CSU The California State University
WORKING FOR CALIFORNIA

CSU Campus Early Warning Systems

CSU Office of the Chancellor

Academic Affairs

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I. Introduction

As part of recent Graduation Initiative workshops and campus visits, the Chancellor's Office Graduation Initiative team engaged campus leadership in discussions about what actions were being taken to improve retention and graduation rates on their campuses. One of the strategies that was frequently mentioned was the utilization of an Early Warning system to assist campuses to identify and alert students when they are under-performing academically and recommend suggested interventions (e.g. advising or supplemental instruction) to get them back on track.

Ideally, an Early Warning system quickly detects signals of academic difficulty and provides an intervention for students who might not be performing to the best of their abilities. In order to identify students at risk, a good system applies predictive models to data mined from the student information system, the Learning Management System and other sources of student data. Using this information a student could be assigned to a "risk group" determined by a predictive student success algorithm. Student services staff are then alerted, or in some cases, students themselves are alerted and directed to available campus resources, such as advisors, study skills workshops, tutoring centers, and/or supplemental instruction.

Campus Graduation Initiative reports and subsequent follow-up discussions indicate that campuses are at various phases of implementing Early Warning systems. These systems also vary in scope and objectives from campus to campus.

In an effort to identify best practices, potential synergies, and opportunities for inter-campus collaboration, Chancellor's Office staff conducted a brief online survey with campus Deans of Undergraduate Studies beginning February 16, 2012. The survey (which can be accessed at https://www.surveymonkey.com/s/csuearlywarning) consisted of a branching structure that posed 3-8 questions focused on campus use of Early Warning systems. All campuses participated in the survey.

II. General Findings

1. CSU campuses expressed strong interest in Early Warning systems:

    - Every campus expressed some level of interest.

    - Just under half (11) of CSU campuses are currently piloting or implementing an Early Warning system. Of these, six campuses (East Bay, Fullerton, Los Angeles, Northridge, San Jose, and Stanislaus) reported having more than one year of experience implementing their systems.

    - Six campuses (Channel Islands, Humboldt, Pomona, San Bernardino, San Marcos, and Sonoma) are planning to implement an Early Warning system sometime in the near future.

2. A wide variety of software is being used to implement campus Early Warning Systems, with PeopleSoft and Learning Management System applications leading the way.

    - Of the eleven campuses currently piloting or implementing an Early Warning system, the following software packages were identified:

- o PeopleSoft (6)
- o Learning Management Systems (3)
- o In-House System (2)
- o Hobson (1)
- The six campuses that are planning a future Early Warning system indicated that they were likely to use PeopleSoft (4) and Hobson (3).
- Two campuses (Fresno and San Jose State) mentioned Grades First software in a narrative response, but did not identify it in response to the software question.

3. All campuses with Early Warning systems use e-mail (often sent automatically through the Learning Management System) to contact students at risk. Campuses also mentioned the use of postal mail, text messaging, and phone calls.

4. Early Warning systems have been rolled out to select groups of students, as opposed to campus-wide deployments.
- Early Warning systems are targeted (or will be targeted) to athletes at five CSU campuses (Humboldt, Long Beach, San Diego, San Jose, Stanislaus)
- Early Warning systems are targeted (or will be targeted) to EOP students at four CSU campuses (Dominguez Hills, Northridge, San Diego, San Jose)
- Limited resources have prevented several campuses from expanding their use of their Early Warning system.

5. Academic advisors and faculty members make up the support team in most campus Early Warning programs.

6. Several campuses reported that in order to be effective an Early Warning System must alert at-risk students as early as possible:
- Quarter campuses are at a significant disadvantage to produce expeditious warnings given the compressed academic term.

7. Faculty participation and buy-in are critical to success. Iván Pagán at CSU Monterey Bay offered this tip:

> *The main lesson that I've learned while trying to implement the Early Alert system is that technology is easy; people are hard. The technical challenges of implementing the system were easy to overcome. Making sure that all of the stakeholders were comfortable with what we're trying to accomplish with the alerts has been extremely challenging.*

8. Empirical data demonstrating the effectiveness of campus Early Warning systems is scarce, but several campuses report decreasing numbers of students on academic probation and improvement in retention rates after implementing their system.

III. Conclusion

The importance of Early Warning systems can be demonstrated by the fact that all campuses indicated that they were interested in them. With nearly half (11) of the campuses reporting that they were currently piloting or implementing one of these systems, and another six campuses planning an implementation, campuses clearly find value in these systems.

Campuses that are currently using an Early Warning system employ it in a variety of ways. Some are using it at the macro level, monitoring a student's overall progress (e.g. are they on probation, or have they fallen below a certain GPA?). Others are designed to focus on student performance in particular courses (e.g., receiving less than a 70% on a key exam or poor attendance). Other campuses are using them at both the university and course level. Those using the system to monitor students' overall progress tend to focus on targeted groups (EOP, First-Time Freshmen on probation, etc.).

The underlying premise behind an Early Warning system is to utilize data collected by institutional and instructional tools to determine which students might be at risk in real-time, when an intervention can assist that student before it is too late. Data can come from various sources including the LMS, student information systems, library systems, audience response systems, and many others. Through analytics, the institution mines these large data sets and applies statistical techniques to predict which students might be falling behind. The goal is to produce "actionable intelligence" which will guide students to appropriate resources and assist them in how to use them.
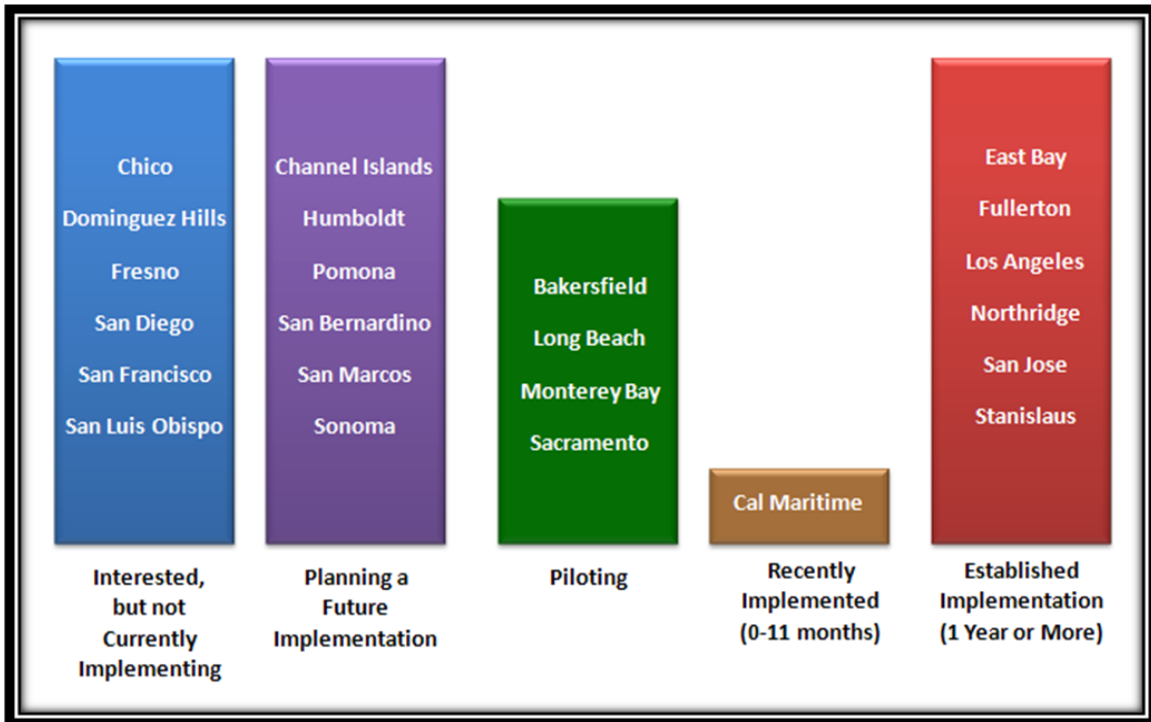
It would appear that although many campuses have implemented aspects of an Early Warning system, none have implemented it fully. Resources appear to be a major concern for many campuses, not just regarding the implementation of the system, but the support systems that need to be in place once the at-risk students have been identified. Other challenges that impede the implementation of Early Warning systems include the fact that data are frequently maintained in different locations. Combining data into a common location is often inhibited by different technology standards, lack of unique identifiers and organizational challenges to the ownership and use of the data.

Ultimately one of the goals of the CSU Graduation Initiative is to identify variables that influence student retention and graduation. Once these variables have been identified at the campus and system level, the next step is to translate these into actions that will presumably increase a student's chance at academic success. The interest in Early Warning systems by the campuses is a first step in realizing this very important goal.

IV. Detailed Survey Findings
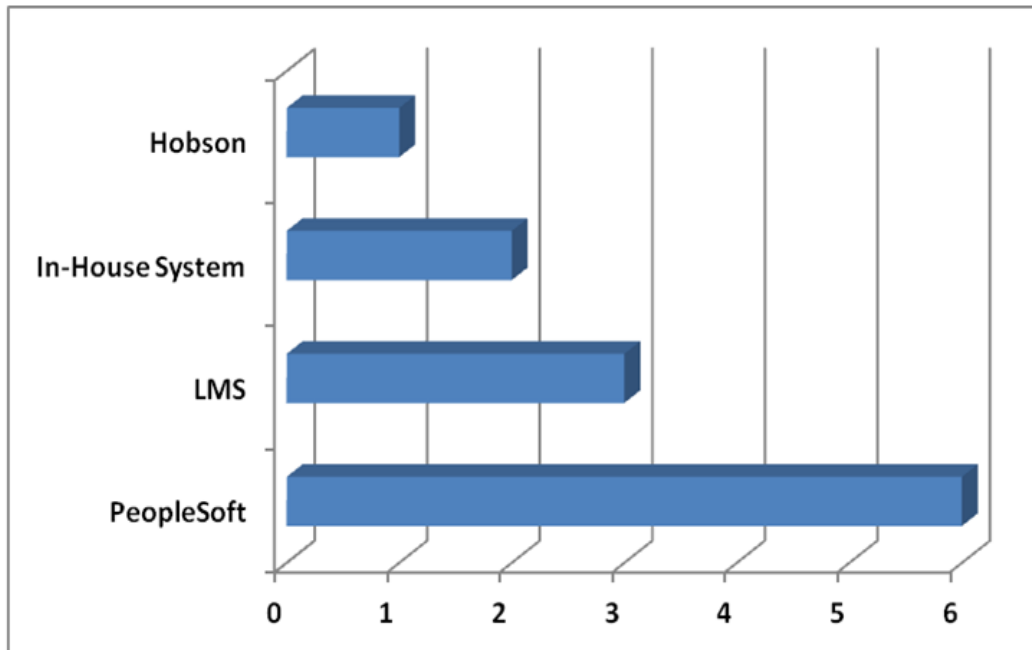
➢ **CSU Campus Usage of Early Warning Systems**

The chart below shows current and future planned campus usage of an Early Warning System.

> ## Early Warning Software

Campuses reported using a variety of software packages to support their Early Warning Systems. The table and chart below provide details about the software being used.

Campus	Response
Cal Maritime	• PeopleSoft, LMS (Moodle)
East Bay	• LMS (Blackboard), PeopleSoft
Fullerton	• In-house system
Long Beach	• LMS (Desire 2 learn)
Los Angeles	• PeopleSoft
Monterey Bay	• Hobson
Northridge	• TEWS is currently 100% embedded within PeopleSoft, making it a fully web-based application.
Sacramento	• Hand grown tool built through CMS (PeopleSoft) with an internet interface
San Jose	• PeopleSoft

Bar chart showing: Hobson ≈ 1, In-House System ≈ 2, LMS ≈ 3, PeopleSoft ≈ 6 (x-axis 0 to 6).

➤ **Key Components of Existing Systems**

Survey Question: Please describe the key components of your Early Warning system (e.g. what factors do you use to create alerts, which monitors the alert system, what interventions are suggested, and how do you monitor progress). Please provide as comprehensive a response as possible.

East Bay	The Early Alert System at CSU East Bay is a Blackboard tool faculty can use to inform students of their progress in class early in the term. The progress report is sent electronically to students via a Horizon E-mail. The Early Alert System is available the first day through the sixth week of the term. Faculty have full control in how frequently they use the system and/or how many students they send reports to. Because the system is automated, faculty prepare the reports and emails are generated to the students. A cc is also sent the faculty for their records. Within 24 hours, the performance comments from the pull-down menu faculty enter in Blackboard are moved to the "Person Comment Detail" screen on PeopleSoft. Faculty and staff advisors are encouraged to review these comments when working with students. Additionally, the Student Center for Academic Achievement (SCAA) and Academic Advising and Career Education (AACE) can run reports of referrals to their units so that can proactively engage with students who received reports. The performance comment pull-down menus include the following options: * At this time in the quarter, work is Above Average

* At this time in the quarter, work is Satisfactory
* At this time in the quarter, work is Below Average
* Attendance needs improvement
* Conference with instructor recommended
* General Education advising recommended
* Major advising recommend

In addition the "pull-down" options, faculty also have the option to write personalized comments in the free flow text box. System usage is monitored by the Diana Balgas, Executive Director for Student Retention Services. Quarterly reports are run tracking number of emails generated, and course and instructor counts.   Below are the Early Alert System's FAQs for Faculty and Advisors:

- What is the Early Alert System?
  The Early Alert System is a Blackboard tool you can use to inform your students of their progress in class early in the term. The progress report is sent electronically to students via a Horizon E-mail. The Early Alert System is available the first day through the sixth week of the term.
- How does the Early Alert System work?
  The Early Alert System uses Blackboard to create a class roster which includes a performance comment pull-down menu and a free flow text box. Information entered into Blackboard is embedded in an electronic message which is sent overnight to the student via Horizon. In addition to your comments, the E-mail message lists campus support programs and provides a link to their Web site. Within 24 hours, the performance comments from the pull-down menu that you enter in Blackboard are moved to the "Person Comment Detail" screen on PeopleSoft. Faculty and staff advisors are encouraged to review these comments when working with students.
- Do I have to submit a report for every student in the class?
  You are encouraged to send progress reports to students even when they are doing well. However, you can limit the progress report to a select group of students such as students who are in academic jeopardy.
- Why isn't the Early Alert System available after the sixth week of the term?
  The intent of Early Alert is to provide students with ample time to seek and receive support or assistance if needed. The earlier students are notified during the course of a term that they are academically underperforming, the greater amount of time they will have to take corrective action or officially withdraw from the course. Research shows that institutions that are most successful with retaining students who are at risk of failing are those that are proactive in identifying them and intrusive in their intervention.
- Why should I use the Early Alert System?
  The Early Alert System supports student success and is easy to use. The goals of the system are to improve the quality of student

	work in class, increase student retention and progress to degree, increase FTE, create a greater awareness and utilization of student support services, serve as an advising tool for faculty and staff advisors, and increase interaction between students and faculty. • Who can use the Early Alert System and what is required? All faculty can use the Early Alert System including those who teach graduate and Open University courses. For Early Alert to be successful, faculty must give assessments early in the quarter. • Who should I contact if I have questions about the Early Alert System? Technical support and information related to training on the use of Early Alert is available through the Help Desk. Inquiries should be sent to helpdesk@csueastbay.edu. The Help Desk can also be reached by calling 885-4357.
Fullerton	Key Components and Interventions In an effort to increase retention and facilitate graduation, Academic Advisement piloted an evidence based program to enhance the quality of advising support for First Time Freshmen (FTF) on Probation. The first group to participate in this pilot was 2009 FTF on probation. Prior to 2009, FTF probation students only participated in 1 workshop which provided basic academic probation policy information. Based on the Chancellors initiative to raise graduation rates, the research based pilot group of FTF on probation participated in 4 intervention strategies and the 2010 cohort experienced 7 academic interventions (outlined below). 1. Online Video Probation Tutorial with knowledge assessment and evaluation components imbedded 2. Student Success Contract Part I - to self identify challenges and strengths - information integrated into the Interactive Workshop 3. Academic Probation Interactive Workshop - Hosted by Academic Advisement 4. Student Success Contract Part II - reflection of progress 5. Small Group Advising Session - review semester progress, plan a balanced schedule for summer/fall, review remediation requirements, Grade Forgiveness, strategies for working with faculty Avoiding Academic Disqualification and the Titan Degree Audit 6. Meeting with at least 1 current faculty member - Students are required to meet with a faculty member to review course progress and discuss strategies for success 7. Online Student Success Tutorial - Students can choose between time management, stress management, study skills and view this in the comfort of their own home What factors do you use to create alerts? How are studentsnotified? FTF on Academic Probation (<2.0 CSUF and/or CUM GPA) are notified immediately following Academic Status. Information is delivered via a USPS Letter, notification to their CSUF email address, text message, and phone calls. Prior to the pilot program students were only notified via mail. However, with text messaging and email as their reported preferred method of delivery - Academic Advisement has implemented new strategies for contact. Thus resulting in a 92% participation rate in 2010 cohort (currently

	95% participation rate in the 2011 cohort) How do you monitor progress? Through this initiative, Academic Advisement reclassified 3 advising positions from SSPII to SSPIII with support of the Vice President of Academic Affairs in 2009. Since the reclass each advisor is assigned a college based caseload of students which they are responsible for monitoring, contacting, and providing notification to. Each semester, advisors generate a report of their caseload of students.
Long Beach	Alerts are generated from our LMS when a student receives less than a 70% on a key exam. Alerts are sent to the student, professor and an advisor. The advisor then contacts the student. It should be noted that our student athlete services units conducts early alerts for every student athlete every semester using Grades First.
Los Angeles	A list of students with low GPA is sent from the Registrar. An email is sent to these students alerting that they are in jeopardy based on their academic record and requesting that they schedule an appointment with an adivsor to discuss strategies to address their academic difficulties.
Maritime Academy	Faculty alert the Academic Dean about students doing poorly at the midterm point (and earlier) in the semester; information is collated with students' overall performance (via PeopleSoft) and letters are sent to at risk students, encouraging them to see their advisors and seek tutoring. Data is collected and performance improvement (or not) is notes at the end of the semester. Reports are generated after each semester and disseminated via Moodle Faculty showing greatest improvement with students are encouraged to share "best practices" via informal brown bags and workshops, to assist other faculty and stakeholders in helping improve performance for the highest at risk students. Advisors and department heads are also alerted at the start of each year about students needing remediation so they can be tracked and assisted more closely.

Monterey Bay	Hobson's has the ability to use six types of alerts. We chose to use the following three. Hobson's does not define the alerts, so we created the definitions below.
	• Academic: If your answer to any of the following questions is "yes," you may wish to use an academic alert:
	  o Has the student received a D or F on any major exams?
	  o Has the student failed to hand in multiple assignments?
	  o Is the student's performance on graded work consistently poor?
	• Attendance: If your answer to any of the following questions is "yes," you may wish to use an attendance alert:
	  o Has the student missed three or more classes without providing a valid explanation for the absences?
	  o Is the number of absences such that the student is headed towards failing the class?
	  o Is the student consistently late to class, or does the student have a tendency to leave class early?
	• Behavioral: If your answer to any of the following questions is "yes,"

	you may wish to use a behavioral alert:
	   o Does the student have challenges with time management and procrastination?
	   o Does the student lack essential skills such as reading comprehension, note taking, and test taking skills?
	   o Does the student lack the proper motivation to succeed?
	
	For the pilot in the spring of 2012, I am monitoring the alert system. In the fall, when we implement the system more broadly, a team of advisors will be monitoring alerts.
	
	The level of intervention is very elementary. When a professor generates an alert, the student will get an automated message suggesting on campus resources that they should access. In the pilot, I will be following up with students on a case-by-case basis as necessary. In the fall, a team of advisors will follow up with students as necessary. One of the challenges that I see with this system is that all communication takes place through email, and I'm concerned that many students don't pay attention to email. I haven't worked out all of the details regarding progress monitoring. I'm thinking of selecting key courses and comparing the pass rates before and after the Early Alert system is implemented.

Northridge	All of the CSUN "*The Early Warning System*" (TEWS) alerts are initiated by the Faculty from within the faculty's class roster within PeopleSoft. Found in the class roster, is a tab for TEWS, allowing faculty to simply click a link to generate a TEWS ticket, fill in text and identify warning signs. Once saved, the TEWS ticket is automatically sent to the Advisor for the student. The Advisor (based on the students major) then follows up with the student. Once Advisor has sufficient feedback from the student, The Advisor responds to the TEWS Alert within PeopleSoft. Once Closed & Saved, the TEWS Alert is automatically sent to the Faculty who initiated the Alert, completing the process.
	
	Faculty initiates alert via TEWS and Student Services Center/EOP Satellite contact receives via email Faculty attempts to discuss issue with student via follow-up [if possible] Faculty keeps abreast of satellite and referral contact with student via email responses
	  • Day 1: Satellite will send TEWS postcard to student, Postcard to faculty, Send message to classroom- inform the students about TEWS - faculty can indicate on syllabus in a uniform manner Satellite contact makes telephone call to student.
	  • Day 2: If satellite contact has not heard from the student - an email message will be forwarded to the student from satellite
	  • Day 3: If satellite contact has not heard from the student by the 3rd day Satellite will forward a TEWS response to faculty describing contact attempts; reminder- system must be checked by faculty in order to see updates
	  • Day 4 & beyond: A reminder email will be forwarded to the satellite contacts for each faculty initiated TEWS alert in which no response has been made Satellite attempts to contact student v Email faculty a response alerting of the update in TEWS TEWS

	Alert: Satellite contact sends TEWS referral response to student service center When the College Based Student Service Center/EOP Satellite receives alert they will reply with an alert via TEWS to state student has arrived- i.e. LRC - student has received services, UCC - student has had an informational consultation, Health Center & NCOD- student has had a tour of the center, Financial Aid- student has seen counselor, Career Center- student has been seen After student has made contact student service center responds via TEWS
Sacramento	Our early warning system tracks students in need of intervention. The alerts can be created by both faculty, staff, and trained peer advisors. The system is set to be monitored by our new Peer and Academic Resource Center. The primary intervention suggested is advising. We are working on ways to monitor the progress and effectiveness of the tool and alerts flagged in the system.
San Jose	We use Grades First to monitor student progress at two times during the semester in our student athlete program and EOP. The Directors and their staff monitor the alert system. Interventions are academic advising, tutoring and study hall. They monitor progress from instructor feedback.
Stanislaus	All of our targeted programs, EOP, SSS, Promise Scholars (Former Foster Youth), Athletics, use a mid-term, early warning review. The classes are selected manually starting with remedial classes and paper response cards are sent to faculty to report student progress at the mid-term for program participants. Program advisors review reports and advise students based on academic progress. Intervention strategies vary, but advising includes strategies for successful recovery for individual classes if necessary.

➢ **Key Components of Systems Under Development**

Survey Question: How do you anticipate that your Early Warning system will work (e.g. what factors will you use to create alerts, who will monitor the alert system, what interventions will be suggested, and how will you monitor progress)? Please provide as comprehensive a response as possible.

Humboldt	These are all questions that have yet to be answered. One factor we are looking for is the ability of the system to extract data from existing sources to trigger early warnings independently/automatically. While we certainly want the software to receive and process alerts from an instructor or other individual concerned about student behaviors, we are reluctant to build the whole process on a requirement that, say, most alerts would be triggered by faculty responding to a query (as is the case for our midterm evaluations distributed by a number of special programs) or deciding to enter an alert manually or via a pulldown menu or checklist. As I said, those are very valuable and we certainly want to encourage them - but in many cases these do not occur until halfway through the semester or even later.

So identifying possible indicators that could be monitored (for example, a student's activity on class Moodle sites, attendance at specific required orientation events) very early in a student's college experience is one of the important steps we want to take: there likely isn't just one surefire indicator, but there may be clusters of behaviors that would could find pretty easily that, together, indicate a possible need for intervention.

Another very important step is to develop a "hierarchy" of intervention responsibility: if a student belongs to three different special-focus groups (e.g., athletes, veterans, students receiving disability services, on probation, etc.), which one should make the initial intervention - and how does it communicate with the other groups to plan for follow-up? How do we manage alerts for students who belong to none of the special focus groups? |
| Pomona | • FACTORS: Completion of GE coursework; successful completion of a certain percent of units attempted in first year; withdrawal from a set percent of courses; part-time attendance; stopping out; declining GPA; GPA below 2.2
• FOCUS: Transfer students in first year
• COMMUNICATION: To students, advisors and department chairs
• NTERVENTIONS: Under discussion
• MONITOR PROGRESS: Benchmarks and quarterly reports |
| San Bernardino | Poor grades on mid-terms or exams, poor attendance, and problematic behaviors will trigger an alert. Ideally, when a student is identified as being at risk, a notice will go to someone in the student's major. We would also like some system generated messages to be sent automatically to the student at risk. For example, a student getting poor grades might be reminded that we have a Learning Center that offers |

	tutoring in a variety of subjects. That would not be the only intervention, but even that might be helpful. One of the major impediments to an Early Warning system for us is the short length of our term. As a quarter system campus, mid-terms come so late that meaningful interventions may be difficult to make at that point.
San Marcos	The system will be enveloped into our SOAR referral process. IITS is developing the process so details are still not completed.
Sonoma	We are not far enough along in our planning to respond to these important questions.

➤ Implementation of Existing Systems

Survey Question: How extensive is your use of the Early Warning system on campus? What (if any) barriers stand in the way of a larger campus-wide implementation?

Stanislaus	The Academic Wellness and Academic Recovery programs described in our Graduation Initiative reports target the general campus-wide population. Severely reduced resources and staffing have prevented full, consistent implementation.
Fullerton	Currently this program is only able to provide these 7 interventions to First Time Freshmen (FTF) who are placed on Probation after completing their first semester. Since the ratio of students supported by the AAC to Advisor is 1:7,000 - in order to extend these opportunities beyond FTF a liaison is required for each college. Currently the caseloads of students managed by each advisor are between 175-250 per cohort. Another factor that is required for implementation on a larger scale is the need for an automated tracking system that outputs students' academic history each semester (Fall, Spring, Summer, Int). This would create efficiencies and allow advisors to provide concentrated academic support.
Northridge	TEWS is not terribly extensive; however it's very powerful and robust. The basic principle of TEWS is to provide a simple, easy way for Faculty, Advisors and Referral Centers to identify students facing challenges and providing a vehicle for communication between both parties.The system itself is primarily a set of forms with simple fields to fill in, that can be edited, opened and closed, and with special 'Auto' email triggers occur when TEWS Alerts are Generated, Updated and Closed notifying Faculty, Advisors and Referral Centers of TEWS Alert status. It has the potential to be a very extensive system, but due to capacity issues, the system is currently only accessible by a cohort of classes. The number one barrier to wider implementation, regarding technology is that the system is managed by the campuses IT department, making it a bit challenging to get changes made to the system on any type on-going, intermediate or long term basis. Most of the barriers to wider implementation reside more in the staff capacity issue. Application of- • Limited Staffing in the College Based SSC/EOP Satellites • More attractive training for faculty users • Increased faculty participation in training and system use
Los Angeles	Implemented by the University Academic Advisement Center (UAAC) for undeclared majors and pre-majors. Need additional advisors to monitor at risk majors
Long Beach	Human resources--full implementation would require many more advisors. Currently, piloting in our most at risk science gateway courses.
East Bay	In Fall 2011, approximately 7% of the instructors utilized the system, which resulted in 1,150 early alert reports generated to students. The system is available campus-wide. All faculty can use the Early Alert System including those who teach graduate and Open University

	courses.
Sacramento	Our early warning system is in the pilot phase of development. The major barrier will be in growing its utilization campus-wide.
San Jose	We use it just for student-athletes and EOP. The two main barriers for larger campus-wide implementation are faculty participation and the staff to monitor the outcomes and contact students.
Maritime Academy	Fairly moderate at the moment; the main barrier is the number of faculty participating. Many faculty are unwilling to participate so the number of highly engaged faculty is fairly small.
Monterey Bay	Right now we are in the pilot stage. A critical transition point will be next fall when the administration will have to select the focal group for the alerts. Some potential alternatives include: remedial math and English classes, first generation students, students on academic probation, lower division students. We don't have the resources to monitor alerts on the entire student populations, so we will have to select a focal group for the alerts. The main lesson that I've learned while trying to implement the Early Alert system is that technology is easy; people are hard. The technical challenges of implementing the system were easy to overcome. Making sure that all of the stakeholders were comfortable with what we're trying to accomplish with the alerts has been extremely challenging. • How do we define the alerts? • Who should get the alerts? • When should the alerts go out? • How often? • How do we train the faculty? These are just a few of the questions that have to be carefully examined by all parties involved, and going through this process has taken more time than I ever imagined it would require!

➤ Future Rollout Plans

Survey Question: Briefly describe your strategy and timeline for rolling out your campus Early Warning system.

Humboldt	We are starting on a very basic level, with the goal of converting our cumbersome and paper-heavy Midterm Evaluations procedure into a paperless system. The list of possibilities, above, emerged in an initial effort to do that about a year ago. The intention is to adopt a system for that purpose that might also be scalable to include other indicators, other students, and other interventions. We are again reviewing products and will invite demonstrations by vendors - to be evaluated by our technical staff as well as the student support and academic folks - so that we have a clear understanding of what a product will and will not do, and how much of the "thinking" we have to provide before the product will work. It may take another semester or two to implement the best choice.
Pomona	Data analysis will hopefully be done by the end of June 2012. Report development will continue through summer with the first phase of the implementation no later than Fall 2012.
San Bernardino	We have done some limited testing of an Early Warning system using EMT Retain, but we have not had good success with it. We hope to use funds from the Student Success Fee to see if we can't find a better system. I suspect we will be exploring possibilities in the next six to eight months.
San Marcos	IITS is developing the process. We plan to roll it out in three phases. Timeline is still unknown
Sonoma	Our Graduate Initiative Group, Advising Subcommittee, and recently-constituted advising group (consisting of representatives from Academic Affairs, Advising Subcommittee, Advising Center, and School-based advisors) will explore an early warning system as part of several initiatives to improve advising on campus. A next step should also involve the Degree Progress Report group and CMS administrators to explore how CMS could support our efforts.

➢ **Barriers to Future Implementations**

Survey Question: What are the barriers to implementing an Early Warning system on your campus?

Chico	Resources to fund both any needed software purchase, and to support the programming staff needed to develop this...
Dominguez Hills	The barriers are related to finding the right system that will take into consideration all of the stakeholders who will use it. Most Early Warning systems require large faculty support with entering timely student progress indicators. If those progress indicators are entered in Blackboard, Moodle or interfaces like Starfish, support service units, like Advising and EOP can establish contact with the those students needing the most assistance. We piloted Starfish here and the greatest challenge was getting timely student progress data entered by faculty.
Fresno	Funding, diverse interests as to what ought to be included
San Diego	It's less about implementing such a system than the question of the kind of support we could provide with the information we gathered from such a system.
San Francisco	Time, money, one more thing to ask faculty to do - we have the capability in our email system but in these busy times (early start, 1440, etc. etc.) we have not had time to develop a strategy. Morale is so low that it might be challenging to get faculty buy in.
San Luis Obispo	Finding a system that will interface well with PeopleSoft, staff to administer the system, new leadership needs time to get the lay of the land to move the idea forward with faculty and deans. This is one software system among several that is being advocated for at Cal Poly, all of which can certainly help the campus improve student success.

➢ Strengths and Weaknesses of Existing Programs

Survey Question: What are the strengths and weaknesses of your Early Warning System? Do you have empirical evidence of success?

East Bay	• Strengths: Easy to use, automated, developed and supported by campus IT staff • Weaknesses: Optional tool for faculty; usage has been mixed. Faculty have expressed concerns that data collection would identify them/or their usage of system. • Currently, no empirical studies have been conducted on early alert.
Fullerton	• Strengths: Overall increase in number of students regaining good academic standing (>2.0 GPA), increase in student participation, decrease in number of students Disqualified (DQ), decrease in number of students remaining on probation, and decrease in number of students leaving the University. Quantitative Data 2005 Cohort (Baseline Data) = Total 958 FTF on Probation 65% Participation Rate Results = 30% DQ, 31% Good Standing, 39% Continued Probation or Stopped Out 2009 Cohort (Baseline Data for High Impact Practice Pilot Academic Success Program) = Total 698 FTF on Probation 77% Participation Rate Results = DQ 27%, 29% Good Standing, 31% Continued Probation, 1% Stopped Out, 12% Left CSUF 2010 Cohort = Total 694 FTF on Probation 92% Participation Rate Results = DQ 27%, 40% Good Standing, 24% Continued Probation, 1% Stopped Out, 8% Left CSUF Overall Significant Increase (11%) in Students Regaining Good Academic Standing following their 2nd semester (CSUF and CUM GPA >2.0) 95% of participants correctly identified the GPA required to be removed from Probation (2.0) Qualitative Student Feedback "The advisors made me feel comfortable, I know I have the ability to get back off of probation, and I have an action plan for success." "I feel like the university cares if I succeed" "The academic advisement center is very helpful and helps keep me motivated to do as well as I can" "I liked doing the sessions and I think we should have more of them. Even though I was on probation, these workshops and meetings made me feel like a part of a group so I wasn't so lonely." "I will definitely visit the Academic Advisement Center whenever I need help - Thank you for all you do!" • Weakness - the number of students supported through this program continues to grow exponentially, however, the number of advisors remain the same. College specialists are required and should be housed in Academic Advisement - 1 advisor per college (total of 8 including Undeclared) - this would result in an increase of 5 positions.
Long Beach	None yet

Los Angeles	The warning is not intrusive and meeting with an advisor is not required. Lack the resources to required mandatory advisement and to follow up with these students. No empirical data collected.
Maritime Academy	We only have a year and a half of data so far; while many students show improvement, we have not yet clearly identified what exactly was the reason for the improvement -- the letter, tutoring, the intervention of the faculty, etc. This will be our next step in our assessment.
Monterey Bay	I'm still in the pilot stage, so I can only offer limited observations here. The main strength of the system is that it is very easy to use. Professors just click-click-click their way through the Early Alert system. The greatest weakness of the system is that it is entirely dependent upon email for communication with the students, and I don't think that this is the most effective way of communicating with students.
Northridge	The Early Warning System primary strengths are its Ease of Use, Accessibility being embedded in PeopleSoft, and flexibility as a system. The system has great potential and flexibility to grow from its current form. The simplicity of the system helps to minimize its weaknesses; however, we need to focus on its lack of ability to send out reminder notifications to both faculty, advisors and referral areas. The system relies on specific action from faculty and advisors. One recommended function would to add is for the system to automatically send an advisor a reminder email if an Alert hasn't been responded to. In addition, an automatic follow up email notification can be sent to faculty regarding a previous TEWS Alert to see how the student is doing after the Advisor got involved. The email triggers would be automatic and don't rely on human interaction. - Strengths: - It facilitates early interaction of faculty, students, advisors and other student service areas - It is a tool CSUN faculty has available to use aid in the persistence and academic success of students at the university - It eases FTF student's transition into the college environment - It provides early systematic identification of those students who may be academically at risk - It provides early identification of students who may be having difficulties in and out of the classroom - It establishes a common communication link between students and their instructors, advisors and relevant support services - It encourages students to utilize CSUN support services-i.e. Klotz Health Center, - Weaknesses: - Only faculty can trigger TEWS - Some confidentiality/privacy issues - Consideration of students with disabilities - SSC/EOP Satellite contacts should be able to initiate

	TEWS tickets to faculty
Sacramento	Having a tool to use is a strength in and of itself. The University Retention Tool is the first of its kind to track students and document services. We do not have empirical evidence at this time.
San Jose	Our EOP first year retention rate has increased. Our overall GPAs of our student athletes are higher than they have ever been. I don't have the exact numbers at my finger tips, but I can get them if needed.
Stanislaus	Because we are only able to administer early warning through special programs, there are pockets of the population that are not monitored. Therefore, early warning is not fully institutionalized.

➤ Additional Comments

Survey Question: Do you have any other comments about your campus plans for or experience with Early Warning systems?

Chico	We see this as having a lot of potential for helping our students stay on track to graduation. While we are not currently planning to implement, we do want to do so in the near future. Any best practices or central support in negotiating software would be helpful.
Dominguez Hills	We use low tech (paper) progress reporting after mid-terms for our developmental math and English courses. The Undergraduate Advising Center, EOP, Title V and other special programs get progress reports on all developmental math and English students. The staff in those areas are expected to follow-up, establish a connection with the students, and get them linked to campus resources.
Fresno	We have bits and pieces of early warning systems. Faculty can provide students with referrals to our "Support Net" program thru PeopleSoft that informs the student and the program that a student has been referred. The campus is rolling out the Grades First software to select populations on a pilot basis. We encourage departments to download datasets from PeopleSoft for selected populations and reach out to them (disseminated information on how to use the appropriate query)
Humboldt	We will be implementing a portal this summer; any early warning system will need to mesh with the portal, communicate with PeopleSoft, and perhaps pull data from other locations as well.
Long Beach	Impending budget cuts are likely to result in either the termination of this program or keep it to just a few courses.
Los Angeles	We will be hiring more staff advisors which will allow the campus to implement a broad Early Warning system. The campus is committed to identifying and addressing the needs of students at risk.
Maritime Academy	I would really like to hear what other campuses are doing, and the success they are having.
Monterey Bay	I would check back with us after the spring 2012 and the fall 2012 semester. We are just barely starting our pilot program, so I have limited data to share with you at this point. I would love to learn about the experience of other campuses. Please share your results with us! Thanks!
Pomona	We are also very interested in campuses that may have done a PeopleSoft or Hobson's implementation for Early Warning systems. Any info that can be shared from other campuses would be very welcome!!
Sacramento	Not at this time. Thank you for the opportunity to participate in this survey. It would be great if the results could be shared once compiled.
San Diego	We already have early warning systems in place for athletes and for students in EOP. In our experience, those systems work well.

San Francisco	We do send other student success messages including some targeted at students who received low grades in the previous semester. This might be possible to do on a small scale, but to implement on a large campus makes it difficult. We might consider targeting or piloting with interested departments or populations.
San Jose	I really like Grades First because it interfaces nicely with CMS.
San Marcos	I'm not sure if we will call it Early Warning but components of the SOAR referral system will include EWS.
Sonoma	We recognize the need for developing and implementing an early warning system, and look forward to hearing what other campuses are doing.

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