At-Risk Prediction Instruments, Early-Alert Systems & Exit Interviews: A Proactive-to-Reactive Continuum of Efforts to Promote Student Success

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Early-Alert (Early-Warning) Procedures

What defines and early-alert procedure?

An early-alert system may be defined as a formal, proactive, feedback system though which students and student-support agents are alerted to early manifestations of poor academic performance (e.g., low in-progress grades) or academic disengagement (high rates of absenteeism).

Why the *increasing interest* in early-alert/early-warning programs?

- 1. Growing number of academically underprepared students entering higher education
- 3. Rapid growth of *technology*-mediated commercial systems designed to facilitate the early-alert process.

Despite the lack of solid empirical evidence supporting early-alert programs, their use is consistent with important *student retention* principles:

- a) <u>Proactive</u> intervention: early feedback and preventative action should be taken to address atrisk student behavior in an anticipatory fashion—before it requires reactive (after-the-fact) intervention or eventuates in student attrition.
- b) *Intrusive* support: the college should *initiate* supportive action by *reaching out* to students and bringing support *to* them, rather than passively waiting and anticipating that students will seek out support on their own. (Research indicates that student use of campus support services is woefully low.) Aggressive campus outreach increases the probability that support programs will reach more students and will exert more a systemic salutary effect.
- c) <u>Targeted</u> support: efforts and resources should focus on students who *need* it the most, i.e., students whose behavior indicates that they are *at risk* for academic failure or attrition.
- d) <u>Personalized</u> support: students are more likely to respond positively to support if they perceive that they are being noticed as individuals and their individual success matters to the institution—i.e., early-alert practices may be expected to effectively promote student motivation through personal validation and the "Hawthorne effect".

There are a few reasons why early-alert systems are superior to identifying at-risk students solely on the basis of their demographic characteristics or academic performance tests administered prior to college entry:

- 1) Since early-alert indicators represent actual student behavior exhibited, observed and documented while in college, rather than potential behavior inferred from students' demographic characteristics and pre-college measures of academic performance.
- 2) Since an early-alert system can be used to identify at-risk behavior manifested in different campus contexts (e.g., poor classroom performance, failure to register for next-term classes, or failure to renew financial aid for student housing applications for the following term), it has the

potential to involve multiple members of the college community in the retention process. This responds to the common exhortation that "retention is everybody's business" and that effective retention programs require a "total institutional response."

- 3) It is individualized, diagnostic measure that is based on actual and specific student behavior. In contrast, using student demographic data to predict attrition-risk student subpopulations is a general prognostic measure based on group (aggregate) data that is subjectively reported in paper-and-pencil form. For example, at-risk instruments may rely on a students' self-reported response to a question asking about their "intent to leave" the college before graduation. While is generally a good predictor of student attrition, early-alert behavior takes this predictive power one step higher because it's based on observable evidence that a students is actually beginning to transform his or her subjective (covert) intention into objective (overt) action. Simply stated, the best predictor of eventual attrition is the initiation of student behaviors that, if continued, will eventuate in attrition. It follows that the best way to prevent attrition is to intercept this initiated behavior before it eventuates in attrition.
- (c) Course instructors and academic advisors are likely to feel more comfortable intervening with a student who has exhibited concrete actions or specific behaviors that can be referred to and used as focal points for discussion with the student. Intervention can be a little awkward when trying to work with a student who may be *potentially* at risk, because he shares demographic characteristics with an at-risk *group*, but who hasn't yet demonstrated any behavior which indicates that he is actually at risk *individually*. (This is akin to assuming an individual to be quilty—by virtue of group membership--before that person has actually done anything wrong.)

The point here is not to pooh-pooh the value of using multivariate analysis of demographic data to help identify at-risk students. Such information can be very useful; however, it should be complemented or augmented by individual diagnostic data and personalized intervention strategies. In fact, if the content of the conversations that emerge from these personalized interventions are systematically documented, aggregated, and subsequently analyzed (e.g., "content analysis"), they may serve as a valuable source of qualitative data that could be used to improve the quality of campus services and future interventions.

Early-alert practices have been implemented in different forms, including the following procedures.

Midterm-Grade Reports

One national survey reveals that more than 60% of postsecondary institutions report midterm grades to first-year students for the purpose of providing them with early feedback on their academic performance. Approximately 10% of these institutions obtain student right-to-privacy waivers that enable them to report midterm grades to both first-year students and their *parents* (Barefoot, 2001). Students with dangerously low midterm grade reports are typically notified by letter to speak with an institutional representative (e.g., academic advisor or academic dean) who, in turn, refers the notified student to the appropriate support service. At some institutions, such as New York University, academic advisors make follow-up phone calls to students who fail to respond to their letter of notification (Early Intervention Programs, 1992). At Brooklyn College (NY), faculty notify peer tutors when students are having academic difficulties, and the tutors initiate contact with the student (Levitz, 1991).

Use of midterm grades as an "early alert" or "early warning" system has a long history in higher education. Unfortunately, however, there also have been perennial problems associated with successful implementation of this procedure. Some of the major problems are listed below, followed by potential solution strategies.

- 1) Failure of *midterm-grade reports* to reach students in time for them to modify their behavior in time to improve their performance and final course grade.
- 2) Lack of <u>faculty</u> compliance—i.e., faculty have neither the time for, nor the philosophical commitment to, monitoring the progress of all their students. Faculty compliance rates may be increased if instructors are not asked to submit midterm grades for all students, but only for students who are in academic jeopardy (e.g., students whose grades are C- or below). Compliance rates may also be increased by increasing the convenience of the grade-reporting procedure (e.g., easy-to-complete grade forms or online grade submission). Lastly, instructors may be expected to show higher rates of compliance if they are recognized or rewarded for doing so by college administrators (for instance, if department chairs and the academic dean "count" their record of compliance in promotion-and-tenure decisions).

2) Reporting only a grade at midterm, by itself, does not specify the *source* (*cause*) of the poor performance and fails to suggest the specific *intervention* strategy needed to rectify the problem.

Rather than merely reporting a letter grade, some colleges issue early-alert forms that request additional information from the instructor, which is used to help diagnose the specific nature of the problem and facilitate intervention that is tailored or customized to its particular cause. Again, to increase compliance with this request, the report form should be "user friendly," i.e., completing it should neither be time-consuming nor labor-intensive. For instance, at Adelphi University (NY), early-warning rosters are released during the fourth week of class and faculty report students who are experiencing academic difficulty, using an efficient abbreviation code to identify the specific area(s) of weak performance: AP = Assignment Performance, CP = Class Participation, EX = Examination Performance, IA = Intermittent Attendance, NA = Never Attended, NC = Non-Completed assignments, and WE = Weak Expository skills (Carlson, 2000).

Students' midterm grades for one course in particular—the *first-year seminar*—may have the potential to serve as a vehicle for *early identification* of first-term students who may be at risk for academic failure and attrition. Empirical support for the diagnostic-assessment potential of FYS grades is provided by institutional research conducted on four consecutive cohorts of first-year students at the Massachusetts College of Liberal Arts, which revealed that first-year seminar grade can predict students' overall first-year academic performance better than high school grades or college-entry SAT/ACT scores (Hyers & Joslin, 1998). Similarly, at Floyd College—a public community college in Georgia, institutional research indicates that a significant correlation exists between first-year seminar grade and subsequent GPA (Green, 1996). Other campus-specific studies have shown that the specific *grade* earned by students in its first-year seminar correlates significantly with student *retention* (Raymond & Napoli, 1998; Starke, Harth, & Sirianni, 2001). These findings suggest that the course can serve as an accurate diagnostic tool for identifying first-term students who may be academically at-risk and in need of academic assistance or psychosocial intervention.

Such findings suggest that students' academic performance in the seminar may be predictive of their general academic performance and persistence in their first year of college. If this is the case, then institutions could target intervention procedures that are tailored specifically for beginning students who perform poorly in the seminar, allowing the course to function as a prognostic and diagnostic assessment tool for early identification and interception of academic problems (and potential attrition) during the first year of college. The seminar could perform this diagnostic function in a particularly *proactive* manner if the course concluded before the end of the term, allowing students' grades to be formally recorded and made accessible to advisors and other student-support or intervention agents while students are still enrolled in other classes. This strategy is used at The Ohio State University, Wooster Campus, where the seminar is offered during the first five-weeks of the semester. Institutional research on this campus demonstrates that student grades in the course are better predictors of their success at the college than high school rank or ACT score; and since these grades are known after the fifth week of the term, early identification and intervention is possible (Zimmerman, 2000).

For seminars that do not conclude before the end of the term, FYS instructors could generate *midterm grades* (or pre-midterm progress reports) to students experiencing these problems, which could be circulated to academic advisors or academic-support professionals. First-term students receiving grades below a certain threshold or cutoff point in the seminar may then be contacted for consultation and possible intervention. To determine this cutoff point, assessment could be conducted on grade distributions in the FYS to identify the grade below which a relationship begins to emerge between poor performance in the course and poor first-year academic performance or attrition. For instance, at the Massachusetts College of Liberal Arts, it was found that students who earned a grade of C+ or lower in the seminar had a significantly higher rate of first-year attrition (p<.001) than students who earned a grade of B- or higher in the course (Hyers & Joslin, 1998).

As previously mentioned, use of midterm grades as an "early alert" or "early warning" system is nothing new to higher education, but a perennial problem associated with its successful implementation is lack of compliance—faculty teaching traditional introductory courses may have neither the time for, nor the interest in, calculating and reporting midterm grades for all their students. However, if the first-year seminar grade proves to be an accurate proxy for first-year academic performance in general, then the midterm grade in this single course may serve as an effective and efficient early-warning signal. Moreover, given that first-year seminar instructors often self-select into the program because of their interest in, and concern for promoting the success of first-year students, they should display a high rate of compliance or reliability with respect to submitting students' midterm grades in an accurate and timely manner.

3) Lack of <u>student</u> compliance, i.e., students who receive negative midterm-grade reports do not contact the support person or service recommended to them.

To combat this problem, strong incentives or sanctions may be needed to increase the likelihood that students will connect with and follow through on the recommended intervention. (For example, alerted students may not register for next-term classes until they have seen the person to whom they have been referred).

4) Midterm grade reports may *not be sufficiently <u>proactive</u>*, i.e., they may come too late for the intervention to be effective.

To redress this shortcoming, strategies contained in the following section are recommended. While issuing midterm-grade reports to struggling students is a laudable practice, Tinto (1993) warns that, by the time midterm grades are recorded and disseminated, feedback may come too late in the term to be optimally useful.

Pre-Midterm Alert Systems

Identifying and connecting with students who exhibit disengagement very early in the term—before midterms grades are calculated, processed, and disseminated—represents a more proactive alert system. Some institutions are resorting to an earlier feedback mechanism, based on student *behavior* during the first 4-6 weeks of class (e.g., students who miss class regularly, who are chronically tardy, who consistently fail to turn-in their assignments, or who rarely are prepared for planned class activities). At New Mexico State University, attendance-problem requests are sent to instructors during the second week and sixth week of the term. Students demonstrating attendance irregularities who fall into any of the following categories receive a phone call from the Office of Advisement Services: (a) first-semester students, (b) students on academic probation, and (c) students with multiple early-alert reports (Thompson, 2001).

At Marymount College (CA), the offices of Academic Affairs and Student Development Services collaborate to identify and intercept academic problems during the early weeks of the term through a program titled, "R.E.T.A.I.N," an acronym standing for: Re-Engagement Through Academic Intervention Now. Easy-to-complete forms are placed in faculty mailboxes that may be used to identify students exhibiting early behavioral signs of disengagement. Faculty are given the option of sending these forms to the Assistant Academic Dean, or contacting the Dean by electronic/voice mail to report students exhibiting early "red flag" behavior. Particular attention is paid to students for whom more than one R.E.T.A.I.N form has been submitted. The Dean contacts the student's academic advisor to discuss the situation and the two of them decide what intervention strategy to employ. For example, students needing academic support with their class work are referred to the Learning Assistance Center, whereas students whose disengagement stems from "non-academic" (i.e., psychosocial) issues are referred to the Counseling Center. If the Assistant Academic Dean and academic advisor are unable to connect with the student to resolve the problem(s), the Director of Residential Life is contacted to determine whether the student is living in a college residence and may be reached there.

At North Central State College (OH), the COCO information system is used to facilitate the early-alert process. Through this computer system, faculty access their class rosters through the website and the faculty portal. If faculty want to send an early alert to any student at any time during the term (first week through the last), they simply check a box next to the student's name on the website roster. This takes the faculty member to another page where s/he checks the problem (non attendance, poor homework, poor tests, other), types in notes if needed, and sends it. The electronic message goes to three places: (1) to the student's e-mail, (2) to the college's Student Success Center, and (3) back to the faculty member who originally sent it. An advisor in the Student Success Center then follows up with a phone call, email, or letter to the student to discuss options. The system was initially intended for use only during the first half of the term; however, faculty liked it so well, they asked for it to be available throughout the term (Walker, 2005).

Empirical evidence for the effectiveness of an earlier-than-midterm alert system is provided by institutional research conducted at Vincennes University Junior College (Indiana). When a student begins to miss class at this institution, course instructors tear off one part of a computer-generated ticket whose keystroke input generates two postcards containing messages of concern about non-attendance, one of which is addressed to the student's local residence and one to the student's permanent address. Additional absences generate a second, more strongly worded postcard indicating that the student is in danger of being dropped from the course. The system also generates lists for academic advisors, alerting them of students majoring in their academic field who have received attendance notifications. Following institutional implementation of this early-alert system, the number of students receiving grades of D, F, or W was substantially reduced. The beneficial effect of the early-alert system was particularly pronounced in developmental mathematics classes, for which there was a 17% drop in D and F grades and a concomitant 14% increase in A. B. and C grades (Budig, Koenig, & Weaver, 1991). At the University of Mississippi, faculty reported absences electronically for students in different sections of a first-year English course. Students with multiple absences were identified for personal or telephonic intervention. The results of this pilot study revealed that (a) there was a direct correlation between students' class attendance and their academic success (GPA), and (b) students with multiple absences who received intervention demonstrated greater academic success (higher GPA) than students who did not receive intervention (Anderson & Gates, 2002).

Evidence for the positive impact of a pre-midterm alert system on student *retention* is provided by local research conducted at the University of Wisconsin–Oskosh. After the third of week of the semester, early-alert forms are sent to instructors teaching preparatory and basic-skill courses populated by previously identified "high-risk" students. Forms are sent to the Office of Academic Development Services, which initiates intrusive intervention by contacting and meeting with each student to provide academic counseling, referral to a peer tutor program, and suggestions for other forms of assistance. Since the program was

initiated, retention rates for at-risk students have risen steadily, reaching a level of more than 70 percent (Green, 1989).

All of the foregoing findings are reinforced by a study that reviewed and compared early-warning systems at 14 two-year, four-year, and technical schools, which revealed that students who missed three or fewer classes during the term did significantly better in terms of course grades and course-completion rates (Geltner, 2001).

Rudmann (1992) conducted a study whereby students referred to early-alert services by professors were randomly placed into the these three groups: (1) those receiving a letter that identified and described resources for improvement, (2) those receiving a letter requesting them to meet with their advisor about the early and to discuss strategies, and (3) those on an early-alert list that received no contact (the control group). A comparison of the academic performance of students in these three groups revealed that those who had a meeting with their advisor achieved higher course grades than those who were simply notified about campus resources, and students receiving only a letter achieved higher final course grades than those who received no contact whatsoever.

Exit Interviews: Rationale & Research

The scholarly literature suggests that *exit interviews* should be routinely conducted with withdrawing or non-returning students (Tinto, 1987). There is some evidence that the exit-interview process can generate productive feedback, and may also increase the possibility that the exiting student change have a change of heart and decide to stay, because a college representative has taken the time to meet with and express personal interest in the student's welfare and experience at the college, which in itself may be retention-promoting. Also, during the interview process, the student may learn about a college service or an alternative solution to the problem that is underlying the decision to leave (Noel-Levitz, 1985).

Research conducted at California State University, Long Beach in the late 1960's revealed that 10% of students planning to drop out of the university decided not to withdraw as a result of an exit interview (Demos, 1968). Cook College (New Jersey) also instituted an exit-interview procedure aimed at "underachieving" students, i.e., students whose GPAs were significantly lower than their predicted GPAs, based on entrance test score and high school rank. Data collected by the college comparing students who participated in the exit-interview process with a control group of similar underachieving students who did not participate in the process, revealed that only 2 of the 85 exit-interviewed students withdrew from the college—compared to 14 withdrawals among the control group of un-interviewed students (Levitz, 1988) A strategy used by one college for encouraging students to complete the exit-interview process is to asses them a matriculation fee during their first registration session. This fee is refunded to the student at graduation or, if the student decides to withdraw from the institution, the fee is refunded after s/he completes the exit-interview process (Jones, 1988).

Retention through Re-Recruitment

Student retention may be promoted by collecting information during the withdrawal process about whether the student intends or would consider re-enrolling at a later point in time. If successful, this practice would, in effect, convert drop outs into stop outs. In a based-on-a-true-story movie, titled "Stand and Deliver," a high school math teacher accidentally runs into a former female student at a local restaurant who had dropped out of high school and was working as a waitress. During their chance meeting, the teacher (Jaime Escalante) persuaded the student to return to school and complete her degree--which she did. If this coincidental contact and encouragement led this student return to school, why couldn't it be done *intentionally*, rather than accidentally?

A key factor in the student's decision to return to school was that the encouragement came from someone with whom she had a *positive prior relationship*. To replicate this at the college level, withdrawn students could be contacted by someone with whom the student had a good relationship during their prior enrollment or, at least, someone the student knew and respected. (This information could be gathered by including a question in the withdrawal form that asks: "Was there any particular member of the campus community that you admired and respected, or will miss most?")

Re-recruiting students who previously withdrew from campus might be particularly timely in the current economic climate because students who have lost their jobs, or who are working at reduced hours, are more likely to strongly consider an invitation to return to school.

Sample Exit Interview Form

Please help us assess the quality of your experience here. If you would take a few moments to respond to the following items, the information you provide may help us improve the Marymount experience for future students. Your written comments, in particular, would be especially helpful. Thanks.

Note: To receive the most honest answers during the withdrawal process, ideally, this form should be administered by someone with whom the student feels comfortable—e.g., a trusted teacher, advisor, or peer—such as a peer leader who may be trained for this purpose; in other words, someone with whom the withdrawing students has developed a relationship, or at very least, someone with whom the exiting student has had some contact.

For which <i>reason(s)</i> are you leaving? Please read the options below and circle the appropriate answer(s).			
Academic reasons If yes, please explain:	Yes	No	
Financial reasons If yes, please explain:	Yes	No	
Concerns about <i>student life</i> at Marymount If yes, please comment:	Yes	No	
Personal reasons other than those listed above. If yes, please comment:	Yes	No	
Are you <i>transferring</i> to another institution? If yes, which institution?	Yes	No	
Is there anything else about your experience (positive think we should know about, which might improve the	_		_

Is there anything we can do to help your transition to what you will be doing next (e.g., transfer to another school; obtain a job)?

Note: This question is suggested, not only because it is the altruistic thing to do, but also because it allows one question that asks what the college could for the student—in midst of an interview that is otherwise flooded with institution-centered questions designed to obtain information that will benefit the college. Perhaps, inclusion of a question such as this may also serve to increase the cooperation and self-disclosure of the respondent.

Do you think there is a possibility you might be interested in <i>re-enrolling</i> at in			
the future? Yes No Maybe			
Note: A yes or maybe answer to this questions would allow the exit interview to function not only as a reactive mechanism vehicle for determining the student's reason for withdrawal, but also as a proactive strategy for re-recruiting a withdrawn student, converting that student from a "dropout" to a "stop-out"—i.e., from a student who was temporarily unable to persist to a student who is eventually retained to graduation.			
If yes, or maybe, would you like us to send you registration information in the future? Yes No			
(Note to Student: You may return without reapplying for admission, if you miss only one semester.)			
Address we should keep in our records as your permanent address:			
Thanks for coming toand for providing use with feedback.			

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