

California State Senate: Early Warning Systems



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Education First Consulting

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About Education First Consulting



- Who We Are
 - Education First is a national education firm that helps clients build on best practices, fine-tune innovations and improve effectiveness.

- What We Believe
 - Education First believes that *transformational* improvement in student achievement is possible and necessary.

- Who We Work With
 - Clients include:
 - Nonprofits & Advocacy Organizations (Achieve, Complete College America, Advance Illinois, Oregon Chalkboard Project)
 - Foundations (Gates, Hewlett)
 - Corporations (Microsoft, Boeing)
 - States (Arkansas, Louisiana, Minnesota, Ohio, Tennessee)
 - Districts (Seattle, Cleveland)
 - I3 (California, DC, New York, Washington state)

Support for California State Senate

- ❑ Focused on four education reform areas:
 - Teacher evaluation
 - **Early warning systems**
 - STEM
 - Accountability systems
- ❑ Includes today's workshop to inform the state's work in establishing, maintaining, and providing incentives to use early warnings systems in K–12 schools
- ❑ Generously funded by Hewlett and Irvine Foundations



Agenda

3:00 pm – 3:10 pm	Welcome + Introductions Susanna Cooper, Office of Senator Steinberg
3:10 pm – 3:45 pm	Overview of Early Warning Systems Education First Consulting
3:45 pm – 4:00 pm	Senate Bill 1357 Brad Strong, Children Now
4:00 pm – 5:00 pm	Discussion and Next Steps All

Overview of Early Warning Systems

Elements of Early Warning Systems

1. Indicators that predict academic failure
2. Benchmarks to trigger interventions
3. Technical infrastructure to identify at-risk students
4. Effective interventions to help students get back on track



What We Know about Indicators

- ❑ No single predictor is exhibited by all dropouts, but patterns & crisis spots exist.
 - Transitions from elementary to middle school and middle to high school are critical.
 - First month of transition years is informative.
- ❑ High-yield indicators cluster into two buckets:
 - Attendance / absenteeism
 - Academic performance (e.g., course failures, GPA, combination course failure & credits earned)

National High School Center

“High Yield Indicators”



Type of information	Indicator	Description	Benchmark
Attendance	Absenteeism rate	Number of days absent during the first 20 days and each quarter of the first year of HS	The equivalent of 10% of instructional time
Course performance	Course failures	Number of F's in any semester-long course in first year of HS	1 course
	GPA	GPA for each semester and cumulative GPA	< 2.0
	On-track indicator*	Combination of number of F's in core courses and credits earned in first year of HS	Two or more F's and/or fewer than ¼ number of credits required to graduate

*On-track indicator developed by Allensworth & Easton, Chicago Consortium of School Research



Indicators Can Vary by Grade

In Philadelphia, researchers found that the factors yielding a 75% probability of dropping out were different in 8th grade and 9th grade:

→ Key dropout factors in 8th grade:

- Failing math in 8th grade
- Failing English in 8th grade
- Attending less than 80% of the time

→ Key dropout factors in 9th grade:

- Earning fewer than 2 credits
- Not being promoted to 10th grade
- Attending less than 70% of the time



Early Grade Indicators Can Flag Students Well Before HS

- ❑ As early as **4th grade**, future drop outs from Fall River, MA, received consistently lower grades than future graduates.
- ❑ Sixth-graders in Philadelphia who:
 - Failed either a math or English course
 - Had an attendance rate of under 80 percent, or
 - Had a final unsatisfactory behavior mark in at least one classhad at least a 75 percent chance of dropping out of high school.



State Approaches to Identifying Indicators: Alabama

- ❑ Alabama Graduation Tracking System has three state-specified indicators:
 - Attendance: number of days absent in the first 20 days of each quarter
 - Behavior: number of out-of-class suspensions in each quarter
 - Course performance:
 - **Cumulative Grade Average**
 - **Credits Earned**
- ❑ Three indicators combined to provide factor count (1–3) for each student.
- ❑ System allows districts and schools to add indicators.

Benchmarks



What We Know about Benchmarks

- ❑ Benchmarks are where interventions are triggered.
- ❑ Like indicators, predictive benchmarks may vary by location and grade.
 - In Philadelphia, less than 80 percent attendance was the tipping point in 8th grade; less than 70 percent in 9th grade.
 - In Los Angeles, students who were absent for more than 10 days in a single school year were half as likely as their peers to graduate.



State Approaches to Setting Benchmarks

- ❑ Alabama Graduation Tracking System
 - Allows districts and schools to set their own benchmarks
 - Provides guidance on cut points for:
 - Districts to guide school interventions:
 - Absenteeism: 80% or lower in transition grades
 - Suspensions: failing marks for behavior in 6th grade
 - Course performance: earn F in ELA or math in 6th or 8th grade
 - Schools to guide student interventions:
 - Absenteeism: 10% out of school time in quarter
 - Suspensions: 10% out of school time in quarter
 - Course performance: fail 2 or more core courses; accumulate fewer credits than required to graduate; 2.0 or lower GPA

Technical Infrastructure to Identify At-Risk Students & Empower Interventions

Louisiana Dropout Early Warning System (DEWS)

DEWS DETAIL STUDENT

Age of Student

Total # of Referrals

DEWS Detail Student List														Run Date			
District														Total	Total	Int	Int
Student Name	Sidno	OD	Age	D	Pts	Enr	Days	Abscd	OPA	Serv	Beh	Ref's No	Meets	St us	Code	Years	
	08	15	166	0	0.0	0.5/1.8333"	20	022	C	C							
	08	14	154	0	0.0	0.1666/0.6666"	20	022	C	C							
	08	15	139	0	0.0	0.3333/0.6666"	20	022	C	C							
	08	15	111	0	0.0	0.3333/1.5"	20	022	C	C							
	08	16	166	0	0.0	0.8333/0.8333"	20	022	C	C							
	08	16	166	0	0.0	0.1666/0.1666"	20	022	C	C							
	08	17	49	0	0.0	0.3333/0"	20	022	C	C							
	08	16	166	0	0.0	0.1666/0"	20	022	C	C							
	08	16	166	0	0.0	1/1"	20	022	C	C							
	08	16	166	0	0.0	0.8333/1"	20	022	C	C							
	08	17	166	0	0.0	1/1"	20	022	C	C							
	08	14	166	0	0.0	0.8333/1.3333"	20	022	C	C							

List of students within a school

Intervention Codes

Intervention Status

Total Enrollment Days

Total Days Absence

Louisiana Dropout Early Warning System (DEWS)

DISTRICT SUMMARY

Dropout Early Warning System (DEWS) District Summary Report - Grades 8 - 12

p-LDE Central Office

School	School Name	Multiple Triggers				DEWS TOTAL	School Bandwidth	Age	Last Fall Date							
		Discipline & Attendance	GPA	Discipline & Attendance	Attendance & GPA											
1	1.8	34	63.7	6	10.7	1	1.8	5	5.9	35	62.5	56	17	06/01/08		
		342	62.3	90	15.4			81	14.5	351	63.9	549	200	06/01/08		
		5	12.5	22	55.0	4	10.0	4	10.0	22	55.0	40	7	06/01/08		
		397	66.6	80	16.2			78	15.8	399	66.9	483	193	06/01/08		
		5	21.7							5	21.7	33	2	06/01/08		
		1	0.0	161	56.9	8	4.8	1	0.6	163	56.1	163	163	06/01/08		
				296	74.2	73	15.3			306	76.7	389	155	06/01/08		
				39	62.9	10	16.1			41	66.1	62	24	06/01/08		
				13	35.1	13	35.1			5	13.5	37	3	06/01/08		
				19	43.9	4	9.8			19	43.9	41	4	06/01/08		
		1	0.8	437	65.4	65	12.7	4	0.8	1	0.2	64	12.5	1	0.2	
				15	38.5	1	2.6			16	41.0	36	7	06/01/08		
				27	45.8	4	5.8			29	47.5	59	14	06/01/08		
		1	2.4	20	47.6	4	9.5	1	2.4	1	2.4	2	4.8	1	2.4	
		1	0.2	531	66.8	76	12.3	1	0.2	73	11.9	533	87.1	612	174	06/01/08
				446	69.2	67	10.2			88	8.9	456	69.6	654	167	06/01/08
				4	11.1					4	11.1	36	2	06/01/08		
		11	7.5	145	58.6	34	23.1	11	7.5	4	2.7	34	23.1	4	2.7	
				21	52.5	1	2.5			1	2.5	21	52.5	40	12	06/01/08
		2	4.1	35	71.4	7	14.3	2	4.1	1	2.0	7	14.3	1	2.0	
		66	20.6	216	67.3	19	5.9	59	18.1	7	2.2	16	5.0	6	1.9	
				88	82.9	17	24.3			17	24.3	88	82.9	70	22	06/01/08
				2	4.9	4	9.8			5	12.2	41	1	06/01/08		
		1	0.3	322	76.8	25	8.7	1	0.3	1	0.3	24	8.3	1	0.3	
				13	28.0					13	28.0	53	7	06/01/08		
				15	19.2					15	19.2	78	6	06/01/08		
		2	5.1	25	64.1	1	2.6			1	2.6	25	64.1	39	15	06/01/08
				13	76.5	3	17.6			3	17.6	13	76.5	30	6	03/19/08
				1	100					1	100	1		06/01/08		
		95	1.9	3553	71.3	616	12.3	87	1.7	15	0.3	558	11.2	14	0.3	
										3617	72.6	4962	1714			

06/01/2008 9:33 PM

Total # of students who have triggered Attendance and GPA

List of Schools in the District

Total # of students who have triggered Attendance

Total # of students with DEWS Triggers for the District

Louisiana Dropout Early Warning System (DEWS)

STATEWIDE DISTRICT SUMMARY

Dropout Early Warning System (DEWS) District Summary Report - Grades 8 - 12

LEA	District Name	Absence		GPA		Attendance & GPA		Attendance & GPA		DEWS 100%	LEA Enrollment	Age	Last Full Day							
		#	%	#	%	#	%	#	%											
ALL	STATE	1019	2.2	12639	12.6	4015	6.0	798	1.1	328	0.5	1944	3.8	199	0.3	10536	22.2	71394	7942	
		167	5.9	316	11.0	63	2.2	81	1.8	10	0.4	27	1.0	7		485	16.8	2816	208	05/22/08
		12	0.9	139	4.8	13	1.0	6	0.5	1	0.1	3	0.2	1	0.1	144	11.0	1311	51	05/16/08
		69	3.5	245	17.4	82	5.8	31	2.2	12	0.9	51	3.6	11	0.8	208	16.0	1410	106	05/16/08
		128	6.0	225	9.5	16	4.1	19	5.0	5	0.2	11	0.5	2	0.1	516	20.8	2151	122	05/16/08
		2	0.3	59	3.2	0	0.0	2	0.3	0	0.0	9	1.2	0		83	7.0	769	52	05/16/08
		7	1.2	43	7.4	0	0.0	1	0.2	1	0.2	3	0.8	0		62	10.0	764	28	05/16/08
		1	0.2	27	5.1	0	0.0	0	0.0	0	0.0	0	0.0	0		50	9.4	50	16	05/22/08
		0	0.0	70	12.9	0	0.0	0	0.0	0	0.0	6	1.5	0		128	19.9	65	75	05/16/08
		0	0.0	73	8.1	0	0.0	0	0.0	0	0.0	6	2.7	0		79	8.8	0	0	05/16/08
		51	3.2	118	7.4	0	0.0	0	0.0	0	0.0	5	0.3	0		195	12.2	0	0	05/16/08
		0	0.0	117	24.9	0	0.0	0	0.0	0	0.0	0	0.0	0		156	32.4	0	0	05/16/08
		26	1.4	612	28.4	0	0.0	0	0.0	0	0.0	2	0.1	0		373	31.7	0	0	05/16/08
		34	3.6	152	17.7	0	0.0	0	0.0	0	0.0	6	0.6	0		248	26.6	0	0	05/16/08
		3	0.3	139	9.4	0	0.0	0	0.0	0	0.0	0	0.0	0		155	14.4	0	0	05/16/08
		196	4.7	587	14.2	0	0.0	0	0.0	0	0.0	10	0.2	0		691	21.3	0	0	05/16/08
		11	1.6	129	18.4	0	0.0	0	0.0	0	0.0	1	0.1	0		137	19.8	0	0	05/16/08
		9	0.6	111	5.7	0	0.0	0	0.0	0	0.0	2	0.1	0		158	6.1	0	0	05/16/08
		27	3.1	92	12.6	0	0.0	0	0.0	0	0.0	2	0.2	0		133	15.3	0	0	05/16/08
		31	1.8	195	9.9	0	0.0	0	0.0	0	0.0	5	0.2	0		288	21.1	0	0	05/16/08
		1	0.2	121	19.8	0	0.0	0	0.0	0	0.0	0	0.0	0		133	21.7	0	0	05/16/08
		12	0.9	178	13.6	141	11.2	7	0.6	4	0.2	41	3.3	1	0.1	286	21.7	1911	199	05/16/08
		26	2.9	299	28.6	43	4.7	18	2.0	4	0.4	26	2.9	2	0.2	282	31.1	907	142	05/16/08
		11	2.2	46	9.3	38	7.7	5	1.0	6	1.2	11	2.2	3	0.6	76	15.4	494	49	05/09/08
		12	1.1	129	11.8	37	3.4	9	0.8	2	0.2	9	0.8	0		159	14.5	1093	110	05/16/08
		2	0.1	75	3.3	20	1.4	1	0.1	0	0.0	4	0.3	0		82	6.5	1412	34	05/16/08
		13	3.0	62	19.2	23	6.8	13	3.0	6	1.4	15	3.4	9	1.4	86	22.4	428	97	05/16/08
		14	0.7	418	20.7	298	14.6	8	0.4	6	0.3	19	0.9	3	0.1	663	28.9	2016	334	05/16/08
		85	3.1	215	7.8	212	7.7	40	1.4	35	1.3	17	0.6	0		388	14.0	2770	178	05/20/08
		176	5.4	528	16.3	308	9.6	73	2.3	27	0.9	42	1.5	0		783	24.2	3234	336	05/20/08
		96	1.5	1223	18.9	0	0.0	0	0.0	0	0.0	15	0.2	0		1516	23.4	6470	642	05/20/08
		3	1.3	37	15.9	0	0.0	0	0.0	0	0.0	0	0.0	0		44	19.0	232	32	05/16/08
		12	1.3	263	21.7	0	0.0	0	0.0	0	0.0	1	0.1	0		242	26.7	636	107	05/16/08
		14	0.5	232	9.2	0	0.0	0	0.0	0	0.0	2	0.1	0		312	11.1	2811	150	05/22/08
		37	1.3	151	5.6	0	0.0	0	0.0	0	0.0	2	0.1	0		249	8.6	2884	123	05/22/08
		22	1.3	260	15.0	0	0.0	0	0.0	0	0.0	4	0.2	0		309	17.8	1737	126	05/16/08
		46	2.0	362	15.8	0	0.0	0	0.0	0	0.0	7	0.3	0		652	24.2	2288	252	05/13/08
		16	1.4	99	8.3	0	0.0	0	0.0	0	0.0	2	0.2	0		186	16.7	1182	111	05/16/08
		49	5.9	159	22.7	0	0.0	0	0.0	0	0.0	5	0.6	0		252	30.1	831	110	05/16/08
		51	1.8	601	21.1	0	0.0	0	0.0	0	0.0	12	0.4	0		663	23.3	2845	473	05/16/08

State Districts

Percentage of students with ATTENDANCE risk factors

Number of students with three At-Risk Triggers

Total # of students who have triggered a DEWS Warning

Louisiana Dropout Early Warning System (DEWS)

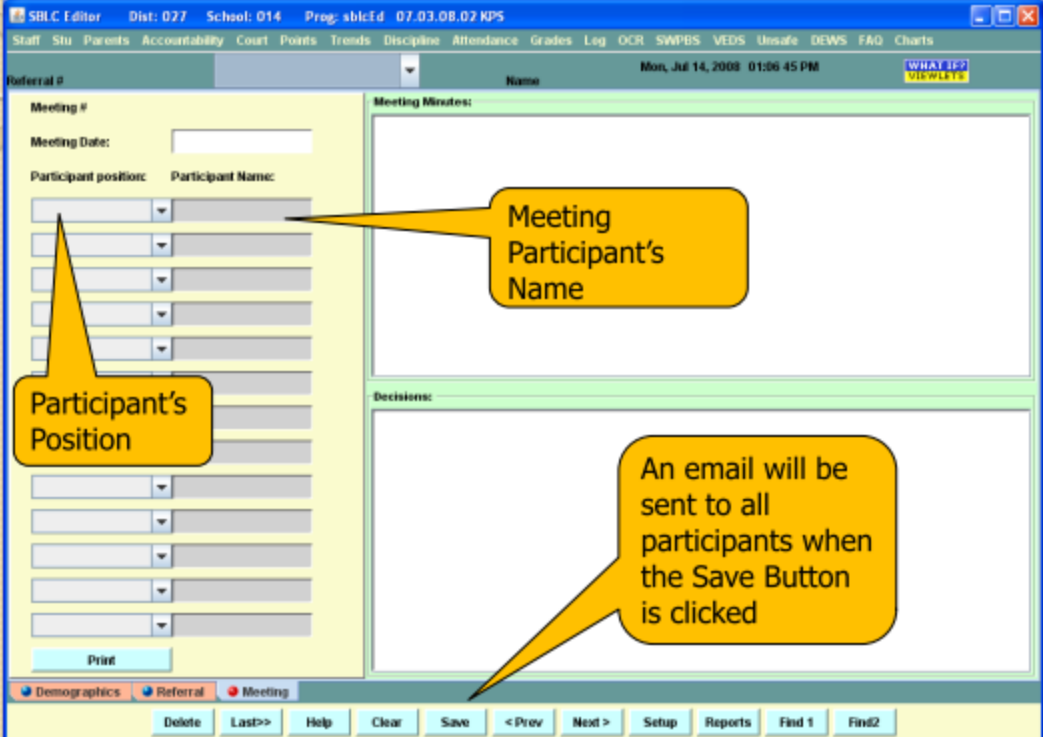
Once At-Risk Student(s) Identified and Confirmed

- ❖ Identify the Stakeholders
- ❖ Notification of the Meeting

School Committee Application is used to generate notifications, log all referrals, meetings, participants, and intervention codes

Louisiana Dropout Early Warning System (DEWS)

IDENTIFY STAKEHOLDERS



Meeting #

Meeting Date:

Participant position: Participant Name:

Meeting Minutes:

Decisions:

Print

Demographics Referral Meeting

Delete Last>> Help Clear Save < Prev Next > Setup Reports Find 1 Find2

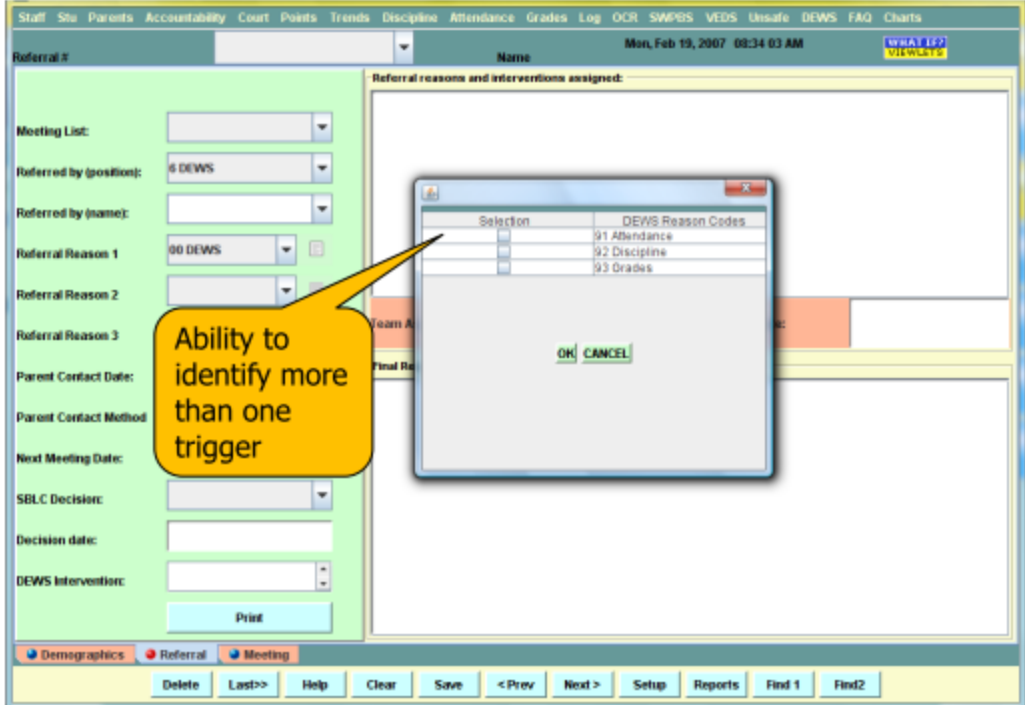
Participant's Position

Meeting Participant's Name

An email will be sent to all participants when the Save Button is clicked

Louisiana Dropout Early Warning System (DEWS)

INTERVENTION INPUT



The screenshot shows the 'INTERVENTION INPUT' form in the DEWS system. The form includes fields for Meeting List, Referred by (position), Referred by (name), Referral Reason 1, Referral Reason 2, Referral Reason 3, Parent Contact Date, Parent Contact Method, Next Meeting Date, SBLC Decision, Decision date, and DEWS Intervention. A modal dialog box is open, titled 'Selection', with a table of DEWS Reason Codes. A yellow callout bubble points to the dialog box with the text: 'Ability to identify more than one trigger'.

Selection	DEWS Reason Codes
<input type="checkbox"/>	91 Attendance
<input type="checkbox"/>	92 Discipline
<input type="checkbox"/>	93 Grades

OK CANCEL

Louisiana Dropout Early Warning System (DEWS)

NOTIFICATION OF MEETING

The Email Notification

School Building Level Committee Meeting Notification

Meeting Notification for: FRANKLIN, BOBBY **Meeting Date:** 04/28/08

This message is to inform you that you have been selected to participate in a SBLC student referral meeting. Details of this meeting are as follows:

Student:	BOB SMITH	
School:	EDgear High School(001)	
Grade:	12	
Homeroom Teacher:	JANE JONES	
Team Member Assigned:	TOM JONES	
Referral Number:	1	

Referral Comments:

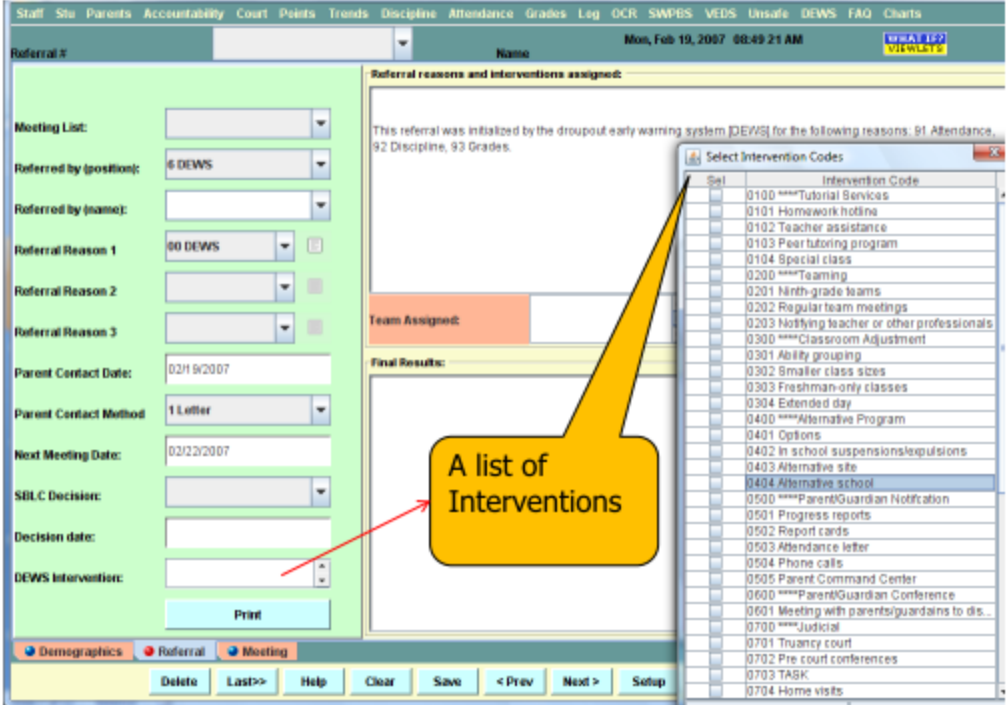
This is the type of referral comments when initialized from DEWS.
This referral resulted from notification by the automated DEWS systems testing of preset triggers. The student's problem appears as a result of a stormy divorce in his family and the unknown future. We have decided on the intervention types below and assigned a person to monitor progress for future tracking. These interventions will provide the mechanics for the student to return to normal.

Intervention Codes: 0101 Homework hotline, 0102 Teacher assistance, 0103 Peer tutoring program

This is the type of referral comments when initialized from a teacher's desk. I recommend a review of this student. He was a straight A student at the beginning of the year. Now his grades are poor and they keep getting worse. He went from being calm to emotional and frustrated. I talked to some of his other teachers and they recognize the same downward pattern.

Louisiana Dropout Early Warning System (DEWS)

INTERVENTION CHECKLIST



Staff Stu Parents Accountability Court Points Trends Discipline Attendance Grades Log OCR SWPBS VEDS Unsafe DEWS FAQ Charts

Referral #: [] Name: [] Mon, Feb 19, 2007 00:49 21 AM

Referral reasons and interventions assigned:

This referral was initialized by the dropout early warning system [DEWS] for the following reasons: 91 Attendance, 92 Discipline, 93 Grades.

Meeting List: []

Referred by (position): 6 DEWS

Referred by (name): []

Referral Reason 1: 90 DEWS

Referral Reason 2: []

Referral Reason 3: []

Parent Contact Date: 02/19/2007

Parent Contact Method: 1 Letter

Next Meeting Date: 02/22/2007

SBLC Decision: []

Decision date: []

DEWS Intervention: []

Print

Team Assigned: []

Final Results: []

Select Intervention Codes

Intervention Code	Description
0100	Tutorial Services
0101	Homework hotline
0102	Teacher assistance
0103	Peer tutoring program
0104	Special class
0200	Teaming
0201	Ninth-grade teams
0202	Regular team meetings
0203	Notifying teacher or other professionals
0300	Classroom Adjustment
0301	Ability grouping
0302	Smaller class sizes
0303	Freshman-only classes
0304	Extended day
0400	Alternative Program
0401	Options
0402	In school suspensions/expulsions
0403	Alternative site
0404	Alternative school
0500	Parent/Guardian Notification
0501	Progress reports
0502	Report cards
0503	Attendance letter
0504	Phone calls
0505	Parent Command Center
0600	Parent/Guardian Conference
0601	Meeting with parents/guardians to dis...
0700	Judicial
0701	Tuency court
0702	Pre court conferences
0703	TASK
0704	Home visits

Demographics Referral Meeting

Delete Last>> Help Clear Save < Prev Next > Setup

A list of Interventions

More About Interventions



Tiered Interventions

1. School-wide preventive strategies to ease transitions and focus on progress toward graduation
2. Group strategies to address particular risk factors
3. Individual strategies to reach the most challenged students



Interventions in Action

- ❑ Students don't self-correct — they need support and help before they drop out.
- ❑ Immediate care and intervention is essential:
 - Tutoring
 - Counseling
 - Transition partnerships
 - Family and community engagement
 - Behavior modification programs
- ❑ Intervening effectively requires knowing *who* is at-risk and *why*



Chicago Public Schools

- ❑ CPS is piloting an early-warning and intervention system in six of its high schools.
- ❑ Using students' historical data on attendance, grades, age, and discipline record, the central office analyzes the student data and provides each school with a list of at-risk students.
- ❑ Schools then use this and other school-based data (extracurricular activities, parent engagement information, and academic and discipline records) to develop, for each student, an intervention strategy that addresses:
 - Parent engagement
 - Connection to the school community
 - Social and emotional support
 - Academic support



Abbeville High School (LA)

- ❑ Using data from a district-wide system, developed an early-warning system and a five-level intervention system that includes a “freshman academy” for all 9th graders.
- ❑ At-risk students are identified every three weeks using warning indicators from the data system.
- ❑ Educators provide at-risk students with a variety of progressively intense interventions, including mandatory tutoring, staff and student mentors, and increased communication with families.
- ❑ In first year of full implementation, the combined use of early warning systems and the freshman academy decreased the number of 9th graders who were not promoted to tenth grade by 50 points.

The background features a repeating pattern of light green circles. A large, faint watermark of the California state emblem is centered on the left side of the page. The emblem consists of a sunburst with rays extending outwards, and a central shield with a grizzly bear.

California



Dropouts in California

Districts with the Highest High School Dropout Rates

In 2005–06, the 10 districts with the highest number of dropouts accounted for 36% of all the dropouts in California, and the top 50 accounted for more than 70% of all the dropouts in the state.



Nevada County Office of Education – 1,976 – 156.6%

Statewide – 69,613 – 3.3%

East Side Union High – 1,793 – 7%

Los Angeles Unified – 10,588 – 5.1%

Baldwin Park Unified – 2,125 – 28.9%

Los Angeles County Office of Education – 1,512 – 16.8%

San Bernardino City Unified – 1,299 – 8%

Kern Union High – 1,391 – 3.9%

Long Beach Unified – 1,494 – 5.3%

San Diego Unified – 1,377 – 3.6%

Vista Unified – 1,740 – 19.3%

Longitudinal Student Data System Requirements



Data Quality Campaign Element	Does CALPADS Have It?
1) Unique identifier to follow students	Yes
2) Demographic, enrollment, program participation & attendance data	Yes – EXCEPT attendance
3) Assessment scores	Yes
4) Reasons not tested	Yes
6) Course enrollment & grades	No
8) Graduation and drop out	Yes

Data Quality Campaign State Action	Does CA Do It?
7) Create reports that guide school-, district-, and state-level improvement efforts	No



Growing Base of Research

- ❑ Research in Los Angeles found that academic experiences are *six times* more likely than demographics to predict graduation rates
- ❑ Research in San Francisco, Long Beach, Fresno and Los Angeles found that students:
 - Who failed classes in 6th or 7th grade but did not fail in 8th grade graduated at *much higher rates* than students who continued to fail in 8th grade.
 - With more than two reported Fs in a core subject in 8th grade have a lower probability of graduating, on average, than their counterparts with zero or one course failures.



Key Elements in California

□ State level:

- Academic Performance Index (API) includes 8th and 9th grade dropout rates and cohort graduation rates.
- SB 1357 calls for collection of data on chronic absenteeism and other data collection improvements.



Key Leaders in California

- ❑ San Jose Unified School District
 - Creating a predictive model called Student Risk Assessment & Management Project (RAMP).
 - Uses longitudinal student data to identify students at risk and enable timely delivery of interventions.
 - Goal is to model for broader statewide use.
- ❑ Anaheim Union
 - Using software to aggregate discipline history, attendance and grades.
 - Objective is to more quickly identify at-risk students and take action.



Key Questions for California

- ❑ What are the prospects for SB 1357? Is it contingent on federal funds? Optional or mandatory?
- ❑ How else can state policy stimulate early warning systems?
- ❑ What resources can be leveraged?
- ❑ How will interventions be triggered, and what will the interventions be?
- ❑ Who are the key champions?

Thank You!



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