 8:00 a.m.– 8:00 p.m.
Friday 8:00 a.m.– 3:00 p.m.
Faculty and graduate teaching assistants provide tutoring and help with online homework for Intermediate Algebra, College Algebra, Trigonometry, and Business Calculus.

Student Counseling Services Lee Hall Room 101
http://www.health.msstate.edu/scs/
Monday - Friday 8:00 a.m.– 5:00 p.m. 325-2091
Student Counseling Services supports the academic mission of Mississippi State University by facilitating the social, psychological, and academic functioning of students. In pursuit of this objective, we offer a variety of direct student services ranging from preventative psycho-educational programming, student mentoring, supportive counseling, group counseling, intensive psychotherapy, and 24-hour crisis intervention.

The Learning Center (TLC) Allen Hall Room 267
http://www.tlc.msstate.edu/ email: tlc@colled.msstate.edu
Dr. Anna Dill anna.dill@msstate.edu 325-2957
Ms. Kathy Forrester kforrester@colled.msstate.edu 325-2957
Main Office 8:00 a.m.– 5:00 p.m. Monday – Friday
Tutoring 2:00 p.m.– 7:00 p.m. Monday – Thursday
Open Computer Lab 8:00 a.m. – 9:00 p.m. Monday – Thursday
8:00 a.m. – 5:00 p.m. Friday
Provides tutoring in various subject areas and courses in study skills and reading; all courses have an LSK prefix; computer labs available.

The MSU Writing Center Lee Hall Room 315D
http://www.msstate.edu/dept/english/writingcenter.html 325-1045
Ms. Sarah Sneed sds9@ra.msstate.edu 325-2349
Monday – Thursday 10:00 a.m.– 5:00 p.m. and Friday 10:00 a.m.– 2:00 p.m.
The Writing Center is a free service to all MSU students! Graduate teaching assistants are available to assist all MSU students, including freshmen, with their writing assignments and projects. Please call or email for more information.

Holmes Cultural Diversity Center
Suite 220 Colvard Student Union
http://www.hcdc.msstate.edu/ Monday – Friday 8:00 a.m. – 5:00 p.m.
Ms. E. Maria White emw1@saffairs.msstate.edu 325-2033
The Holmes Cultural Diversity Center strives to enhance the college experience of culturally diverse students via various services and programs designed to help students achieve their academic and career aspirations.

Student Support Services Montgomery Hall basement floor
http://www.msstate.edu/dept/sss/ Monday – Friday 8:00 a.m. – 5:00 p.m.
Ms. Julie Berry jberry@saffairs.msstate.edu 325-3335
Provides supportive services for students who have an academic need and are first generation, low income, or disabled.

The Career Center Montgomery Hall Room 300
http://www.career.msstate.edu/ Monday – Friday 8:00 a.m. – 5:00 p.m.
Cassandra Latimer clatimer@career.msstate.edu 325-3344
Provides assistance to all students, including freshmen, about a variety of career issues. Also, provides information about the co-op office (located in McCain Hall Room 335 – 325–3823). See a career advisor and talk about choosing/changing your major; take career assessments to help narrow your choices; start a resume; find internships, co-op opportunities, and part-time jobs; attend career fairs and talk to employers.

University Academic Advising Center
150 Magruder Street (first house behind Rice Hall)
http://www.msstate.edu/dept/academic_advising/ 325-4052
Monday – Friday 8:00 a.m. – 5:00 p.m. e-mail: advising@org.msstate.edu
Academic advisors Mr. Wes Ammon, Ms. Jan Odom, Mr. Andrew Sharp, Ms. Sandra Powe, or Mr. Tim Fancher can be contacted at the above telephone number or e-mail address.
Specializes in student academic advising and program of study alternatives, primarily for undecided/undeclared students.

Mitchell Memorial Library Resources
http://nt.library.msstate.edu/ Access Services/Help Desk 325-7668
Ms. Gail Peyton gpeyton@library.msstate.edu 325-7671
Reference Librarian/Desk reference@library.msstate.edu 325-7667

- **Undergraduate Research Center -** Serves all undergraduate students who are unsure of a research topic and need information for term papers and speeches.
- **Research Consultation –** An individual appointment is made with a reference librarian to locate in-depth materials on a given topic.
- **MSU Libraries Outreach Program -** Specifically designed to assist students in utilizing the library easily and efficiently.
- **Instructional Media Center -** Provides computers with web authoring and print software and trained staff available for assistance. Also has free DVD and video rentals and equipment check-out of laptops, cameras, camcorders, etc.
- **Ask-A-Librarian -** You can click on the Ask-A-Librarian link at the top of the menu bar and ask any question you might have. You can also now access the Ask-A-Librarian link through any EBSCO Host research database.

**The numbers listed above can be used for further information regarding any of the library's resources or hours of operation.*

Source: Pathfinders Program, Mississippi State University; University Leadership Council interviews and analysis.

Practice #5: Course Management Software Usage Tracking

Description

Software designed by teaching technologies researchers uses a sophisticated algorithm to automatically calculate each student's risk for failing a specific course based on his or her level of engagement with the Blackboard course management system. Students receive weekly updates of their risk levels via e-mails and text messages, as well as via a stoplight indicator on their Blackboard homepage. Students can reduce their risk level by increasing their use of course materials on Blackboard.

Recommended For: All colleges and universities (but see caveats below)

Council Assessment of Effectiveness

Purdue University's "Signals" program automates academic early warning to a degree that far exceeds most traditional early alert systems. Automatic weekly updates provide students, faculty, and administrators with dynamic feedback on how students' behavior changes across the semester. The burden on faculty to submit risk alerts is greatly reduced, allowing instructors to focus their efforts on assisting struggling students. Students receive continuous feedback on their risk levels and guidance on developing academic habits that will increase their chances for success in college.

This system is still in the development phase, and therefore remains unproven as a student retention strategy. The degree of impact on retention rates will depend on the extent to which students who are not actively using materials on the course management system are at elevated risk for failing that course and how this translates to likelihood of dropping out.

While the Council lacks conclusive data on this practice's effectiveness, we believe it serves as a promising example of how to leverage existing data streams—such as the course management software system—to reduce the burden on instructors to identify at-risk students.

Implementation Tips

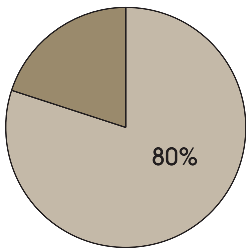
The Signals program was developed over three years by a small team of researchers and programmers at Purdue's Teaching and Learning Technologies group. Development of the underlying software is time and labor intensive; however, the benefits of reducing reliance on faculty to participate in an early warning system make this investment worthwhile for a university that can afford to commit the necessary resources.

This early warning practice depends on extensive instructor use of course management systems to be effective. Courses that rely heavily on CMS are typically large lecture classes and predominantly in STEM fields.

Implementation Toolkit

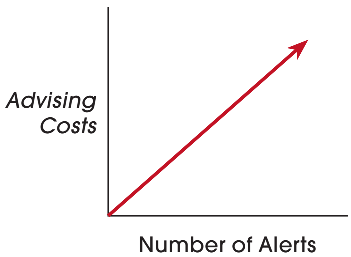
Some progressive universities are looking to develop highly automated early warning systems that do not suffer from the limitations inherent in traditional reporting-based systems. Traditional early warning systems are overly reliant on human action. Faculty who do not submit alerts create gaps in the identification network, and costly advising resources must be committed to the intervention efforts.

Limitations of Faculty-Dependent Early Alert Systems



Best Case Faculty Response Rate

- Early alert exemplars rarely attain faculty response rates above 80 percent



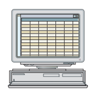
Variable Cost Increase

- Alerts generate more traffic for advising offices, requiring additional resources

Source: University Leadership Council interviews and analysis.

While still rare, automated early warning systems offer some promising advantages. Automated systems are based entirely on monitoring data already collected by the university with interventions requiring almost no support from advisors. Universities are just beginning to experiment with fully automated early warning systems; however, Council view is that the clear advantages presented by automation will likely lead to wider adoption as these technologies mature in coming years.

Advantages of Automation Over Faculty-Dependent Reporting

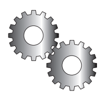


Use of Existing Data

- Automation relies primarily on data already being collected at the university

Reduced Faculty Burden

- Total workload for instructors is reduced and can be pulled forward to before the semester



Automatic Intervention Communications

- Risk levels triaged electronically, triggering automated intervention messages

Engaged Students

- Highly visible risk indicators can be effective at compelling students to seek help on their own

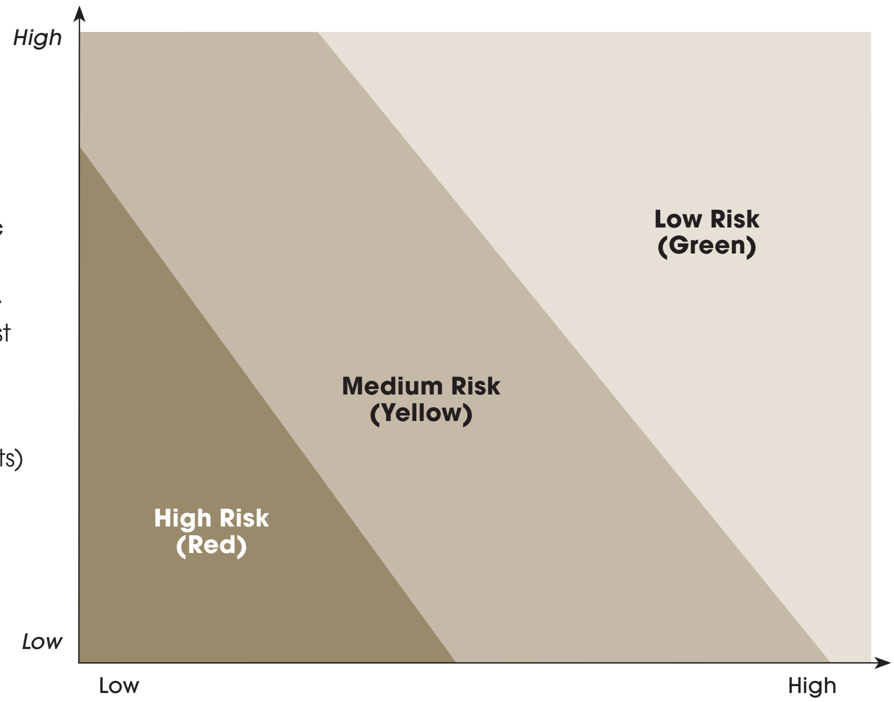
Source: University Leadership Council interviews and analysis.

Purdue University is developing an automated alert system based on usage data from the Blackboard course management system (CMS). Purdue's system obviates reliance on faculty alert reports by instead basing risk assessments on a combination of students' academic performance history and their usage of the course website. A predictive algorithm uses these data to assign each student a green/yellow/red risk assessment representing their likelihood to fail the class based on historical patterns of success.

Calculating Risk Scores from CMS Data

Past Academic Performance

- High school GPA
- Standardized test scores
- Prior semester college GPA (for returning students)



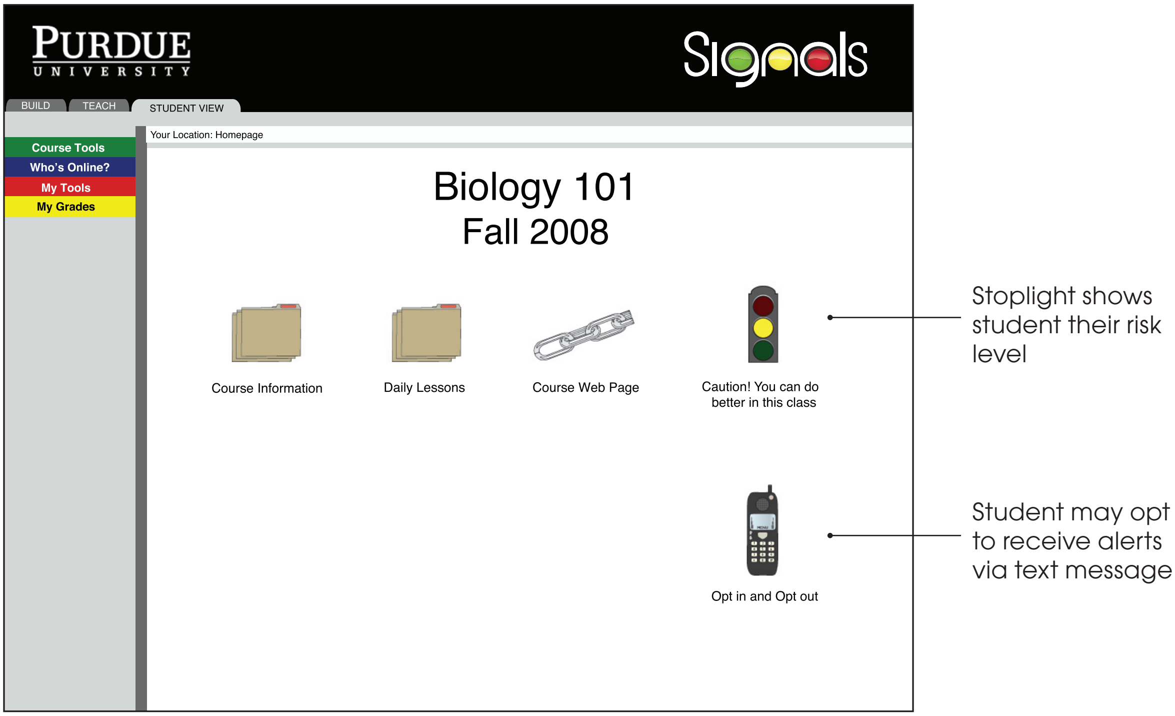
Blackboard Usage Metrics

- Number of log-ins
- Participation in online discussions
- Practice quiz attempts
- Page views

Source: University Leadership Council interviews and analysis.

E-mails, text messages, and a stoplight indicator on the Blackboard course homepage notify students of their risk status. Students see their red/yellow/green indicator each time that they log into the course page. Students are also notified of their risk levels via weekly e-mails containing instructions on how to improve. Students have the option to receive their risk alerts directly on their mobile phones using the university's text message emergency alert notification system.

Purdue's Blackboard "Signals"



Case in Brief

PURDUE UNIVERSITY

Signals
Purdue University
West Lafayette, IN

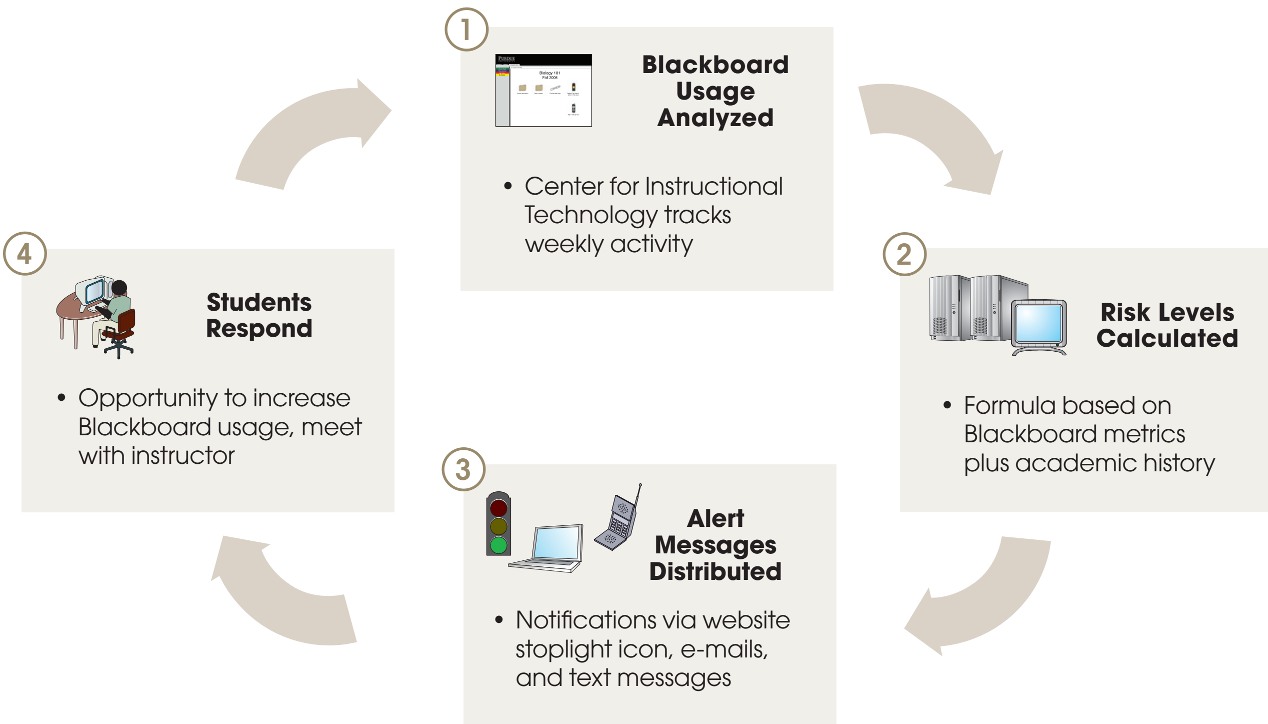
- Suburban public research university with 32,600 undergraduates
- Students receive weekly updates on their risk for failing a course based on their Blackboard usage patterns and past academic history
- Notification of risk levels are made via e-mails and text messages prepared by the instructor prior to the semester
- A stoplight indicator on the Blackboard homepage shows each student his or her risk level
- Students can decrease their risk level by increasing use of course materials on Blackboard
- Students notified of their risk levels tend to get better grades and engage in more "help-seeking behavior"
- System rolled out to 12 introductory courses covering majority of 7,000 first-year students in Fall 2009

Source: University Leadership Council interviews and analysis.

Updated Blackboard data is used to recalculate risk levels each week, helping students and administrators see improvement across the semester. Each week, students have the opportunity to respond to undesirable risk assessments by increasing their Blackboard usage, which in turn will improve their risk standing in the next week's calculations. This creates a positive feedback loop promoting good academic habits. The entire process happens without reliance on costly advising resources to execute interventions with flagged students.

Continuous Feedback

Risk Levels Recalculated Weekly Until Midterms



(See examples starting on page 66)

Source: University Leadership Council interviews and analysis.

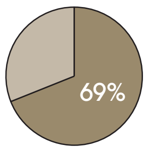
Students exposed to the Signals program earn higher grades and make better use of support resources. In pilot testing, Purdue found that encouraging increased engagement with Blackboard resulted in fewer Ds and Fs. Signals students were also more likely to seek out available academic support resources, even after the intervention messages ceased at midterm.

Helping Students Help Themselves

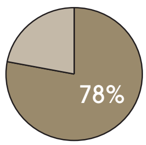
Signals Students Increase Blackboard Use, Get Better Grades

Flagged Students Improving Risk Scores by Week Six

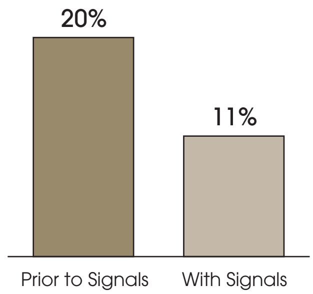
Students with Yellow Alerts



Students with Red Alerts



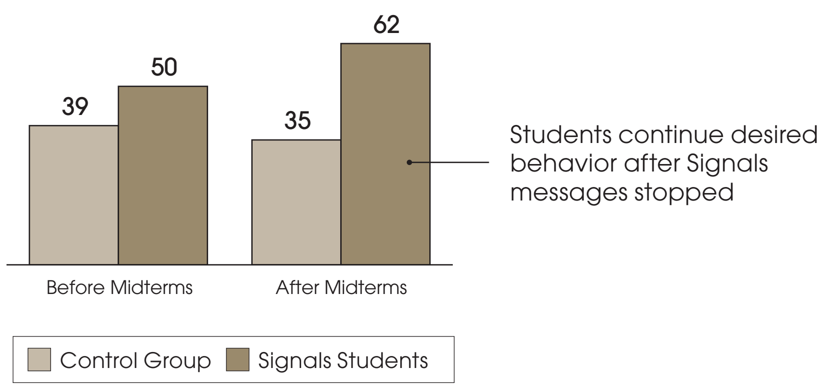
Students with Final Grade of D or F in Sample Pilot Course



Flagged Students Also Increasing Use of Academic Support Services

Student Visits to Biology Resource Center

Fall 2007



Source: University Leadership Council interviews and analysis.

The Signals program allows faculty to concentrate on working with struggling students instead of submitting alerts. Before the semester, instructors specify the series of weekly intervention messages that flagged students will receive. Once the semester commences, participating faculty are asked to do nothing more than meet with students who seek their assistance. The majority of the program work is handled by the development team.

Letting Faculty Do What Faculty Do Best

Signals Reduces the Burden on Instructors

Distribution of Labor with Signals Program

	Work Involved	Teaching and Learning Technologies	Faculty
Prior to Semester	Develop risk algorithm	X	
	Choose alert messages (samples provided)*		X
During Semester	Monitor Blackboard usage	X	
	Calculate weekly risk levels	X	
	Distribute alert messages	X	
	Meet with students seeking help		X

* *(See examples starting on page 66)*

Better Leveraging Faculty Time

"The faculty are most helpful to retention efforts not when they are collecting data or submitting alerts, but when they are actively working with students in trouble."

John Campbell
Associate Vice President for Information Technology
Purdue University

Source: University Leadership Council interviews and analysis.

Development at Purdue required several years and a significant investment in IT resources. This groundwork could shorten development for subsequent adopters; however, universities should still anticipate a multi-year commitment to implement a similar system. Purdue estimates programming and support staff costs to be roughly $47 per student annually.

Three Years in the Making

Development Timeline

Initial Planning

Fall 2006

- Development of initial predictive models
- Statistical testing using historical data

Spring 2007

- Recruitment of initial pilot course
- Development of intervention messages

Pilot Testing—Phase I

Fall 2007

- One course, test/control group of 220 students
- Evaluation of effectiveness and feedback

Spring 2008

- One course, test/control group of 150 students
- Recruitment of additional partner courses

Pilot Testing—Phase II

Fall 2008

- Three courses, 600 students
- Increased automation of analytics and messaging

Spring 2009

- Three courses, 942 students
- Addition of text message alert option

Campus Roll-Out

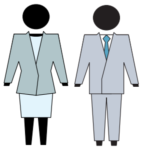
Fall 2009

- Twelve gateway courses in seven disciplines (primarily STEM)
- Majority of 7,000 first-year students covered by at least one course

2010 and Beyond

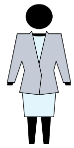
- Interface for advisors to access student risk levels
- Incorporation of Blackboard gradebook data into risk model
- Increased faculty customization of risk inputs and messaging

Development Team



Programmers (1–2 FTEs)

- Database specialist pulls data from Blackboard
- Predictive modeler develops risk algorithm and runs weekly updates



Assessment Specialist (0.75 FTE)

- Works with faculty to develop intervention messages

Source: University Leadership Council interviews and analysis.

Tool 5A: Sample Weekly Signals Messages—Purdue University

Week 2

High Risk and Medium Risk

Reply Reply All Forward Follow Up

From:
To:
Cc:
Sent:
Subject: About your performance to date in BIOL 195T, First-Year Biology Lab

Dear [Student Name],

Based on your use of online resources and assignments, and according to our class Vista grade book, as well as past student performance in BIOL 195T, you are performing well below the level you need to succeed in this course. If you continue at this low level of effort it is likely that you will not do as well as you could in this course. Now is the time to change your "ways." We recommend that you make time during the week before each lab in BIOL 195T to do all your pre-lab preparation. Again, here are our recommendations for preparing for each lab.

- Carefully read and study the lab in your manual, "Boot Camp for Biology Laboratories," to be covered.
- Use the online practice files we post in the "Practice" section in our class Vista site to learn and review material covered in a lab.
- Go through the online pre-lab lecture for the lab to be covered.
- Do the online pre-lab quiz for the lab to be covered.
- Do the online pre-lab homework assignment for the lab to be covered. Remember the link to the online pre-lab homework assignments is on our class Vista site home or main page.
- If there are any flow charts for you to write for a lab you will be doing, you need to write these flow charts in your lab notebook before that lab.
- When you get to lab, be ready to take the in-lab quiz for that lab, and be ready to "do" the lab.

Remember, if you need help, please do one or all of the following.

1. You can get help by staying after your scheduled DivSec meets to get help from one or both of your TAs
2. You can go to the weekly help session Sundays 4:00-5:00 PM in LILY 1-406
3. You can get help by going to the Biology Resource Center (BRC) in LILY G-414C, Monday-Thursday 9:00 AM to 9:00 PM, and Friday 9:00 AM to 4:00 PM
4. You can make an appointment for help with any of our TAs for this course by sending a message to bootcamp@purdue.edu or by sending one of your TAs a message requesting an appointment for help.
5. You can come to my office, LILY G-307, for help. Remember, I have open office hours, which means that if I'm in my office, then I'm available to help you. Remember, we want you to do well in BIOL 195T.

Source: Arnold, Kimberly and John P. Campbell, Academic Analytics: Using Data to Improve Student Success, EDUCAUSE seminar, October 28, 2008; University Leadership Council interviews and analysis.

Tool 5A: Sample Weekly Signals Messages—Purdue University (cont.)

Week 4

High Risk

From:
To:
Cc:
Sent:
Subject: About your performance to date in BIOL 195T, First-Year Biology Lab

Dear [Student Name]

Based on your use of online resources and assignments, and according to our class Vista grade book, as well as, past student performance in BIOL 195T, you are performing well below the level you need to succeed in this course. If you continue at this level of effort it is likely that you will not do very well in this course. Therefore, I am asking you to come see me during the next week of classes, and I must notify your advisor of your poor performance in BIOL 195T. Also, don't be surprised if one of your TAs asks you during your next lab whether you've come to see me or not.

This message is an early warning to you, and it is not meant to discourage you because you have time to change your "ways" in BIOL 195T. I only want to meet with you to talk with you to discuss this matter.

Remember, we want you to do well in BIOL 195T.

Medium Risk

From:
To:
Cc:
Sent:
Subject: About your performance to date in BIOL 195T, First-Year Biology Lab

Dear [Student Name]

Based on your use of online resources and assignments, and according to our class Vista grade book, as well as, past student performance in BIOL 195T, you are performing below the level you need to succeed in this course. If you continue at this level of effort it is likely that you will not do as well as you could in this course. But don't get discouraged, you have only completed about 15% of the labs in this course, and you have time to change your "ways" in BIOL 195T.

Source: Arnold, Kimberly and John P. Campbell, Academic Analytics: Using Data to Improve Student Success, EDUCAUSE seminar, October 28, 2008; University Leadership Council interviews and analysis.

Tool 5A: Sample Weekly Signals Messages—Purdue University (cont.)

Week 6

Medium Risk

Reply Reply All Forward Follow Up

From:
To:
Cc:
Sent:
Subject: Your performance to date in BIOL 195T, First-Year Biology Lab

Dear [Student Name]

Based on your use of online resources and assignments, and according to our class Vista grade book, as well as past student performance in BIOL 195T, you are performing below the level you need to succeed in this course. If you continue at this level of effort it is likely that you will not do as well as you could in this course.

Are you setting aside enough time before each lab in BIOL 195T to do all your pre-lab preparation? If not, doing so will give you the opportunity to do better in this course. Are you staying after lab for help? Are you going to the weekly help session? Are you going to the BRC to get help? Getting help from any of these sources will help you do better in BIOL 195T?

I know you can do better in this course, but you are approaching the half-way mark for this course, so you need to improve your performance now. If you need help, please take advantage of all the help we provide to students in BIOL 195T.

Source: Arnold, Kimberly and John P. Campbell, Academic Analytics: Using Data to Improve Student Success, EDUCAUSE seminar, October 28, 2008; University Leadership Council interviews and analysis.

Tool 5A: Sample Weekly Signals Messages—Purdue University (cont.)

Week 7

High Risk and Medium Risk

From:
To:
Cc:
Sent:
Subject: Your performance to date in BIOL 195T, First-Year Biology Lab

Dear [Student Name]

Based on your use of online resources and assignments, and according to our class Vista grade book, as well as past student performance in BIOL 195T, you are performing well below the level you need to succeed in this course. I know you are capable of doing better in this course than you have done thus far; however, we are about half way through this course, so you need to improve your performance now. If you need help, please take advantage of all the help we provide to students in BIOL 195T.

High Risk Improving to Medium Risk

From:
To:
Cc:
Sent:
Subject: Your performance to date in BIOL 195T, First-Year Biology Lab

Dear [Student Name]

While your performance in BIOL 195T has improved, you are still performing below the level you need to get a good grade in this course. I know you are capable of doing better in this course; however, we are about half way through this course, so you need to improve your performance now. If you need help, please take advantage of all the help we provide students in BIOL 195T.

Source: Arnold, Kimberly and John P. Campbell, Academic Analytics: Using Data to Improve Student Success, EDUCAUSE seminar, October 28, 2008; University Leadership Council interviews and analysis.

Practice #6: Financial Distress Monitoring

Description

The department or office responsible for retention monitors student progress in completing financial aid paperwork each semester, proactively notifying students when a missing form could delay the distribution of fund, and offering assistance in getting the necessary paperwork in order. Special walk-in help sessions assist students in understanding and completing missing paperwork.

Two weeks prior to registration, the bursar office provides the retention office with a roster of students who will be prevented from registering due to a bursar hold. The retention office notifies these students, who are often unaware of the hold and suggests steps for resolving the situation. Students who need more extensive assistance are invited in for an appointment to explore options for securing additional funds. Bursar audits continue each week until the end of the semester.

Recommended For: All colleges and universities (especially tuition-dependent private institutions)

Council Assessment of Practice Effectiveness

Many students leave college due to entirely preventable cases of financial distress. As currently structured, financial aid and bursar offices are task-oriented and not organized to provide the kind of proactive support necessary to assist students through financial troubles. In some instances, bursar holds are simply the result of a delinquent payment or missing financial aid form, problems that the student could resolve if made aware early enough. In other cases, a small financial aid supplement can reduce a student's outstanding balance below the registration threshold. It's estimated that intervening early with financial problems could reduce attrition at some schools by as much as 5 to 8 percent annually. This practice is cost effective, assuming the university has the infrastructure enabling it to audit student financial aid records (see below).

Implementation Tips

From a technological standpoint, this practice requires the university to be able to audit student bursar and financial aid records, then link students' names to a system for sending automated notification e-mails. The majority of universities already have some or all of these functionalities in house. All others will have to invest IT resources to build the necessary software.

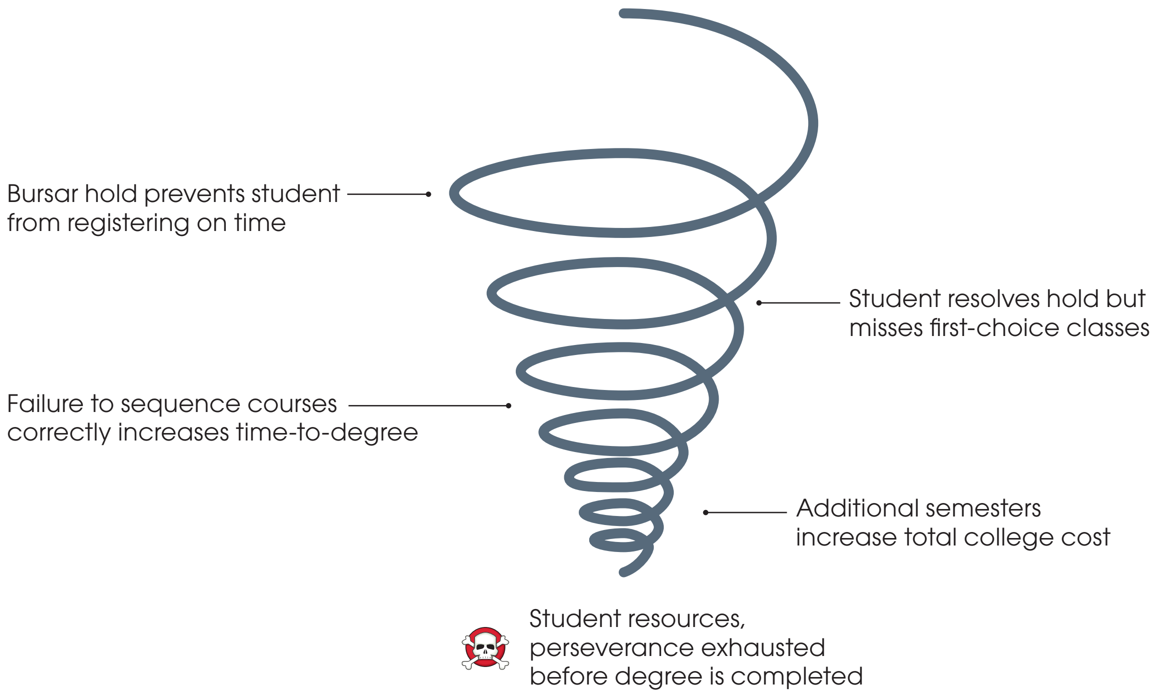
This practice also requires an investment in retention staff with the capacity to support students requiring additional counseling. The exact staffing commitment will vary according to size of the student body and the degree of financial need. It is strongly recommended that these officials have the authority to distribute emergency institutional grants.

Implementation Toolkit

Universities can be doing more to prevent student attrition triggered by bursar holds. Small unpaid bursar balances may block students from registering, catalyzing a series of events that increase attrition rates and decrease the odds that the university will ever collect the missing revenue. Yet a surprising number of universities do little to inform students of financial hurdles prior to registration. Since it is typically parents, not students, who monitor bursar statements, students are frequently unaware of an unpaid balance until the moment they are blocked from registering.

Preventable Losses from Financial Distress

The Bursar Hold Death Spiral



Source: University Leadership Council interviews and analysis.

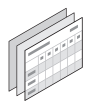
Registration delays can be prevented by auditing student financial records to identify unpaid balances and financial aid problems. Proactive outreach is essential to reaching students who are unaware they are in financial peril or who may be too ashamed or disheartened to seek help. Xavier and Tiffin Universities audit bursar accounts and financial aid paperwork to help students overcome potential financial roadblocks before their problems reach a critical stage. These efforts require roughly one FTE per thousand undergraduates for one month each semester.

Catching Financial Problems Earlier

1 Resolve Bursar Holds Prior to Registration Period

- Students alerted to bursar holds two weeks before registration begins
- Retention expert offers assistance navigating problems

2 Ensure Timely Submission of Financial Aid Paperwork



- Retention expert works with financial aid office to identify and assist students missing financial aid paperwork

Case in Brief

Xavier University
Cincinnati, Ohio

- Urban private master's university with 4,000 undergraduates
- Office of Student Success and Retention contacts students on bursar hold two weeks prior to beginning of registration
- Students who cannot resolve holds on their own are encouraged to meet with program staff for financial counseling
- Students who truly lack resources required to continue at institution may be offered emergency funding

Case in Brief

Tiffin University
Tiffin, Ohio

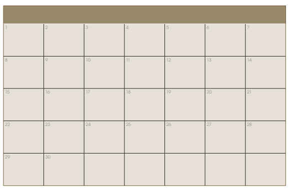
- Rural private master's university with 1,650 undergraduates
- Chief Retention Officer and Director of Student Retention Services proactively identify and offer support to students who have bursar holds or who have not completed necessary financial aid paperwork
- Currently, efforts are focused on ensuring that all incoming students complete all paperwork prior to arrival on campus and on helping continuing students resolve bursar holds before departing for the summer
- Program based in enrollment management division

Source: University Leadership Council interviews and analysis.

Many students can resolve registration holds with minimal additional assistance if given enough notice. Retention staff at Xavier University audit student records for bursar holds two weeks before the start of registration. These students receive an automated e-mail notifying them of their status, suggesting steps for resolution, and extending an offer of assistance. Bursar audits and outreach continue each week until the end of the semester.

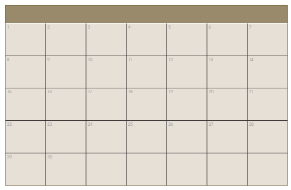
Timeline for Resolving Bursar Holds

October



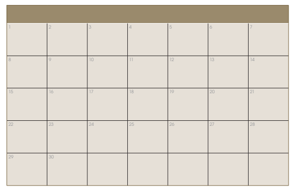
- Initial registrar audit two weeks prior to registration
- E-mails sent to students with outstanding balances *(see example, on page 79)*
- Audits re-run once a week to identify new holds

November



- Registration opens
- Weekly audits continue, confirming that students are clearing their holds
- Students still on hold targeted with in-person counseling

December



- Audits and counseling continue
- Students still on hold are connected with supplemental financial aid

Source: University Leadership Council interviews and analysis.

Xavier uses a series of escalating interventions to optimize their limited financial and human resources for serving those students with the most need. Many holds result from late tuition payments or unpaid fees that most students can quickly resolve following e-mail notification or a brief financial counseling session. The OSSR provides the small remainder of students with money from undistributed Perkins loans or a special donor-established fund earmarked to provide students with emergency scholarships (see “Distribution Retention Micro-Scholarships” on page 21 for details).

Escalating Interventions

Directing Scarce Resources to the Greatest Need

Intervention Step

Target Population

Phase One:

Mass Communication

- Automated e-mail notifications
- Effective for most students

Phase Two:

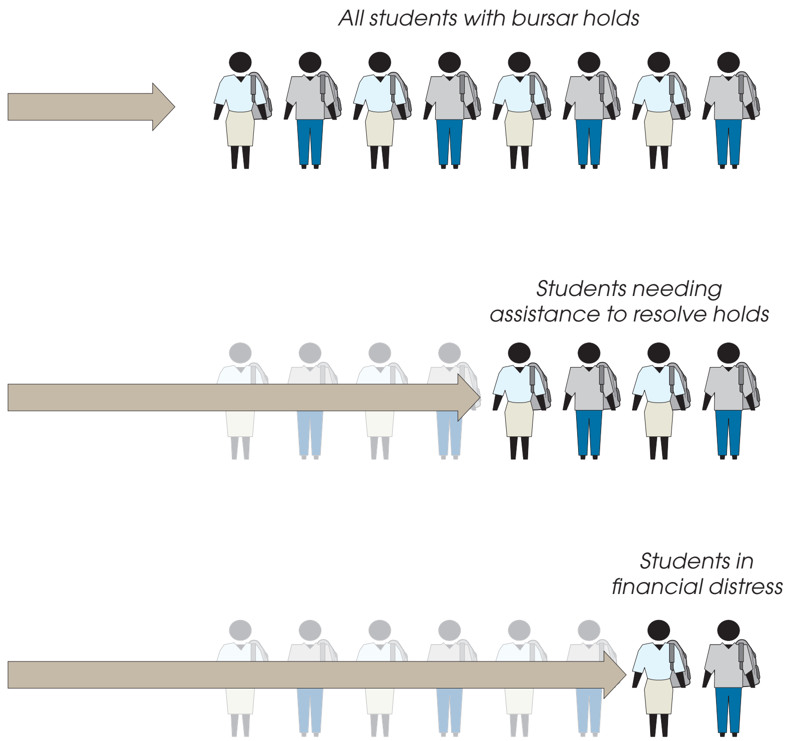
Personalized Support

- Phone or in-person counseling
- Discuss reasons for hold and potential solutions

Phase Three:

Additional Funding

- Undistributed Perkins loans
- Emergency grant aid *(see page 21)*



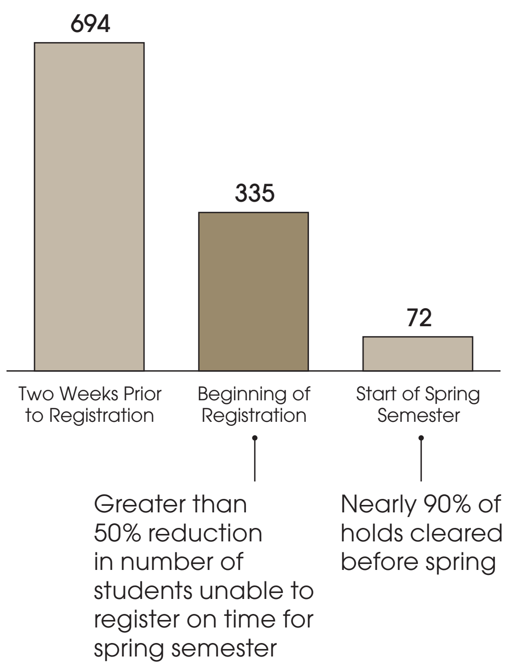
Source: University Leadership Council interviews and analysis.

Inexpensive bursar hold interventions can have a significant impact on retention. In just the two weeks prior to registration, Xavier is typically able to reduce the number of students on bursar hold by over half. Nearly 90 percent of holds will be cleared before the start of the next semester. Xavier estimates that these efforts reduce attrition rates by 5 to 8 percent annually.

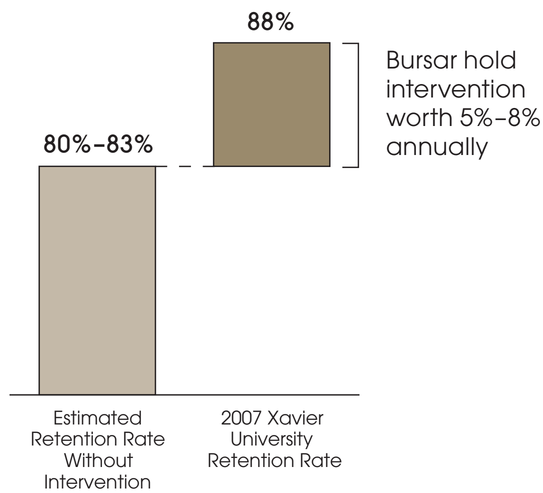
Resolving Bursar Holds Credited with Improving Retention Rate

Reduction of Students with Bursar Holds

Xavier University, Fall 2006



Estimated Impact on Retention



Source: University Leadership Council interviews and analysis.

The complexities of the financial aid application process often overwhelm students and obstruct the distribution of funds. Bursar holds may result from missing or incomplete financial aid paperwork that delays deposit of expected funds to the student's account. These problems are especially common for first-generation and non-traditional students. Tiffin University closely monitors each step of the financial aid application process and proactively extends counseling to students with missing or incomplete forms.

Ensuring Timely Submission of Financial Aid Paperwork

Tiffin University

Targeting Assistance Across the Year

Spring Term—Returning Students

- Monitor missing applications from current students on aid
- Set goal of resolving all issues prior to departure for summer

Summer Term—Incoming Students

- Monitor incomplete applications
- Work remotely with students to resolve majority of issues before their arrival on campus

A Complex Process

Financial Aid Forms

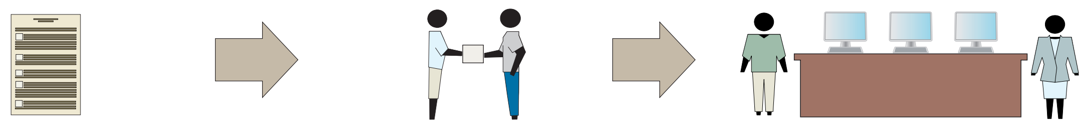
- FAFSA Application
- Master Promissory Note
- Entrance Counseling
- Acceptance of Award
- Revolving Credit Agreement
- Verification Worksheet

Source: University Leadership Council interviews and analysis.

En masse financial aid counseling is a cost-effective alternative to individual meetings. To reach more students without adding staff, Tiffin has begun offering en masse counseling sessions where students with outstanding paperwork can get all of their financial aid application issues resolved on the spot. Tiffin found that it is much easier to get students to show up and complete paperwork at a special event than it is to get them to come one by one to the financial aid office.

Tiffin University's "Financial Aid Frenzy"

Special Event for Solving Financial Aid Issues



1 Personalized Invitation

- Retention expert generates letters outlining missing financial aid paperwork, inviting student to special workshop

2 No-Miss Delivery

- RAs hand deliver invitation to students in their residence halls

3 Solution-Focused Workshop

- One-hour session in a classroom with computers, forms, treats, and financial aid staff to walk students through completion of paperwork
- Three workshops offered in fall semester, one in spring

Getting Students to Show Up

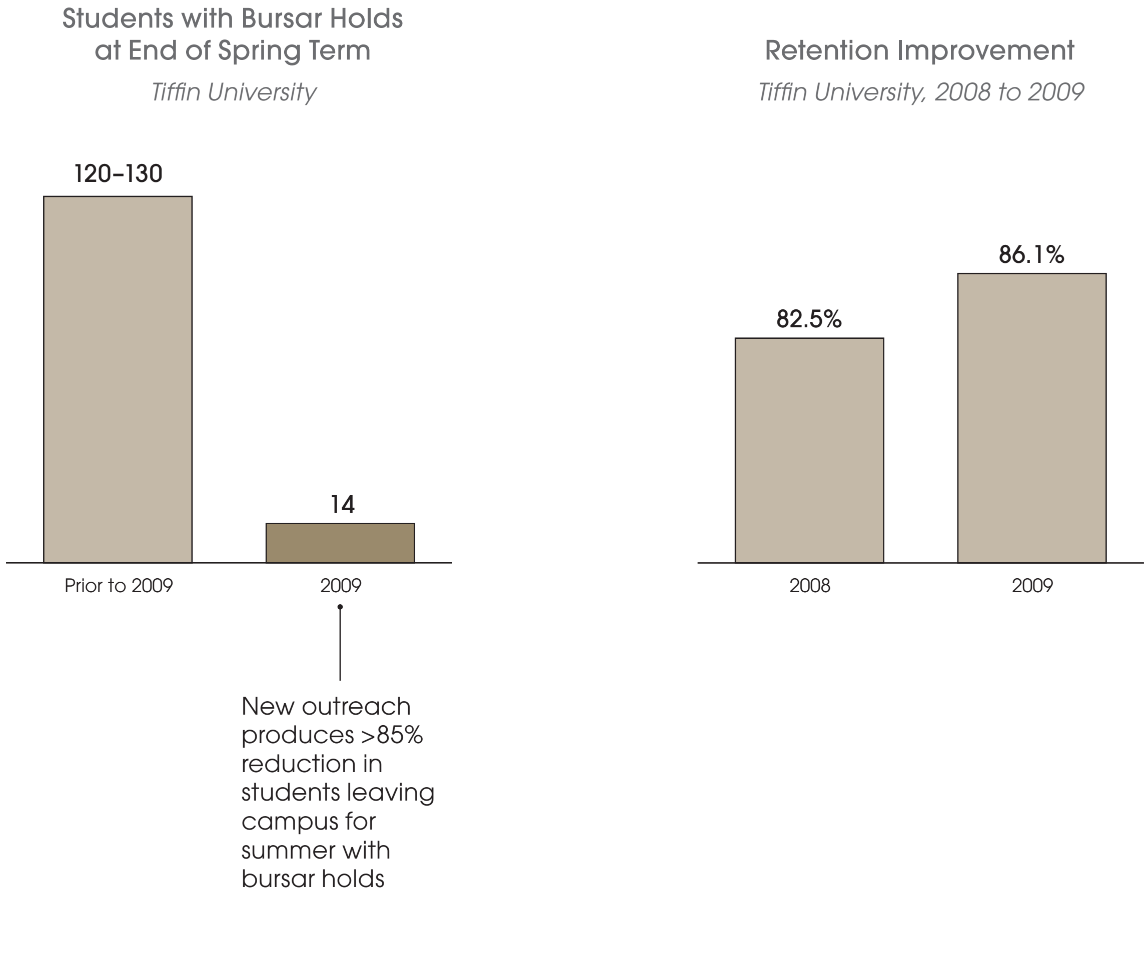
"What we've found, surprisingly, is that students are more likely to come to Financial Aid Frenzy than they are to come to the Financial Aid Office. Maybe the Financial Aid Office is intimidating to them, or maybe they feel like they're getting called to the principal's office. All I know is that we schedule time in a classroom, arrive with a bag of candy, and have more students show up than we can get to go to Financial Aid."

Cam Cruickshank
Vice President for Enrollment Management
Tiffin University

Source: University Leadership Council interviews and analysis.

Tiffin's financial distress outreach efforts have dramatically reduced the number of students leaving campus for the summer with bursar holds. Tiffin enrolls just 1,650 students, thus this improvement is expected to have a significant impact on retention rates.

Resolving Problems Before Summer Departures



Source: University Leadership Council interviews and analysis.

Tool #6A: E-mail to Students on Bursar Hold—Xavier University

XAVIER UNIVERSITY

Dear Student,

As Director of the Office of Student Success and Retention, I would like to bring to your attention that the Bursar's Office at Xavier University is placing a "Hold" on your priority registration for the fall 2009 semester. Your account needs to be current (if you are on the five payment plan) or paid in full prior to your being able to register for the fall 2009 semester. Please contact the Bursar's Office to make payment arrangements.

Should you need any assistance from my office, please contact me or Molly Maher, Assistant Director in the Office of Student Success and Retention. Molly and I can be contacted at 503-745-3036. The Financial Aid Office is also available to assist you with any financial aid concerns. Priority registration for the fall semester is Monday, March 30 through Friday, April 3, 2009.

Realizing that your education is very important to you and to us, as every student matters, we want to help you to the best of our ability. Please do not hesitate to get in touch with us for our assistance or if you should have any questions.

If you would like to make a payment you may go to the Bursar website at www.xavier.edu/bursar/payment.

Sincerely,

Adrian A. Schiess
Director
Office of Student
Success and Retention

Molly Maher
Assistant Director
Office of Student
Success and Retention

Source: Office of Student Success and Retention, Xavier University; University Leadership Council interviews and analysis.

Practice #7: Transcript Request Monitoring

Description

An associate dean meets with first-year and second-year students who have requested their transcripts be sent to other universities. The goal is to identify students considering a transfer, discuss their concerns, and see what can be done to persuade them to stay.

Recommended For: All selective colleges and universities (especially selective private institutions)

Council Assessment of Effectiveness

Often overlooked in discussions of student retention are students who leave the university not because of academic or financial struggles but because they are transferring elsewhere. Often times these students are among the most academically promising on campus, making this type of student attrition particularly painful.

It can be difficult to identify transfer risks in time to intervene. Some universities are monitoring transcript requests to spot students who might be making a move. The process is far from perfect—most students who request transcripts have no intent of transferring, and the face-to-face process necessary to determine legitimate transfer risks is time consuming. Nevertheless, the Council believes that monitoring transcript requests has promise as an early warning system for universities focused on reducing transfer rates. This practice will be especially effective at smaller private universities that can provide extensive one-on-one attention for students dissatisfied enough to consider leaving the institution. Larger universities will have to develop this practice further to make it scalable to their student body size.

Implementation Tips

The technological infrastructure and personnel necessary to implement this practice are already in place. The dean of students should work with the registrar to generate rosters of students requesting transcripts every two weeks. These rosters should then be distributed to the colleges for follow-up by associate deans or advisors.

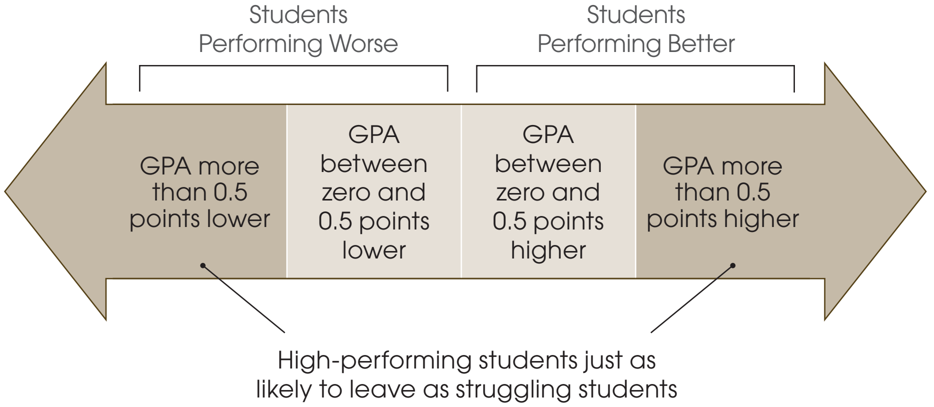
Transfers account for a significant portion of attrition at some schools, and these students are often among the most academically well-prepared. American University found that first-year students performing well above their high school GPAs were just as likely to leave as those performing poorly. Unfortunately, students considering transfer will rarely self-present to university officials and thus can be difficult to identify.

Suffering Losses at the Top

High-Performing Students Transferring Out

Difference Between College GPA and High School GPA

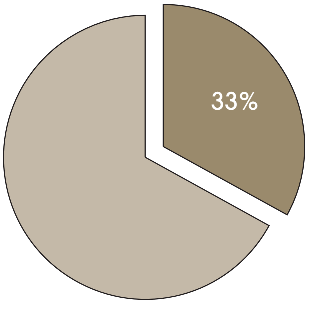
American University First-Year Students



And It's Not Just the Privates

Percentage of Departing Students with GPAs Over 3.0

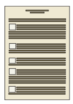
Florida State University



Source: University Leadership Council interviews and analysis.

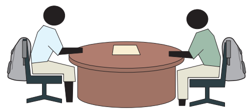
American University is using transcript requests to spot potential transfers. At AU, lists of students requesting transcripts are distributed every two weeks to the associate deans in the colleges for follow-up. The deans meet with students who have requested transcripts to determine if they are considering a transfer and see what the university could do to sway the student's decision. At larger universities, these conversations could be conducted by advisors.

Identifying Students Considering a Move



Biweekly Audit by Registrar

- Generates roster of students requesting at least one transcript
- Names sent to individual colleges
- Roster includes destination institution for transcript



Personal Meeting with the Associate Dean

- "What courses are you taking?"
- "How do you feel about your professors?"
- "Are you concerned about paying for college?"
- "What sort of activities are you interested in?"
- "Do you feel challenged?"

Case in Brief

American University
Washington, DC

- Urban private research university with 6,000 undergraduates
- Every two weeks, the Registrar provides Associate Deans with rosters of all students who request transcripts be sent to other universities
- Associate Deans follow up with students to identify those that are imminent risks for transfer, working with these students to see what can be done to help them stay
- Two common reasons for transfer are financial concerns and feelings of being academically under challenged
- The associate deans meet with 100 to 125 students per semester; roughly two-thirds of transfer risks are first-year students

Source: University Leadership Council interviews and analysis.

Transfer conversations connect dissatisfied students with campus opportunities and identify students in financial peril. While some students will transfer for reasons outside the university's control, many others will reconsider if introduced to academic or social resources that they may have overlooked. Some students considering transfer to less expensive schools can be persuaded to stay if provided with additional financial assistance.

Preventing Avoidable Losses

Meetings Surface Reasons for, Response to Intended Transfer

Reasons for Intended Transfer		University Response
Largely Controllable Factors		
Under-challenged academically	→	Admit to honors program and/or connect with faculty for research opportunity
Dissatisfied with campus life	→	Connect with appropriate student life or co-curricular resources
Financial difficulties	→	Connect with Financial Aid Office to discuss options
Largely Uncontrollable Factors		
Serious family illness Boyfriend/girlfriend in another state Desired major not offered	→	Explore possible alternatives and then wish student well

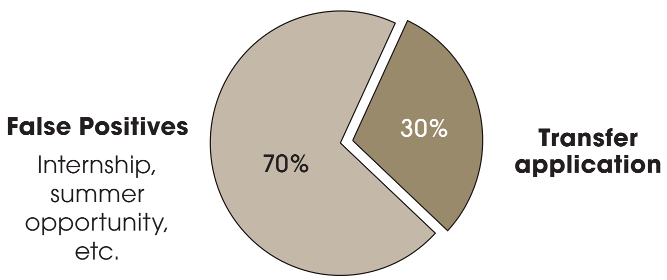
Source: University Leadership Council interviews and analysis.

Refinements in the registrar auditing process are necessary to reduce the number of false positives. Most transcript requests are for purposes other than transferring, and the AU system generates a large number of false positives. Currently, this critical distinction is made during the student meeting. To make the practice more cost effective and scalable, universities will need to explore ideas for more accurately identifying transcript requests that indicate an imminent transfer.

False Positives Could Be Reduced Through More Precise Audits

Reason for Transcript Request

American University



Potential Ideas for Reducing False Positives

1. Target only students requesting multiple transcripts
2. Flag transcripts sent to common transfer destinations
3. Survey students on their intention to transfer at moment of transcript request

Source: University Leadership Council interviews and analysis.

Reviews of transcript destinations can provide administrators with important insight into the reasons why students transfer. At AU, the dean of students and other senior administrators will review the rosters of transcript requests to spots trends in the number of transcripts going out to more prestigious or less expensive schools.

Transcript Trends Reveal Areas for Improvement

Dean of Students

Are we losing more students to the Ivies?

What can we do to improve the honors college?

Vice President of Student Affairs

Are students transferring to similar schools closer to home?

Can we do more to address homesickness?

Vice President for Enrollment Management

Is the economy causing more students to make the move to less expensive schools?

Do we need to commit more funds to financial aid?

Source: University Leadership Council interviews and analysis.

Practice #8: Social Engagement Flash Polling

Description

The university uses student reactions to a rotating, single-question quick poll on the front page of the first-year student web portal to identify students who are having social or adjustment issues. Likert-scale questions, such as “Are you getting along with your roommate?” and “Are you able to balance academic and social life?” rotate weekly and are timed to specific points in the semester. Concerning responses generate an automatic message to the student offering guidance and trigger an e-mail to an advisor for further follow-up.

Recommended For: All universities (but see caveats below)

Council Assessment of Practice Effectiveness

It is difficult to identify and intervene with first-year students who are struggling with the social adjustment to college. The most common early warning measures, one-time engagement surveys administered in the first two weeks of school, have two key drawbacks: 1) the survey is static, only measuring student opinion at a single moment in time, and 2) many students lack the interest or attention span to complete a 30–60 minute survey with precision.

Flash polls are an as-yet unproven replacement for the traditional first-year engagement survey. Instead of comprehensively surveying student attitudes, flash polls aim to catch a student in a moment of candor, leading to more reliable responses. While it is difficult to enforce participation in a voluntary poll, universities hope to maintain high response rates by reducing the survey to a single question and presenting it in a high-traffic location on the web. The greatest potential advantage of flash polling is in its dynamic adaptability. Relevant polling questions can be pre-programmed to capture student reactions at key moments during the first semester, such as move-in or midterms.

Implementation Tips

This practice requires a pre-existing first-year student web portal that has a mechanism for identifying specific users, such as a log-in. Campus IT can be relied on to develop a polling module and a system for automatically notifying advising staff of concerning responses. Polling questions and automated responses may be prepared and preloaded prior to the semester. Content should be developed by the first-year advising staff.

This practice requires a fair amount of work for a university seeking to develop a home-grown solution. Commercial products exist, most notably the FYRE software from EducationDynamics.

Traditional engagement surveys have key limitations. Many universities struggle with identifying first-year students experiencing difficulties with the academic and social adjustment to college. Current practice relies heavily on extensive engagement surveys administered in the first two weeks, although these surveys have shortcomings. Students find survey completion (typically requiring 30–60 minutes) to be onerous. More critically, one-time surveys can only capture student attitudes at a single moment in time and thus cannot be used to detect issues that might come to the forefront later in the semester.

Engagement Surveys in Need of an Update

One-Time Surveys Do Not Track the Student Life Cycle

Surveys administered in the second week of the semester can only capture student attitudes in a single moment of time, missing out on engagement concerns that may develop later in the semester.

Participation Is Burdensome and Difficult to Secure

Surveys may take up to an hour for students to complete, sapping student willingness to offer meaningful data.

Follow-Up Is Rarely Instantaneous

Survey results are typically reviewed centrally before initiating follow-up, delaying the university's response to students who would benefit from immediate assistance and advice.

Source: University Leadership Council interviews and analysis.

Some universities are experimenting with replacing traditional surveys with adaptive next-generation "flash polls." A single Likert-scale question appears on the front page of the first-year student web portal throughout the semester, and students voluntarily offer responses in the moment. The poll questions change each week to address issues relevant to the time of the semester, prompting students to register their impressions regarding common adjustment issues, such as roommates, academic/social balance, and "fit" of school. Flash polling is a relatively new and thus far an unproven concept for raising retention rates. That being said, the Council believes that the potential for dynamic early alerts and automated intervention makes this practice worthy of consideration.

Catching Students in Moments of Candor

Checking In on Social Indicators Across the First Term

Representative Flash Polls

Week 1: *Finding friends at college will be easy for me*

Week 2: *I enjoy the social atmosphere*

Week 3: *I am satisfied with my roommate situation*

Week 4: *I have found at least one student organization*

Week 5: *Work obligations have kept me from getting the most from school*

Week 6: *I am unable to balance my academics and social life*

Week 7: *I have close friends at school*

Week 8: *This school is a good fit for me*

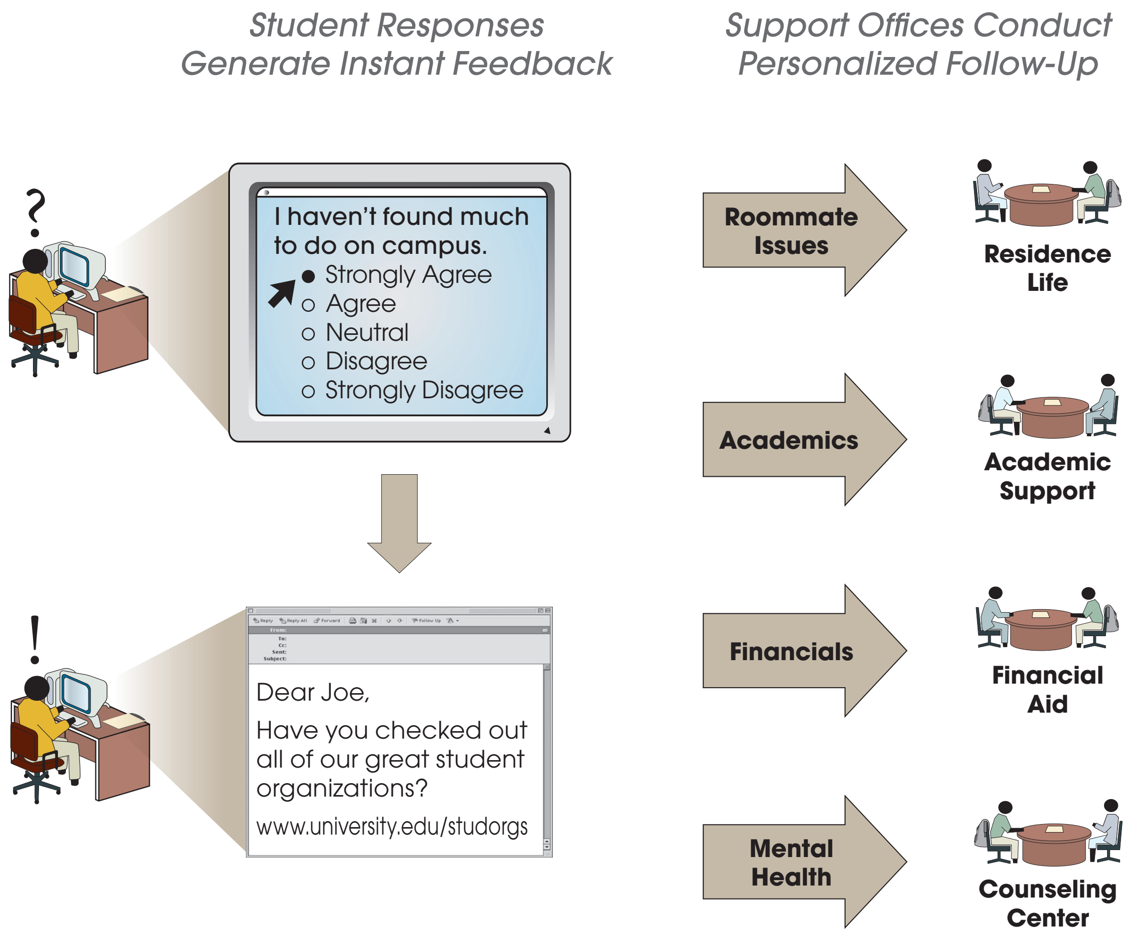
1. Single-question "point and click" reduces survey time
2. Questions sequenced to match typical onset of student problems
3. Web interface reduces stigma of admitting problems

Implementation Tip: An engagement flash-polling module is available as part of the First-Year Retention and Engagement (FYRE) software package from EducationDynamics. Learn more at http://www.educationdynamics.com/

Source: University Leadership Council interviews and analysis.

Concerning poll responses trigger instantaneous feedback followed by personalized support. Student responses that indicate concerning attitudes generate instant electronic feedback with guidance on available resources. These automated responses are prepared by the retention or first-year advising office and pre-loaded into the polling software prior to the semester. The retention office also distributes rosters of flagged students sorted by risk type to relevant support offices for independent follow-up offering personalized support.

The Next-Generation Engagement Survey



Source: University Leadership Council interviews and analysis.

III. Hardwiring Institutional Intervention

Practice #9: Intervention Tracking System

Description

When an instructor submits an academic alert through the online course roster, the system automatically prompts the responsible advisor in that student's home college to initiate follow-up. The alert opens a "ticket" that cannot be closed until the advisor meets with the student, assesses the problem, and enters the outcome in the system along with any action steps. The referring instructor is automatically updated via e-mail on the outcome of the intervention. The system allows central administrators to monitor the progress of interventions, promoting accountability among advisors for following up on alerts in a timely manner. If the queue of open tickets becomes unmanageable, the central advising office redirects resources to ensure coverage.

Recommended For: All colleges and universities

Council Assessment of Effectiveness

At most universities, interventions with flagged students are conducted in a haphazard, uncoordinated fashion by multiple offices in isolated colleges. Administrators have no way of holding advisors accountable for following up with flagged students in a timely manner, or at all.

Prompt follow up is critical when intervening with at-risk students. An intervention ticketing system allows the university to build accountability for rapid intervention, monitor performance, and ensure that individual college advising offices have sufficient resources to fulfill their obligation to assist struggling students. Universities that have adopted a case ticking system have been able to reduce the lag time on follow-ups from weeks down to just a few days (and, in some cases, just a few hours).

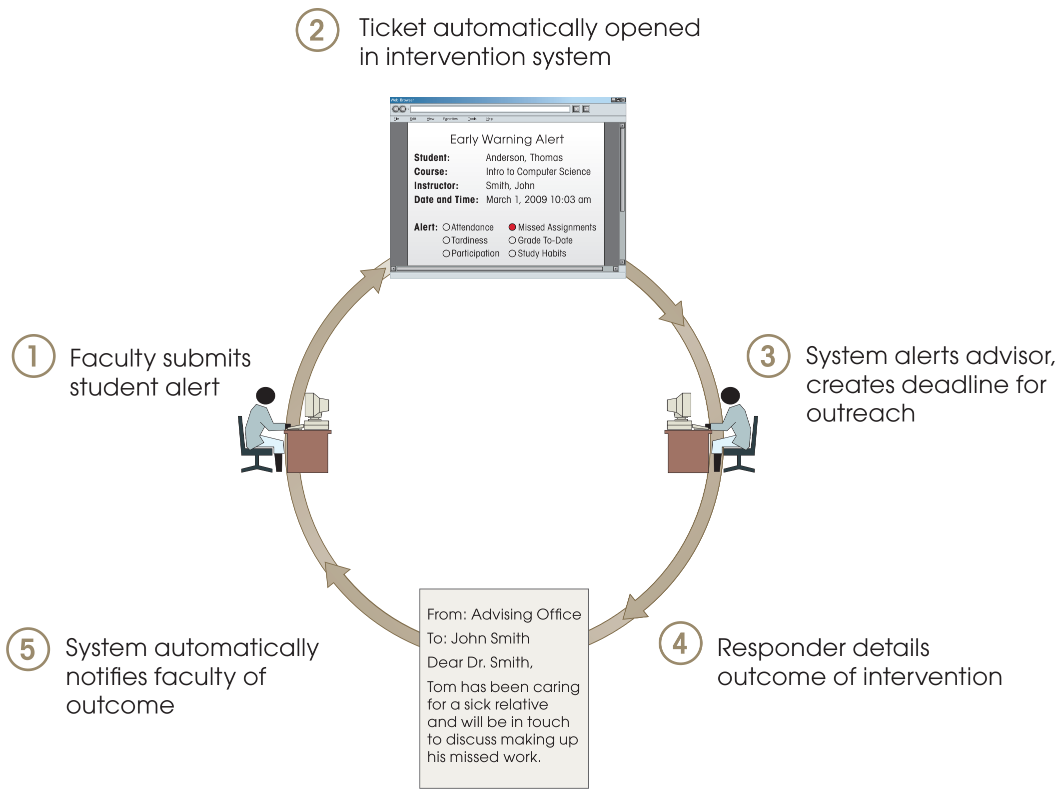
At California State University, Northridge, the intervention ticketing system automatically notifies instructors when the advisor receives the alert and when the intervention is completed. Faculty respond positively to being shown the results of their efforts, and the university credits this policy with increasing instructor engagement with the alert system.

Implementation Tips

The software underlying the case ticketing system can be designed inexpensively in-house by the university IT staff. Time of development to implementation is roughly one semester in length.

Closed-loop ticketing systems ensure that every alert receives timely follow-up. At California State University, Northridge, advisors use a case ticket system for automatically tracking the progress of follow-up on each academic alert. The system opens a unique electronic case ticket each time an instructor submits an academic alert through a special form built into the online course roster. The ticket cannot be closed until an advisor meets with the student and enters the results of this discussion in the system. The system then automatically notifies the referring instructor of the outcome of the advising conversation.

Closing the Loop on Each At-Risk Student



Case in Brief

California State University Northridge

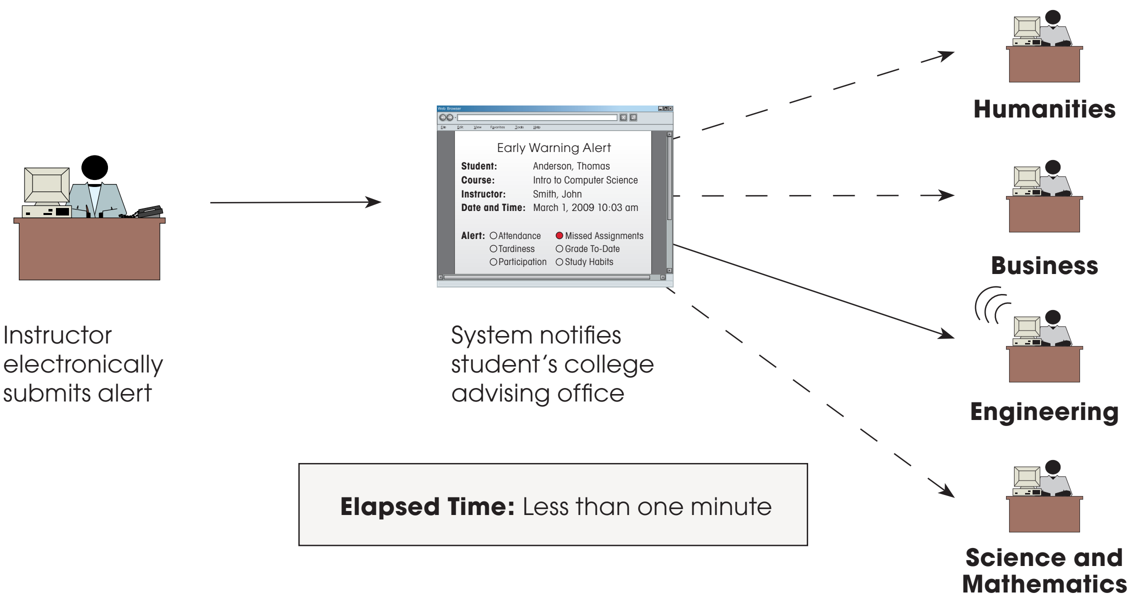
The Early Warning System (TEWS)
California State University, Northridge
Northridge, CA

- Urban public master's university with 29,800 undergraduates
- Intervention ticketing system facilitates follow-up on academic alerts within 48–60 hours of submission
- A ticket is opened automatically when an instructor submits alert via PeopleSoft class roster and is closed only when the advisor has completed follow-up with the student.
- Central oversight ensures that advisors are processing alert tickets in a timely manner
- The system automatically notifies the referring instructor once the student has been contacted

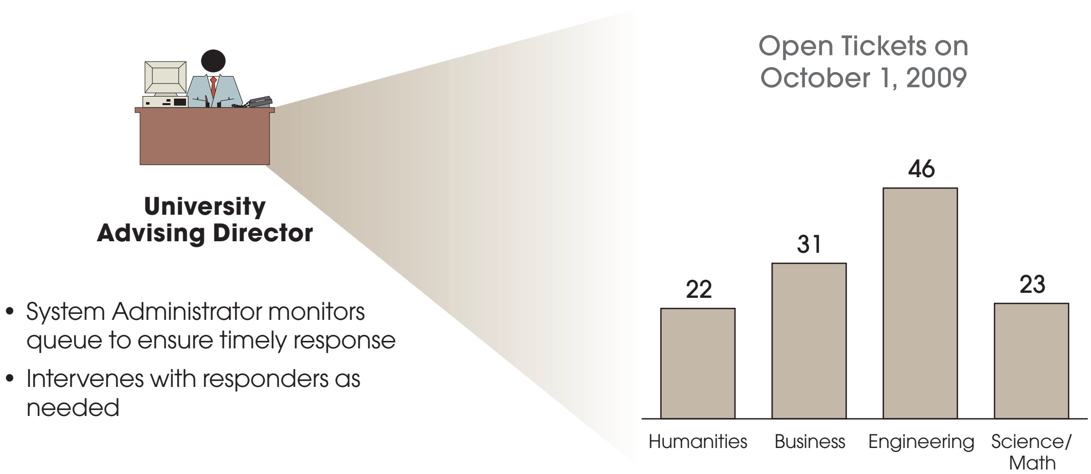
Source: University Leadership Council interviews and analysis.

The system automatically distributes alerts to college advising offices and tracks each advisor's open ticket queue. When an instructor submits an alert, the system automatically sends a notification to the desktop of the designated advisor in the student's home college. Administrators in the central advising office monitor each college's case queue on a daily basis and deploy additional advising resources to deal with unusual volumes.

Alerts Automatically Distributed to Advisors



Alert Volume Monitored Centrally to Ensure Accountability



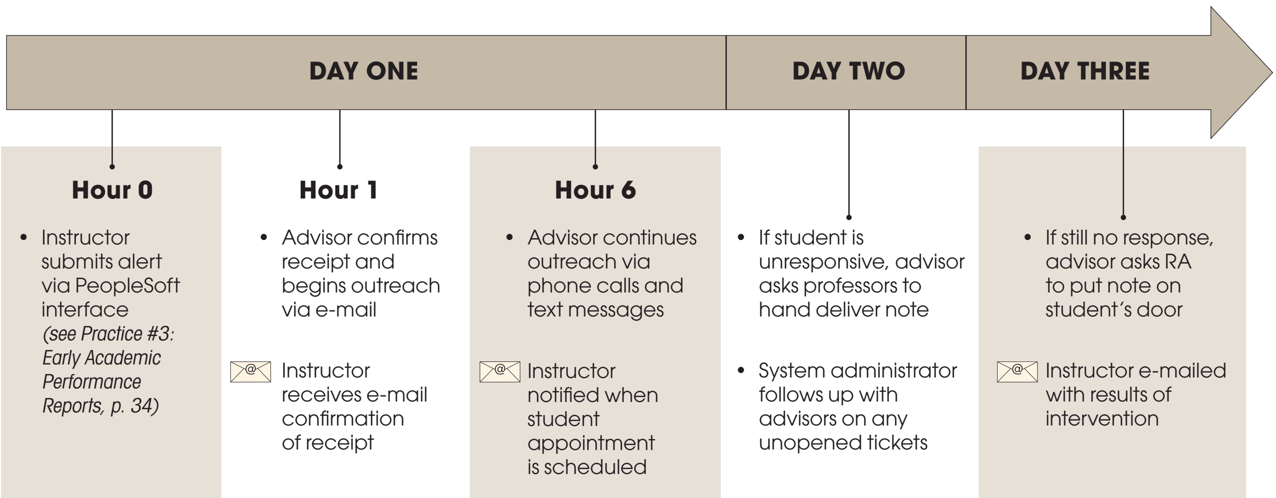
Source: University Leadership Council interviews and analysis.

Advisors are accountable for completing follow-up within three days, and the system automatically keeps instructors informed of their progress. The CS-Northridge system is designed to facilitate rapid interventions. Advisors initiate outreach within minutes of alert submission and use an escalating communications strategy to make contact with the student within three days.

What "Fast" Looks Like

Securing Student Response in Three Days or Fewer

Timeline of Alert Follow-Up



Building Faculty Buy-In

"When faculty get the advisors' reports, they want to participate more in the alert process. These reports keep our system going."

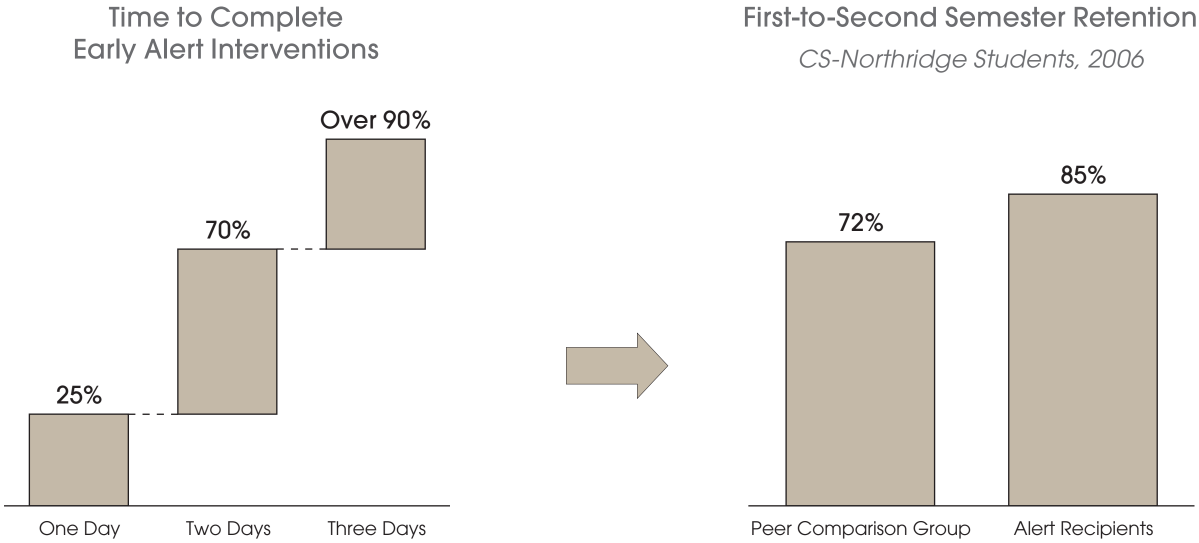
José Luis Vargas
Director, Educational Opportunity Program
Cal State Northridge

Source: University Leadership Council interviews and analysis.

The case ticketing system has accelerated the pace of interventions and improved retention at CS-Northridge. Advisors are nearly always successful in reaching flagged students within three days. The combination of rapid intervention and guaranteed follow-up on every alert has had a measurable impact on first-to-second semester retention at CS-Northridge.

Catching Problems Quickly

Rapid Intervention Translates into Significant Retention Gains



Source: University Leadership Council interviews and analysis.

Practice #10: Unified Advising Records

Description

Advisors maintain a common online record of their interactions with students, adding detailed notes when appropriate. Multiple advisors contribute to a single student's record, allowing viewers to get a complete digest of the student's history of interactions with advising and support resources across the university. The system also includes key information on the student's academic plan and alerts advisors to unfulfilled graduation requirements.

Recommended For: All colleges and universities

Council Assessment of Effectiveness

On many college campuses, advising records are anything but unified. Offices rarely share information with each other regarding their interactions with a student, and advisor turnover within a single office can disrupt the continuity of record-keeping. As a result, advisors who intervene with a flagged student are often operating off of little more than the information contained in the alert and their own personal files. Students may receive guidance that is incomplete, redundant, or even contradictory from what they have been told before, fostering frustration and hostility toward the university advising system.

A unified record system improves the quality of alert interventions by providing the advisor with quick access to what colleagues have discerned about a student's circumstances. Rather than spending valuable time regathering information from a reticent student, the advisor can instead focus the meeting on helping that student find solutions.

Implementation Tips

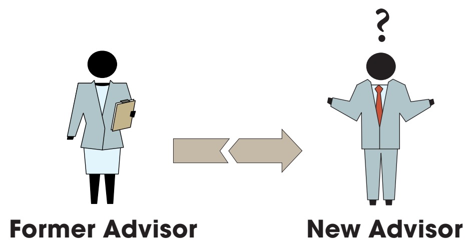
Commercial advising record systems exist, notably Educational Benchmarking, Inc.'s MAP-Works software. Alternatively, universities could rely on their in-house IT staff to develop a home-grown system. The Council estimates that this project would take one developer a little over a year to complete.

The Council notes that this system is only as good as the extent to which advisors regularly contribute relevant information. Institutions that choose to implement this system should take measures to ensure advisor participation.

Most advising offices suffer from communication gaps that result in an incomplete picture of the student and hamper intervention efforts. Few advising offices collect robust data from multiple stakeholders, transfer detailed student records when students switch advisors, or use the advising record system to facilitate and track intervention efforts.

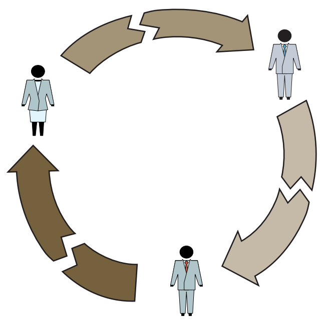
Shortcomings of Traditional Advising Records

Lack of Continuity



Advisors rarely are able to easily access old notes when taking on new advisees, such as when a student declares a major

Lack of Cross-Communication



Advisors cannot easily notify other stakeholders of intervention efforts or track their progress

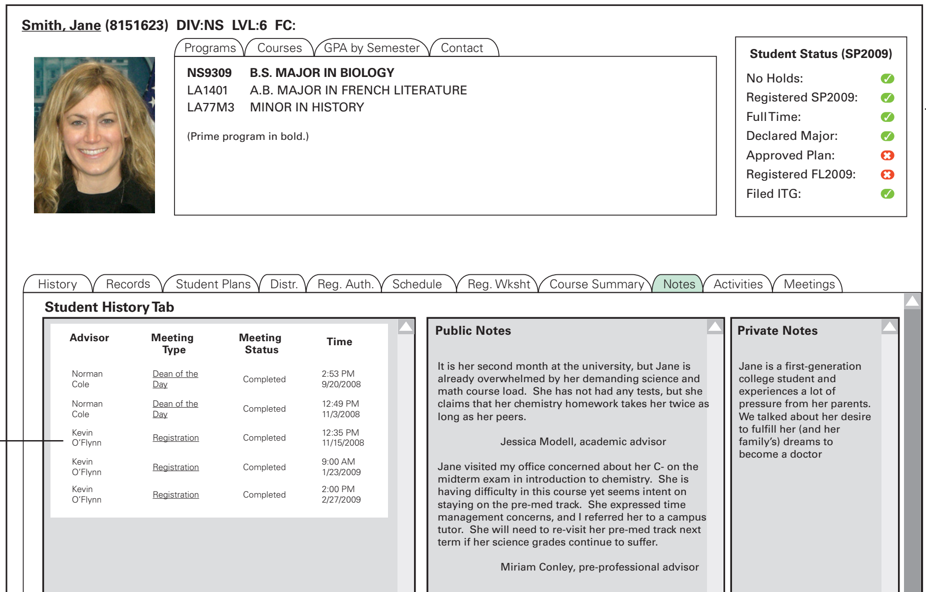
Source: University Leadership Council interviews and analysis.

Washington University has developed a single online advisory record system that aggregates detailed information on a student in a single location. Advisors can access basic information from the SIS, see a complete history of university interaction with the student, and maintain detailed notes that can be shared with other advisors.

Getting a 360° View of the Student

Single-Source Access to Cross-Silo Information

Washington University in St. Louis Advising Record (Illustrative)



Advising History

- At-a-glance assessment of level of engagement with advising services
- List of relevant advisors and staff serves as a reference if specific student concerns arise

Public Notes

- A single location for sharing and reviewing notes preserves student information and allows for coordinated action

Private Notes

- Personal documentation for review by contributor only, can be shared with subsequent advisors if desired

Graduation Obstacles Dashboard

- Simple "✓" or "x" allows for quick evaluation of student progress toward graduation

Case in Brief

Washington University in St. Louis

Washington University in St. Louis
St. Louis, MO

- Urban private research university with 6,200 undergraduates
- New system provides advisors with a digest of key information regarding advisees
- Complete history of advising interactions provides advisors with a 360-degree view of the student

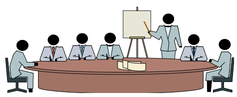
Source: University Leadership Council interviews and analysis.

Development at Washington University took almost two years and involved ongoing feedback from key advising stakeholders. The university emphasized the importance of incorporating end-user input at multiple stages in the design process.

Development Timeline

Phase One: Brainstorming

(9 months)



- Designers meet weekly with advisors and academic deans to model desired system functions
- Discussions focus on developing a system that will be useful and accepted by advising staff

Phase Two: Programming

(One FTE, 12–14 months)

- Data from legacy advising systems incorporated into new system
- Prototypes shared periodically with lead advisors for feedback
- System piloted with small advising team before full campus rollout

Source: University Leadership Council interviews and analysis.