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ABSTRACT

This paper describes the processes that one school district, the Visalia Unified School District (California), went through in establishing a standards-based assessment and accountability system using multiple methods. First the district's standards-based assessment and accountability system and the methods used to establish it are described, and the approaches the district explored in setting the performance standards are outlined. After exploring publisher-developed standards, the district settled on setting the performance standards separately for each grade as recommended by the California Department of Education. The multiple measures used by the school district include norm-referenced and performance-based assessments from the TerraNova Multiple Assessments published by CTB/McGraw-Hill and their Spanish equivalents. The second part of the paper presents achievement results along with the adequate yearly progress target and disaggregated achievement data. The paper concludes with a discussion of implications for district and state policy for implementing the standards-based assessment and accountability system. (Contains 16 tables and 22 figures.) (SLD)

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Implementing Standards-Based Multiple Measures for IASA, Title I Accountability Using TerraNova Multiple Assessment

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Younghee Jang
Visalia Unified School District

April 16, 1998

TM029312

Paper presented at the 1998 American Educational Research Association Annual Meeting, San Diego, CA.

Introduction

The reauthorized Elementary and Secondary School Act (ESEA) called Improving America's School Act (IASA) requires states to set high academic content and performance standards for *all* students. One major element of this law is the "standards-based" accountability for local school districts and schools receiving Title I (previously Chapter I) funds. To implement the "standards-based" accountability, the California Department of Education (CDE) developed a statewide standards-based accountability system for local school districts and schools in California. According to these guidelines, school districts are required to establish a standards-based assessment and accountability system for all schools, including non-Title I schools. Districts and schools are required to report student achievement data based on the district adopted or developed performance standards, following the guidelines set by the CDE.

Districts and schools in California are faced with challenges in developing a standards-based assessment and accountability system that monitors student achievement and progress, and provide information that will help schools and teachers enhance student achievement through effective teaching and learning practices. The California Department of Education has set a goal for each school district and for each school to have at least 90 percent of students performing at or above grade-level standards in no more than ten years (i.e., in 2006-07).

To reach this goal, schools are expected to make adequate yearly progress each year, with 1996-97 as base year. Adequate yearly progress is the yearly increase in percent of students meeting or exceeding grade-level standards that will be needed to reach the goal of 90 percent in ten years. In 1996-97 and 1997-98, Title I schools will be candidates for Program Improvement if student performance data show that fewer than 40% of the students are meeting or exceeding grade-level standards.

This paper describes the processes that one school district went through in establishing a standards-based assessment and accountability system using multiple measures. First, the district's standards-based assessment and accountability system as well as the methods and procedures used to establish the system are described, followed by the several approaches that the district explored in setting the performance standards. The second part of the paper presents achievement results along with the adequate yearly progress target and disaggregated achievement data. The last section of the paper concludes with the implications for district and state level policy for implementing the standards-based assessment and accountability system.

Visalia Unified Assessment and Accountability System

The district's standards-based Assessment and Accountability System is presented in this section. It describes the measures the district employed in 1996-97 to identify the level of performance for individual students in reading/language arts and mathematics in grades K-12. It also describes the methods and procedures used to obtain a single standards-based performance level for individual students, including

- (a) the weight given to each measure in combining the results, and
- (b) the criteria/methods used to establish grade-level standards.

Description of Measures

Visalia Unified has a multi-year plan for developing a comprehensive assessment system that consists of multiple measures for assessing student achievement. The district believes that a comprehensive assessment system is an integral part of a high quality educational program for students. The goal of the district's assessment system is to:

- ▶ improve the quality of student learning
- ▶ provide accurate information about student achievement in all subjects and skill areas that will be used by teachers, schools, the district and the community to improve instructional programs for all students
- ▶ serve as a means by which both the staff and community can measure the progress of all students toward achieving the district's "List of Agreements."

The guiding principles of the district's assessment system are to:

- ▶ integrate teaching, learning and assessment into a system that creates and upholds consistently high standards for student performance
- ▶ provide students with an understanding of the purposes and benefits of a quality assessment system
- ▶ measure both specific knowledge and critical thinking
- ▶ incorporate more than one type of assessment to fairly evaluate student progress
- ▶ be practical to administer and provide accurate, useful and timely data
- ▶ be responsive to all students regardless of experience, background and abilities
- ▶ prepare teachers for an active role in analysis of student work to improve teaching and learning
- ▶ be reported to stakeholders in an understandable format

Implementing Local Standards-Based Assessment and Accountability System and Its Policy Implications

Introduction

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To reach this goal, schools are expected to make adequate yearly progress each year, with 1996-97 as base year. Adequate yearly progress is the yearly increase in percent of students meeting or exceeding grade-level standards that will be needed to reach the goal of 90 percent in ten years. In 1996-97 and 1997-98, Title I schools will be candidates for Program Improvement if student performance data show that fewer than 40% of the students are meeting or exceeding grade-level standards.

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- ▶ measure both specific knowledge and critical thinking
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- ▶ be practical to administer and provide accurate, useful and timely data
- ▶ be responsive to all students regardless of experience, background and abilities
- ▶ prepare teachers for an active role in analysis of student work to improve teaching and learning
- ▶ be reported to stakeholders in an understandable format

The district is in its second year of developing a comprehensive assessment system. The next phase of the district's assessment system will focus on developing assessment tools in mathematics for grades K and 1 and performance-based assessments in at least one grade from each grade span: grades 3-5, 6-9, and 10-12 in reading/language arts and mathematics.

In 1996-97 school year, the district's assessment system included multiple measures that consists of both norm-referenced test and performance-based assessments. For grades K-1 reading/language arts, the district administered classroom embedded Early Literacy Observational Surveys from the Early Literacy Project to all K-2 students in the district, including students with disabilities and limited-English proficient (LEP) students. For Kindergarten, three measures were administered in the Spring of 1997: Letter Identification, Hearing and Recording Sounds in Words and Writing Vocabulary. For first grade, Text Reading (Running Record) was administered. The Spanish equivalent of these measures was administered to our Spanish speaking LEP students. The results from the Text Reading along with student grades are used to report student achievement in reading/language arts for first grade. In the 1997-98 school year, a Writing Test in addition to Text Reading will be administered to all first graders. For grades K-1 in math, the district did not have any valid and reliable measures to administer in the 1996-97 school year. Student grades were used to report the K-1 student achievement in mathematics. The district will focus on developing K-1 math assessments in the 1997-98 school year.

For grades 2-10 reading/language arts and mathematics, the TerraNova and Supera (Spanish Equivalent of TerraNova) Multiple Assessments, published by CTB/McGraw-Hill, were administered to all students in grades 2-10 in the Spring of 1997, including special education and limited-English proficient (LEP) students in the district. Accommodations were made for testing of students with disabilities. The Supera was administered to our Spanish speaking LEP students. The TerraNova and Supera Multiple Assessments consist of test items that included both selected-response (SR) items and constructed-response (CR) items. Tables 1 and 2 display the percent of SR items and CR items included in the multiple assessments. Scores on all pieces of these items are combined to yield one single score in reading/language arts and mathematics.

Student academic grade on Junior English for grade 11 and Writing Proficiency Exam for grade 12 are used to report the student achievement in reading/language arts. For grades 11-12 mathematics, student academic grades on both algebra and geometry are used for reporting student achievement. Tables 1 and 2 show a matrix of the district's assessment and accountability system and the percent of the weight assigned to each measure to determine the percent of students meeting or exceeding the grade level standard in reading/language arts and mathematics, respectively.

Table I: Matrix of 1996-97 Visalia Unified Assessment System and Weight Assigned to Each Measure for Reading/Language Arts (percent)

Measures	Reading/Language Arts								
	Letter Identification	Hearing & Recording Sounds in Words	Writing Vocabulary	Text Reading	Grade on Report Cards	TerraNova & Supera Multiple Assessments*		Grade on Junior English**	Writing Proficiency Exam***
						SR	CR		
Grade K	40%	35%	25%						
Grade 1				70%	30%				
Grade 2						85%	15%		
Grade 3						83%	17%		
Grade 4						86%	14%		
Grade 5						86%	14%		
Grade 6						86%	14%		
Grade 7						86%	14%		
Grade 8						86%	14%		
Grade 9						87%	13%		
Grade 10						87%	13%		
Grade 11								100%	
Grade 12									100%

* TerraNova and Supera Multiple Assessments consist of test items that include both selected-response (SR) items and constructed-response (CR) items. The percent of SR items and CR items in the test is indicated in the table. Under item pattern scoring, weight of each item is a function of item discrimination and variability of student responses. Scores on all pieces of these items are combined to yield one single score in reading/language arts and mathematics.

** Included students who passed Junior English by the end of their 11th grade.

*** Included students who passed the Writing Proficiency Exam by the end of their 12th grade.

Table 2: Matrix of 1996-97 Visalia Unified Assessment System and Weight Assigned to Each Measure for Mathematics (percent)

Measures	Mathematics			
	Grade on Report Cards	TerraNova & Supera Multiple Assessments*		Grade on Algebra & Geometry**
		SR	CR	
Grade K	100%			
Grade 1	100%			
Grade 2		76%	24%	
Grade 3		79%	21%	
Grade 4		76%	24%	
Grade 5		76%	24%	
Grade 6		76%	24%	
Grade 7		76%	24%	
Grade 8		76%	24%	
Grade 9		71%	29%	
Grade 10		71%	29%	
Grade 11				100%
Grade 12				100%

* TerraNova and Supera Multiple Assessments consist of test items that include both selected-response (SR) items and constructed-response (CR) items. The percent of SR items and CR items in the test is indicated in the table. Under item pattern scoring, weight of each item is a function of item discrimination and variability of student responses. Scores on all pieces of these items are combined to yield one single score in reading/language arts and mathematics.

**Included students who passed both algebra and geometry by the end of 11 th grade for grade 11 and by the end of 12th grade for grade 12.

Description of Methods Used for Setting Visalia Unified Performance Standards

Three levels of performance standards were established for grades K-1 reading/language arts:

1. *Advanced* (above grade-level standard),
2. *Proficient* (at grade-level standard) and

3. *Partially Proficient* (below grade-level standard).

In setting the grade-level standards, scores from the Early Literacy measures were used. Tables 3 and 4 show the score cut points for each performance level - at, above and below standards - and the percent of weight assigned to each measure for Kindergarten and first grade, respectively. For example, Letter Identification score 36 or above represents at or above grade-level standards for Kindergarten. Writing Vocabulary score 7 or below represents below grade-level standards. In judging student performance, Letter Identification measure was weighted 40%, Hearing and Recording Sounds in Words 35% and Writing Vocabulary 25% for Kindergarten. For first grade, Text reading was weighted 70% and grade was weighted 30%.

Visalia Unified has an Early Literacy Training Team that consists of six teachers. These teachers provide inservice to all K-2 teachers in the district to implement the Early Literacy Program. The performance standards were developed by the committee that consists of the Early Literacy Training Team and district staff from the elementary education, compensatory education and evaluation and assessment offices. Research studies from the Early Literacy Program, Reading Recovery Program and our students data from the Observational Surveys were examined along with the published statistical information in setting the performance standards for grades K-2 reading/language arts.

K- 1 Reading/Language Arts Assessment Performance Standards

Table 3: *Kindergarten Reading/Language Arts Assessment Performance Standards*

Measures		Performance Standards		Scores
1.	Letter Identification	3 Advanced	<i>Above standards</i>	50+
	(weight: 40%)	2 Proficient	<i>At standards</i>	36 - 49
		1 Partially Proficient	<i>Below standards</i>	0 - 35
2.	Hearing & Recording Sounds in Words	3 Advanced	<i>Above Standards</i>	32+
	(weight: 35%)	2 Proficient	<i>At standards</i>	22 - 31
		1 Partially Proficient	<i>Below standards</i>	0 - 21
3.	Writing Vocabulary	3 Advanced	<i>Above Standards</i>	13+
	(weight: 25%)	2 Proficient	<i>At standards</i>	8 - 12
		1 Partially Proficient	<i>Below standards</i>	0 - 7

Table 4: First Grade Reading/Language Arts Assessment Performance Standards

Measures		Performance Standards		Scores
1.	Text Reading	3 Advanced	Above standards	18+
	(weight: 70%)	2 Proficient	At standards	14 - 16
		1 Partially Proficient	Below standards	12 or below
2.	Report Cards	3 Advanced	Above Standards	"Excellent"
	(weight: 30%)	2 Proficient	At standards	"Satisfactory"
		1 Partially Proficient	Below standards	"Progressing, below grade level (P)" or "Needs Improvement (N)"

For kindergarten mathematics, two performance levels were established: Proficient (at grade-level standard) and Partially Proficient (below grade-level standard), using information from the student report cards. "Satisfactory growth" represents at grade-level standard and "progress but needs to continued experience" represents below grade-level standard (See Table 5). For first grade mathematics, three levels of performance standards were established. Student grade from report cards was also used in setting these standards. "Excellent" represents above grade-level standard and "Satisfactory" represents at grade-level standard. "P" or "N" represents below grade-level standard (See Table 6).

K- 1 Math Assessment Performance Standards

Table 5: Kindergarten Mathematics Performance Standards

Measures		Performance Standards		Scores
1.	Report Cards	2 Proficient	At standards	"Satisfactory growth (✓)"
		1 Partially Proficient	Below standards	"Progressing, but needs continued experiences (P)"

Table 6: First Grade Mathematics Performance Standards

Measures		Performance Standards		Scores
1.	Report Cards	3 Advanced	<i>Above Standards</i>	"Excellent"
		2 Proficient	<i>At standards</i>	"Satisfactory"
		1 Partially Proficient	<i>Below standards</i>	"Progressing, below grade level (P)" or "Needs Improvement (N)"

Grades 2-10 Reading/Language Arts Performance Standards

Described below are the methods and procedures used to establish the district's performance standards in grades 2-10 for reading/language arts and mathematics based on the guidelines set by the California State Department of Education's Statewide Accountability System. The TerraNova and Supera Multiple Assessments were administered to all students in grades 2-10. Four levels of performance standards were established:

1. *Advanced* (exceed or above grade-level standards),
2. *Proficient* (meet or at grade-level standards),
3. *Partially Proficient* (below grade-level standards) and
4. *Below Partially Proficient* (below grade-level standards).

A National Percentile (NP) score is used in setting the district's performance standards in grades 2-10. The state requires that the 50th National Percentile or above should be used in judging student performance for meeting the grade-level standards. In setting the proficient level performance, the 50th percentile is used as a cut point. The 76th percentile, which represents the top quarter of percentile, is used as a cut point in setting the advanced level performance. Table 7 shows the NP cut points for each performance level across grade levels 2-10.

Table 7: Grades 2-10 Reading/Language Arts and Mathematics Performance Standards

Performance Level	National Percentile
<i>Advanced</i> (Above or Exceed Grade-Level Standards)	76 and above
<i>Proficient</i> (At or Meet Grade-Level Standards)	50 - 75
<i>Partially Proficient (PP)</i> (Below Grade-Level Standards)	35 - 49
<i>Below PP</i> (Below Grade-Level Standards)	34 and below

Partially proficient (PP) level is established to show the percent of students making progress from partially proficient to proficient each year. The purpose of this information is to assist schools in monitoring their instruction and programs to better meet the needs of these students. A National Percentile of 35, previously the Title I identification cut point, is used in setting the partially proficient level.

Several approaches were explored and reviewed internally in setting the performance standards. The CTB/McGraw-Hill's performance standards were examined. Alternative approaches to the publisher's performance standards were also explored. A study session on setting performance standards was held with the school board and the public. Advantages and disadvantages along with the technical qualities on each approach were discussed and examined during this study session. The district adopted the performance standards that will result in more valid and consistent information as well as the most meaningful to the district and local schools, following the recommendations from the California State Department of Education.

Grades 11-12 Reading/Language Arts and Math Performance Standards

Student academic grade was converted into a standard score: 3, 2 or 1. Table 8 shows each grade's corresponding standard score. Grade "A" represents above grade-level standard. Grades "B" or "C" represents at grade-level standard. The percent of students with standard scores 2 or 3 is reported as meeting or exceeding grade-level standards.

Table 8: Grades 11-12 Reading/Language Arts and Mathematics Performance Standards

Grade	Performance Standards	Standard Score
"A"	<i>Above Standard</i>	3 (pass)
"B" or "C"	<i>At Standard</i>	2 (pass)
"D" or "F"	<i>Below Standard</i>	1 (fail)

The methods and procedures used in determining the percent of students at or above grade-level standards in reading/language arts and mathematics are as follows. Student grades in Junior English for grade 11 and the Writing Proficiency Exam (WPE) for grade 12 were used in determining the percent of students meeting or exceeding grade-level standards in reading/language arts. Student grades on both algebra and geometry courses was used in determining the percent of students meeting or exceeding grade-level standards in mathematics for grades 11 and 12.

All of the students who were enrolled and passed Junior English by the end of grade 11 (includes grades 9 or 10) and WPE by the end of grade 12 (includes grades 9, 10, or 11) were included in the calculation. All of the students who were enrolled and passed both algebra and geometry by the end of grade 11 (includes grades 9 or 10) and by the end of grade 12 (includes grades 9, 10, or 11) were included in calculating the percent of students meeting or exceeding grade level standards. The chart below illustrates the formulas for grades 11 & 12 calculation.

GRADE 11:

$$\text{Percent of students at/above grade-level standards} = \frac{\text{Number of students passed in grades 9, 10, or 11}}{\text{Total number of grade 11 student population}}$$

GRADE 12:

$$\text{Percent of students at/above grade-level standards} = \frac{\text{Number of students passed in grades 9, 10, 11, or 12}}{\text{Total number of grade 12 student population}}$$

Procedures for combining grades on both algebra and geometry to determine the grade-level standard are illustrated in Table 9. As Table 9 illustrates, the grade on both algebra and geometry from each semester were converted into a standard score. These standard scores were then added together. The total score was divided by the number of semesters. The final score 2.5 was rounded up to 3. The score 3 represents above grade level standard.

Table 9: Illustration of Combining Student Grade to Determine Grade-Level Standards

Course	Semester	Student Grade	Standard Score	Final Score	Calculation
Algebra	Semester 1	"A"	3		
	Semester 2	"C"	2		
Geometry	Semester 1	"B"	2		
	Semester 2	"A"	3		
Sum			10	3 (pass)	(3+2+2+3)/4=2.5

ELD Standards

ELD standards are set by the number of years that a student has received ELD instruction using the Student Oral Language Observation Matrix (SOLOM) test. Table 10 shows SOLOM score cut points by the number of years of ELD instruction a student received. As can be seen in Table 10, for the first year of ELD instruction, a SOLOM score 8 or above represents that a student is meeting the standard for developing his/her language proficiency in English. For a student to be judged as fluent in English using SOLOM, he/she must score 23 or above.

Table 10: ELD Standards by Number of Years of Instruction

Year in ELD Instruction	SOLOM Scores
1st	8+
2nd	13+
3rd	18+
4th and 5th	23+

Approaches To Setting Performance Standards

This section of the paper describes the methods that the district studied in setting the performance standards using the norm-referenced standardized achievement test. The district administered the TerraNova and Supera (Spanish equivalent of TerraNova) Multiple Assessments, published by CTB/McGraw-Hill, to students in grades 2-10 in the Spring of 1997. In setting the district's performance standards, several approaches were explored and reviewed internally. First, the publisher's performance standards setting approach was examined. Second, alternative approaches to the publisher's performance standards were explored. A study session on setting performance standards was held with the school board and the public. Advantages and disadvantages along with the technical qualities of each approach were discussed and examined during this study session. Below describes each of the four approaches that the district examined in setting the performance standards.

First Approach: Use publisher developed performance level standards

Table 11: Publisher's Recommended Grade Level Cut Scores in National Percentiles (NP)

Grade	Proficient			Advanced		
	Reading	Language	Math	Reading	Language	Math
2	59	61	60	89	90	90
3	86	87	95	97	97	99
4	76	80	85	93	95	97
5	67	68	70	91	91	90
6	82	81	88	96	95	97
7	75	76	79	94	93	94
8	67	69	67	90	91	90
9	89	90	91	98	98	99
10	85	87	88	97	98	98

Within the context of California Accountability System, which recommends that content and performance standards should be developed on a grade by grade basis, this first approach does not provide valid information by grade level. Rather than developing performance standards for each grade separately, the publisher chose to develop standards by grade spans: grades 1-2, grades 3-5, grades 6-8 and grades 9-12. For example, the grade span 3-5, the same standards apply for grades 3, 4 and 5. This means, by design, the number of students meeting the proficient and advanced level will be smaller for the fourth grade and still much smaller for the third grade compared to students in the fifth grade. As can be seen in Table 11, a NP cut score in reading for third grade is much higher (86 percentile) than that of the fourth grade (76 percentile) and fifth grade (67 percentile). This is likely to give a misleading picture of student achievement because it will appear that fourth and third grade students are not performing as well as the fifth grade students.

Figures 1-3 shows the percent of the students in the norm group that performed at or above standards in reading, language and mathematics based on the CTB's performance standards. This approach was not recommended on technical ground.

Insert Figures 1-3 Here

Figures 1-3: Percent of Students in the Norm Group At (Proficient) or Above (Advanced) Standards Based on the CTB's Standards

Figure 1:

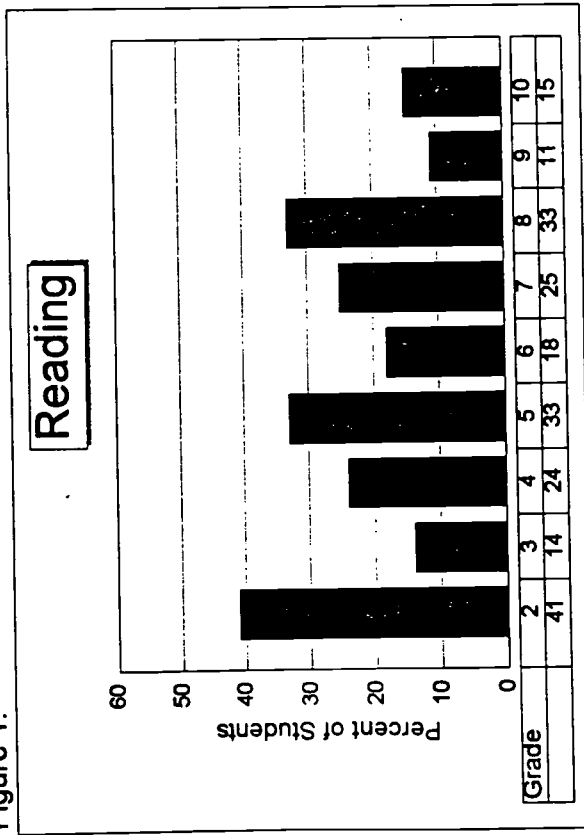


Figure 2:

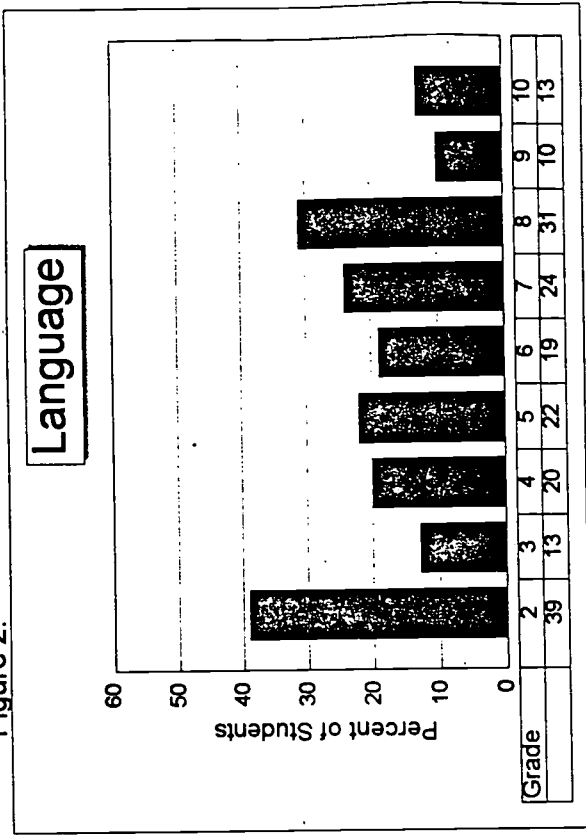
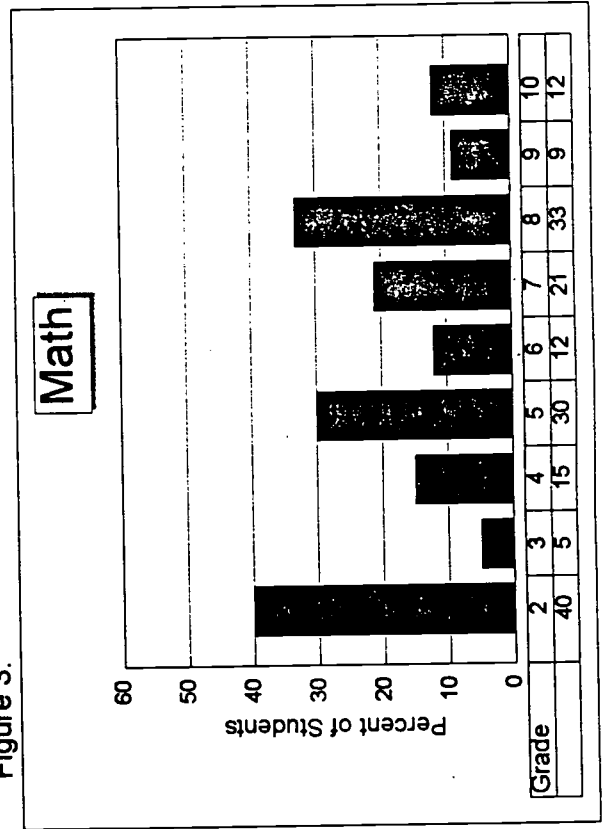


Figure 3:



Second Approach: Use publisher developed performance standards and interpolate National Percentiles (NP) using benchmark grade level (grades 2, 5, 8, and 12) NP score

Table 12: Interpolated Grade Level Cut Scores Based on Publisher's Benchmark Grade Levels (2, 5, 8 and 12) In National Percentiles (NP)

Grade	Proficient			Advanced		
	Reading	Language	Math	Reading	Language	Math
2	59	61	60	89	90	90
3	62	63	63	90	90	90
4	65	65	66	90	90	90
5	67	68	70	91	91	90
6	67	68	69	90	91	90
7	67	68	68	90	91	90
8	67	69	67	90	91	90
9	68	70	69	90	91	91
10	69	71	70	91	91	91

This approach uses the publisher's performance standards and interpolates National Percentile (NP) cut scores using the benchmark grade level - grades 2, 5, 8, and 12. For example, a second grade NP cut score for proficient level in reading is 59. A fifth grade NP cut score for proficient level in reading is 67. The NP score difference between grades 2 and 5 in reading is 8 points. This score difference, 8 points, is divided by 3, the number of grades between grades 2 and 5. This number, 2.67 (8 divided by 3), is evenly distributed between grades 2 through 5. Using this approach, a NP cut point for grades 2, 3, 4 and 5 for proficient level in reading is 59, 62, 65 and 67, respectively.

Performance standards for the second approach are set on a grade by grade basis, unlike the first approach. However, these standards are external to the district and the state. They are not developed for California specifically. Thus, these standards are less meaningful to the district and local schools. Rather, they are more comparable to the national standards such as National Assessment of Educational Progress (NAEP), which are very stringent standards.

Third Approach: Use benchmark grade level (grades 2, 5, 8, 12) National Percentiles (NP) to set the performance standards for other grades.

Table 13: Benchmark Grade Level (2, 5, 8 and 12) National Percentiles Applied To Each Grade Level Within Grade Span: 1-2, 3-5, 6-8, 9-12

Grade	Proficient			Advanced		
	Reading	Language	Math	Reading	Language	Math
2	59	61	60	89	90	90
3	67	68	70	91	91	90
4	67	68	70	91	91	90
5	67	68	70	91	91	90
6	67	69	67	90	91	90
7	67	69	67	90	91	90
8	67	69	67	90	91	90
9	71	72	73	92	91	93
10	71	72	73	92	91	93

The third approach to setting the standards examined the publisher's benchmark grade level NP cut scores and used the benchmark grade level National Percentiles to set the standards for other grade levels within each grade span: grades 1-2, grades 3-5, grades 6-8 and grades 9-12. For example, a NP score of 67 for grade 3 was applied to also grades 4 and 5. This approach was not recommended since it is based upon many assumptions which may or may not be valid because the same standards are used across the grade span.

Fourth Approach: Set local standards using National Percentile (NP) score

Table 14: Local Performance Standards National Percentile Cut Scores

Grade	Proficient			Advanced		
	Reading	Language	Math	Reading	Language	Math
2	50	50	50	76	76	76
3	50	50	50	76	76	76
4	50	50	50	76	76	76
5	50	50	50	76	76	76
6	50	50	50	76	76	76
7	50	50	50	76	76	76
8	50	50	50	76	76	76
9	50	50	50	76	76	76
10	50	50	50	76	76	76

In the fourth and last approach to setting the standards, the 50th percentile is used as a cut point in setting the proficient level. The 76th percentile, which represents the top quarter of percentile, is used as a cut point in setting the advanced level performance. The fourth approach is consistent with the guidelines set by the California Department of Education (CDE). The state requires that the 50th National Percentile or above should be used in judging student performance for meeting the grade-level standards. The CDE also recommends that the standards should be developed on a grade by grade basis. In this approach, standards are set consistent across grade levels. This procedure will result in more consistent estimates that will be comparable to other districts because most districts are likely to set their standards at the 50th percentile level following the CDE guidelines.

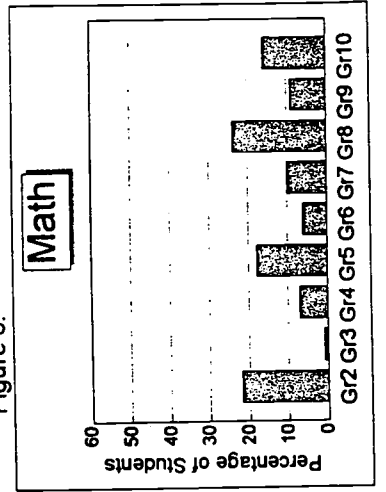
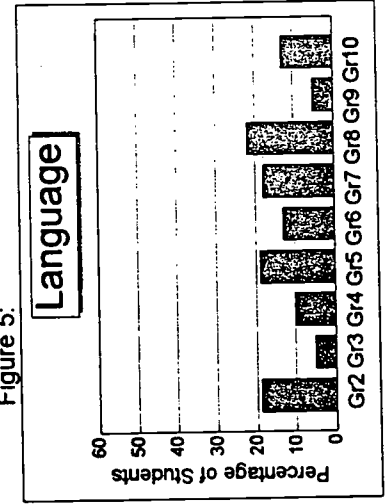
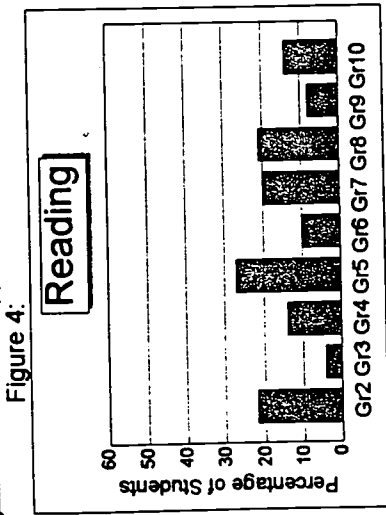
An in-depth study session was conducted with the local school board and the public about all approaches to setting the performance standards. Advantages and disadvantages along with the technical qualities pertaining to each approach were examined. The second and the fourth approach was examined and discussed as possible standards for the district. One of the difficulties for adopting the performance standards developed by the test publisher was that those standards were not particularly relevant to the state and district. They were not developed for California specifically, rather these standards were more closely aligned with the standards such as NAEP. Therefore, it was concluded that they were less meaningful to the local district and schools.

Finally, the district took the approach to set the performance standards for each grade independently as recommended by the CDE. It was also concluded that the local approach will result in more valid and consistent information as well as the most meaningful to the district and schools, following the recommendations from the CDE. The district adopted the fourth approach in setting the performance standards. Figures 4-6, 7-9, and 10-12 present the district achievement data pertaining to approaches one, two and four respectively.

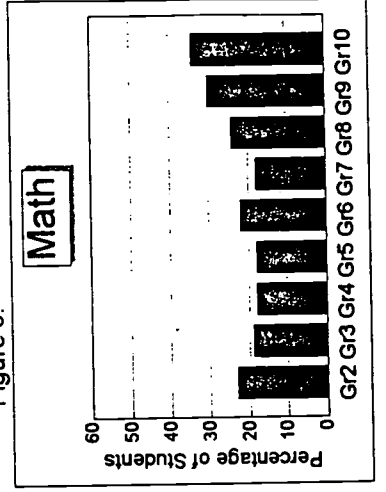
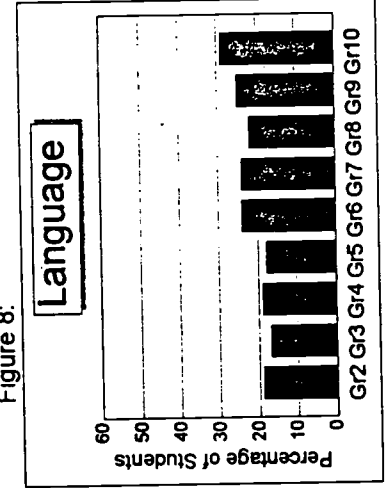
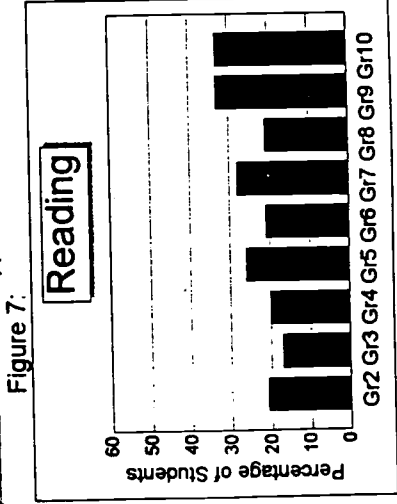
Insert Figures 4-6, 7-9 and 10-12 Here

TerraNova Multiple Assessments Test Results - District Summary
 Percent of Students At (Proficient) & Above (Advanced) Standards
 Approaches for Setting Performance Standards

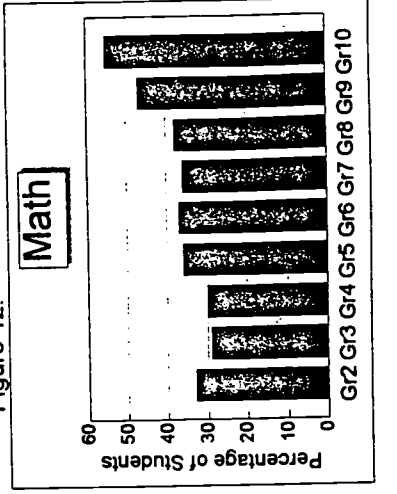
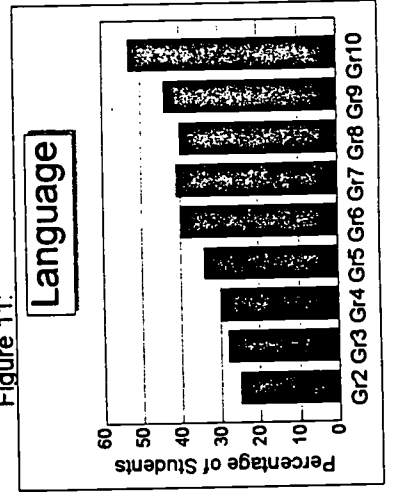
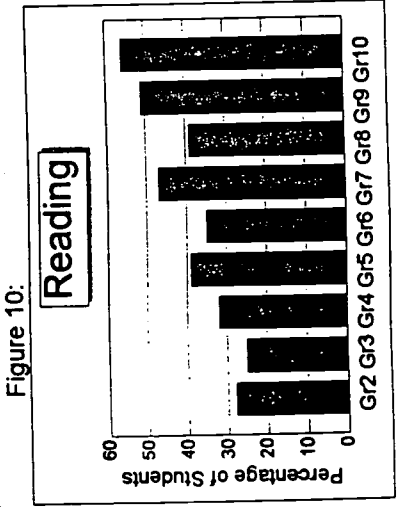
Figures 4-6: First Approach - CTB's Performance Level Standards



Figures 7-9: Second Approach - CTB's Performance Level Standards: Interpolation of NP Score



Figures 10-12: Fourth Approach - Local Standards: 50 National Percentile (NP) and Above



Achievement Results and Disaggregated Data

This part of the paper summarizes student achievement results for the district and for each school in the district. Achievement results are reported by the percent of students at or above grade-level standards in reading/language arts and mathematics. Achievement results are based on the students who were in the school for a full academic year, that is, students who were enrolled in the school since the first month of the school year. Student achievement results are disaggregated by the following categories:

1. Title I students
2. Migrant students
3. Language proficiency
 - a. Limited-English Proficient (LEP) students
 - b. Fluent-English Proficient (FEP) students
 - c. English Only (EO) students
 - d. Redesignated-Fluent-English Proficient (R-FEP) students
4. Special education students
5. Gifted and Talented (GATE) students
6. Ethnicity
7. Educationally Disadvantaged Students - free/reduced lunch program vs. paid lunch program
8. Gender
9. English Language Development (ELD)

Disaggregated achievement results are based on the students who were in the school for a full academic year, except for the migrant students. For migrant students, achievement results are based on all migrant students assessed, regardless of length of time in the school.

The districtwide accountability summary by the percent of students at or above the grade-level standards combining content areas (see Table 15 and Figure 13) and by each content area, reading/language arts and mathematics are presented (see Figures 14-15). Table 16 shows the percent of the students at or above the grade level standards for each school in the district. An adequate yearly progress growth target for each school in 1997-98 year to reach the goal of 90 percent of students meeting or exceeding the grade-level standards in ten years is also presented (see Figures 16 & 17). Figures 18-37 present the disaggregated data by programs and subgroups summarized by content areas, reading, language and mathematics.

Insert Table 15 and Figures 13-15 Here

Insert Table 16 Here

Insert Figures 16 and 17 Here

Insert Figures 18-37 Here

Standards-Based Student Achievement Results

Full Academic Year Students

Table 15: District Summary

Grade	Percent of Students At or Above Standards		
	Reading/Language Arts	Mathematics	Total
K	76	78	77
1	49	87	68
2	26	33	29
3	28	30	29
4	33	31	32
5	37	37	37
6	37	38	38
7	45	37	41
8	42	39	40
9	50	50	50
10	60	62	61
11	77	44	60
12	99	48	73
Total	50	47	48
AYPGT			4.7

Figure 14:

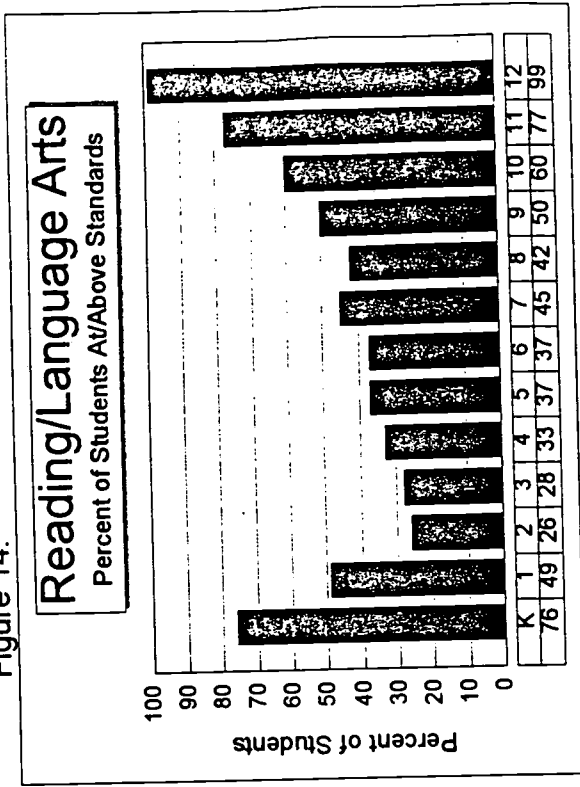


Figure 13:

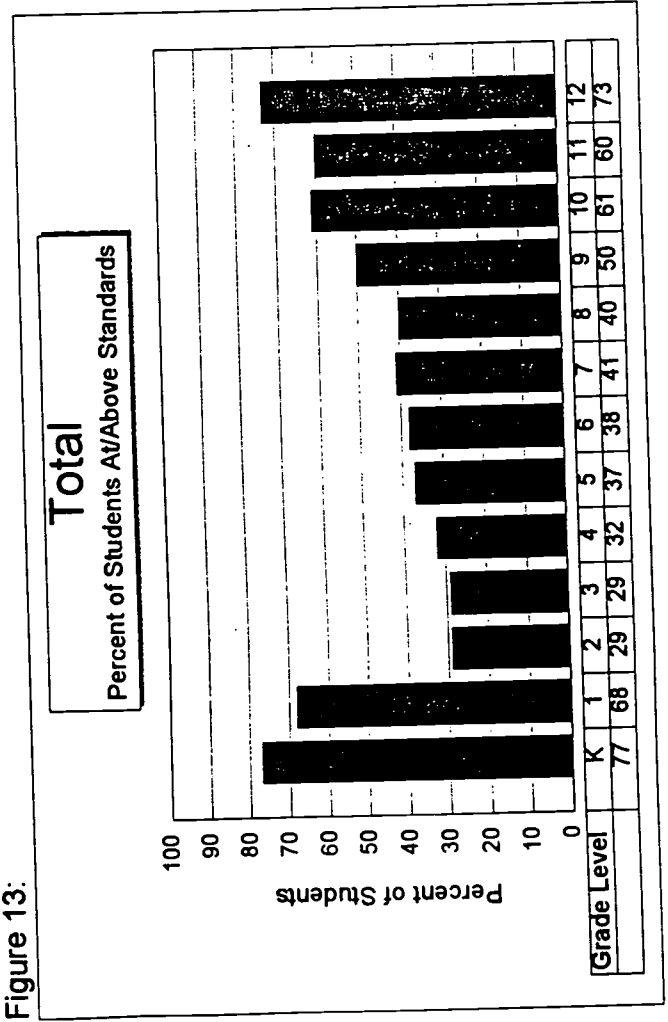


Figure 15:

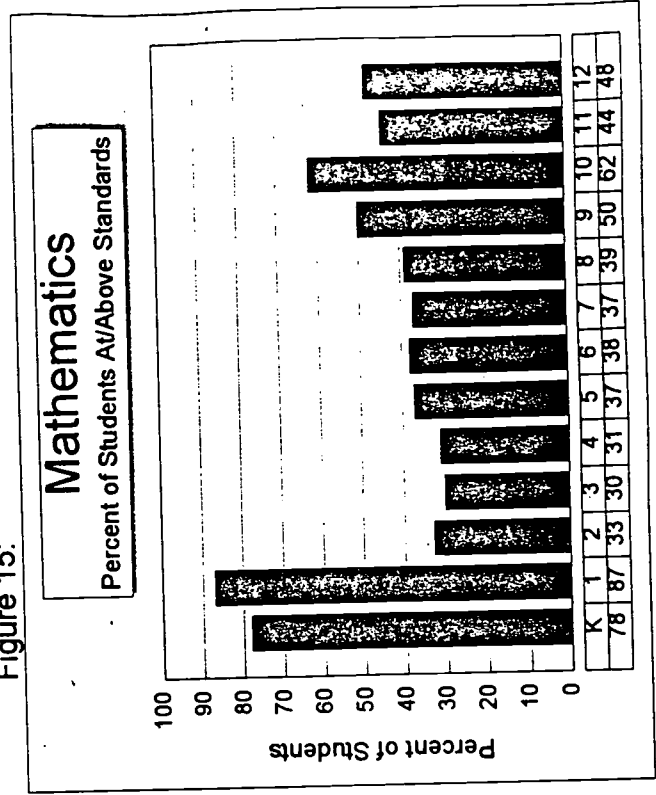


Table 16: Visalia Unified School District Accountability Summary Report By School

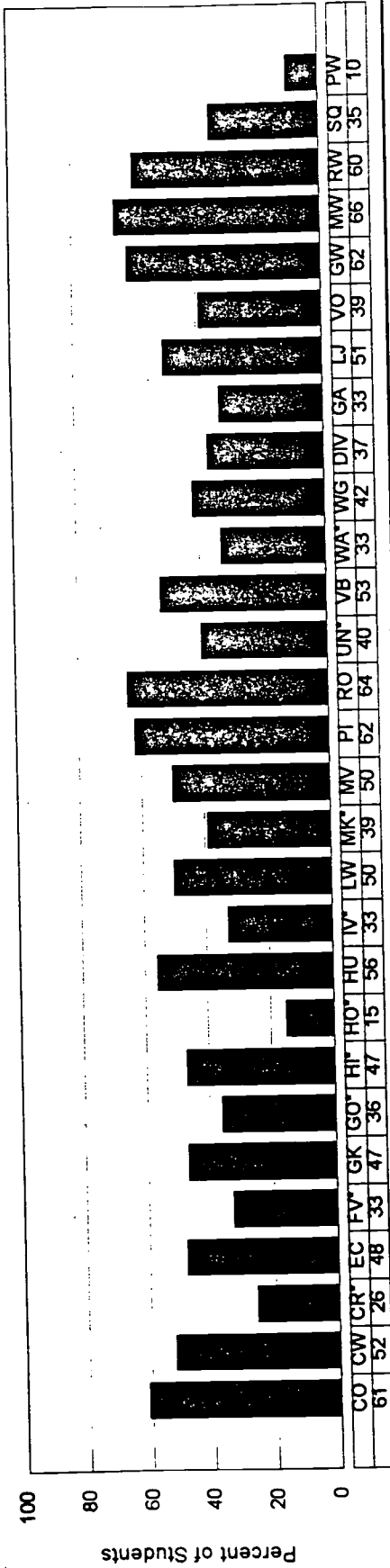
School Site	Percent of Students At or Above Standards (%)	Meet 40% Accountability (✓)	Percent of Growth Target for 1997-98 (%)
CO	61	✓	3.2
CW	52	✓	4.2
CR *	26		7.1
EC	48	✓	4.7
FV *	33		6.3
GK	47	✓	4.8
GO *	36		6.0
HI *	47	✓	4.8
HO *	15		8.3
HU	56	✓	3.8
IV *	33		6.3
LW	50	✓	4.4
MK *	39		5.7
MV	50	✓	4.4
PI	62	✓	3.1
RB**	0		10.0
RO	64	✓	2.9
UN *	40	✓	5.6
VB	53	✓	4.1
WA *	33		6.3
WG	42	✓	5.3
DIV	37		5.9
GA	33		6.3
LJ	51	✓	4.3
VO	39		5.7
GW	62	✓	3.1
MW	66	✓	2.7
RW	60	✓	3.3
SQ	35		6.1
PW***	10		8.9

* Title I Schools; ** 100 percent special education school; ***Alternative school
 Accountability summary is across grade levels and subject areas, reading/language arts and mathematics.

School Accountability Summary Report: Full Academic Year

Figure 16:

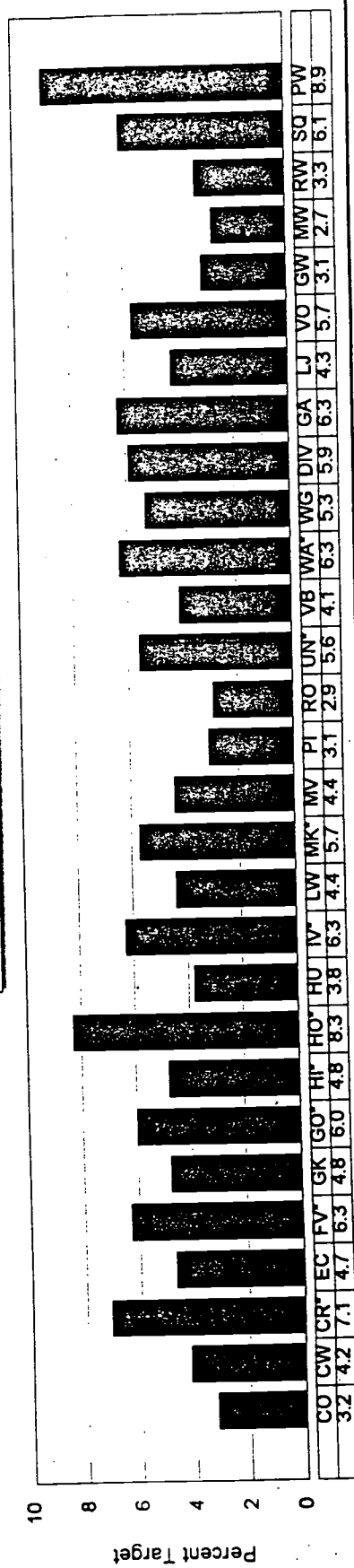
School Achievement Summary Percent of Students At or Above Standards



* Title I School

Figure 17:

Percent of Growth Target 1997-98 Year



Standards-Based Student Achievement Results
 Districtwide Summary by Disaggregated Categories
 Percent of Students At or Above Standards

Figure 18:

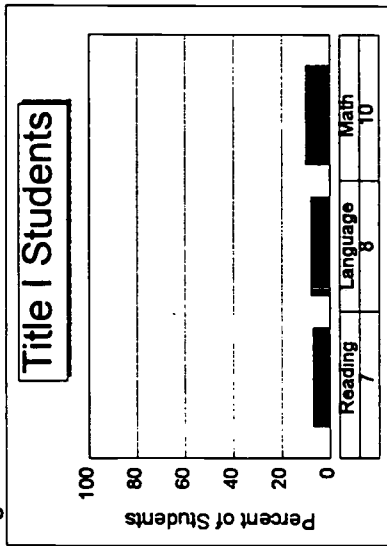


Figure 19:

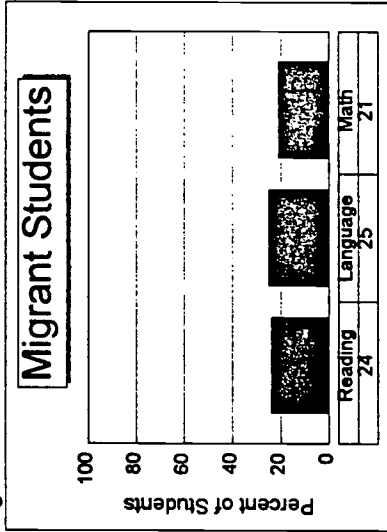


Figure 20:

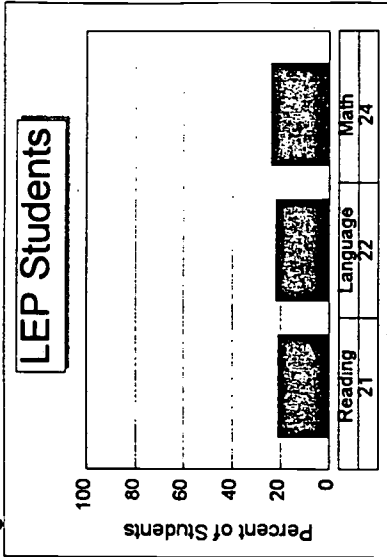


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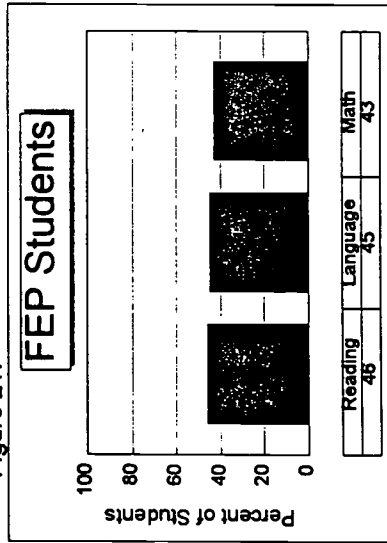


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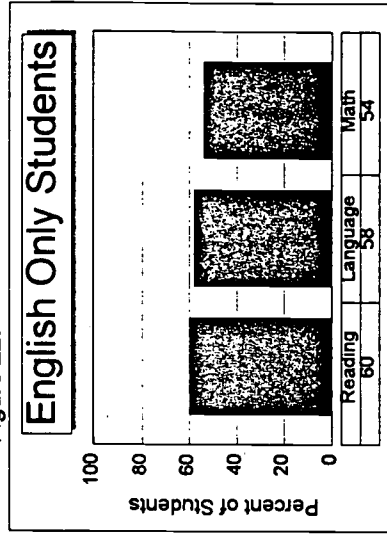


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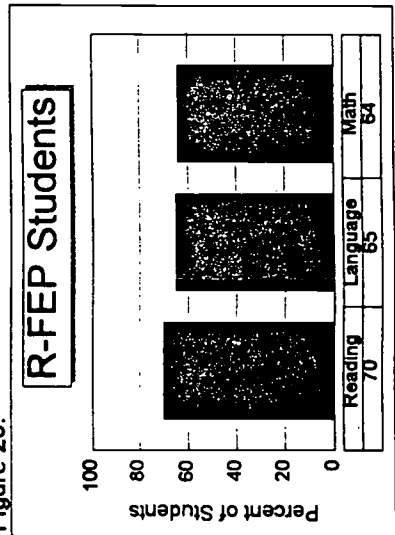


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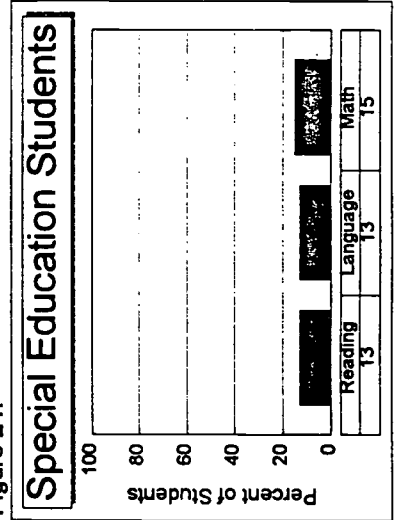
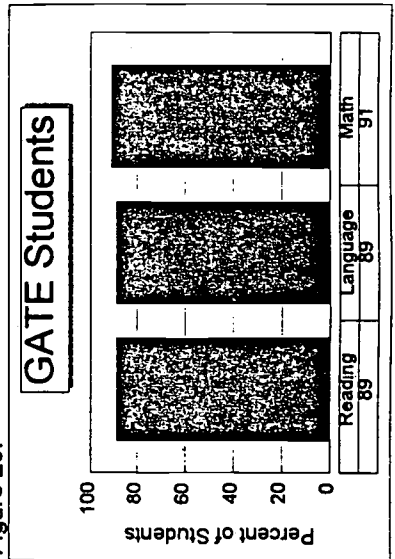


Figure 25:



Standards-Based Student Achievement Results
 Districtwide Summary by Ethnicity
 Percent of Students At or Above Standards

Figure 26:

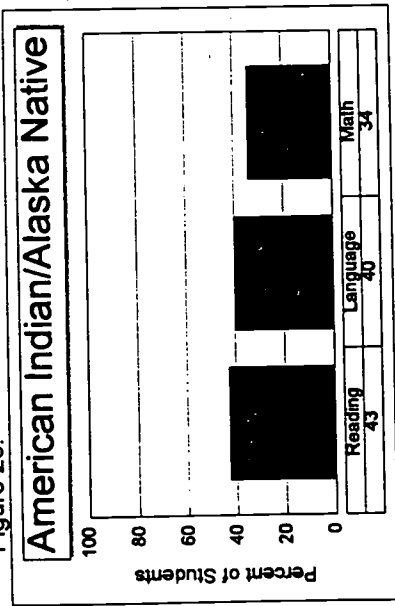


Figure 27:

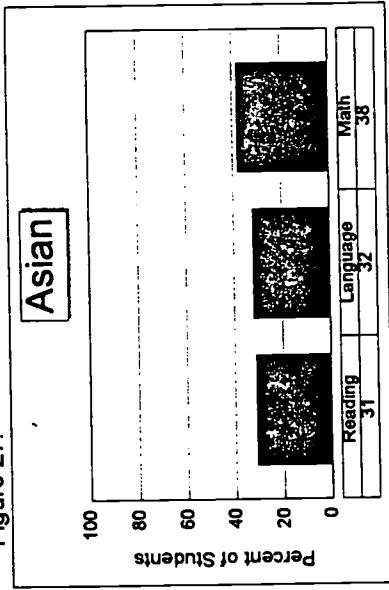


Figure 28:

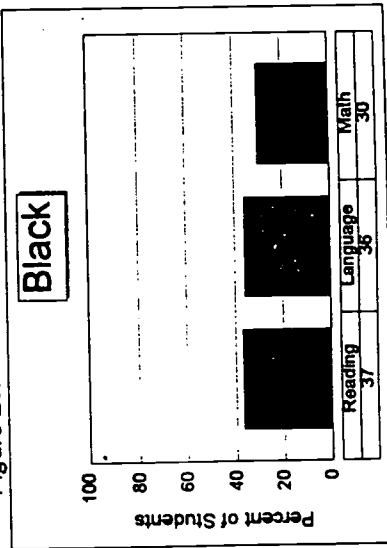


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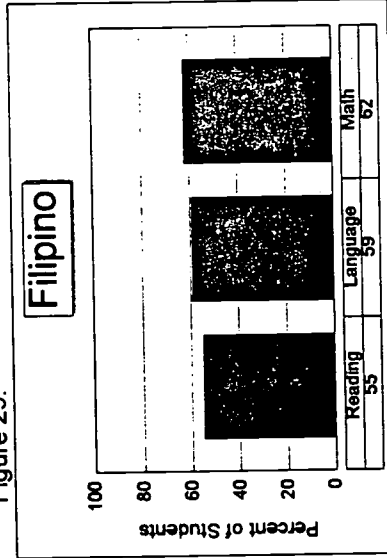


Figure 30:

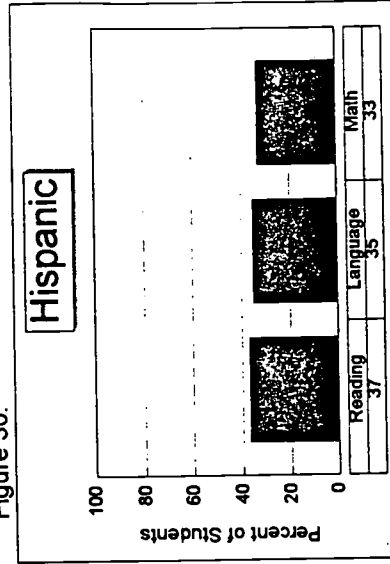


Figure 31:

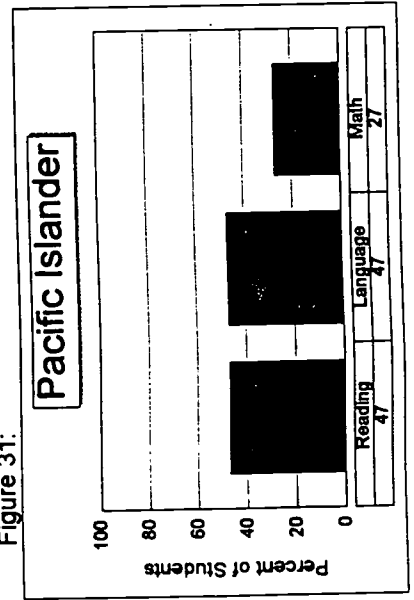
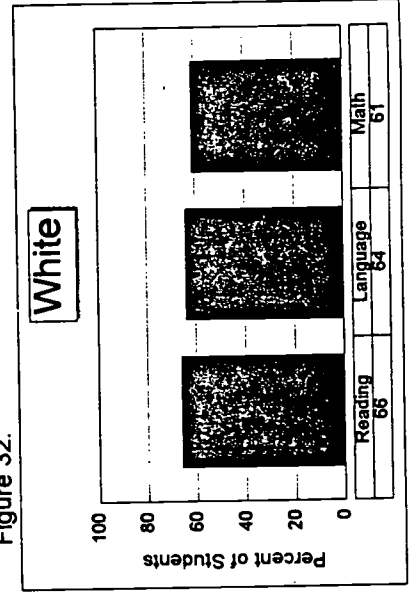


Figure 32:



Standards-Based Student Achievement Results
 Districtwide Summary by Disaggregated Categories
 Percent of Students At or Above Standards

Figure 33:

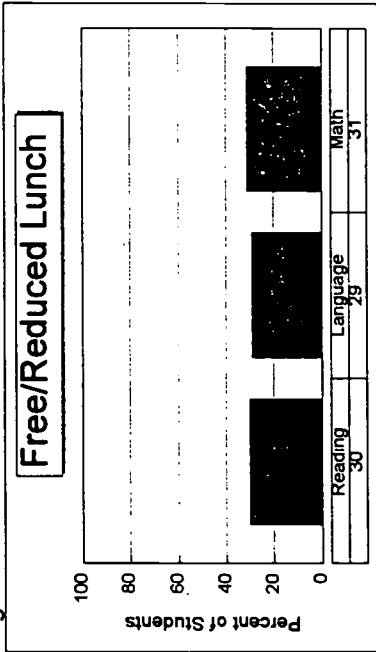


Figure 34:

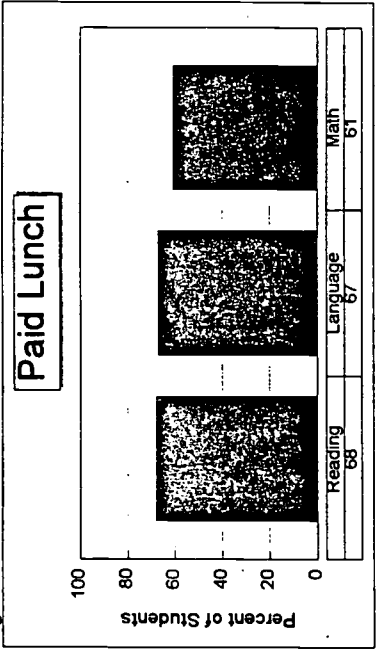


Figure 35:

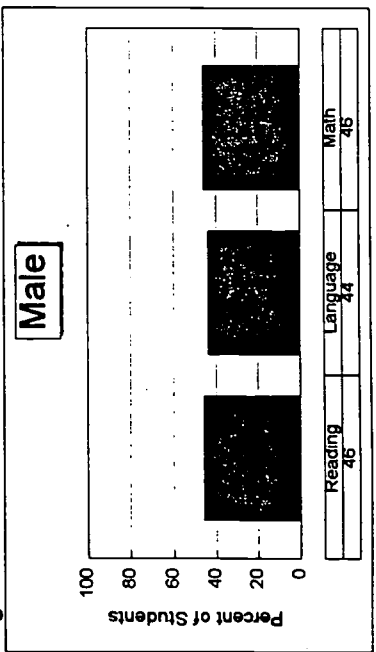


Figure 36:

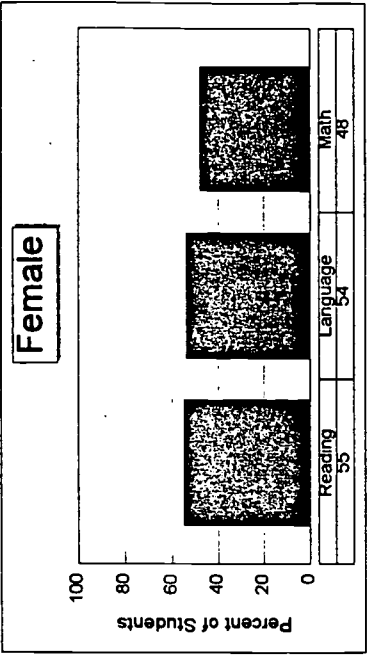
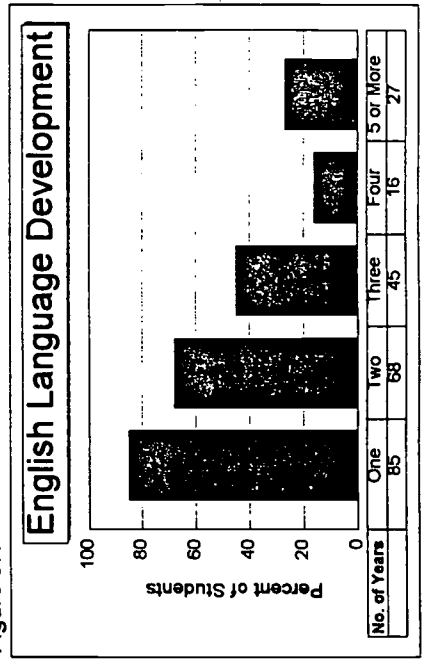


Figure 37:



Implications for District and State Level Policy

Accountability is a very sensitive and important issue for the schools, districts, and the local school boards. In spite of the good intentions on the part of the teachers and administrators, when the accountability results are likely to be seen in comparison to other districts, good intentions are impaired by the reality of the situations. This paper identified some specific policy issues related to implementation of the assessment and accountability system.

1. *Multiple measures*

CDE requires that all districts use multiple measures for assessing student achievement and that student achievement should be reported based on the district adopted or developed performance standards. However, it is not clear as to how many measures are multiple and how many grade levels must have multiple measures. No criteria about the reliability and validity has been set by the state in using multiple measures. The directions at best are vague. The districts wanting to look good can use "inflated" class grades as one of the multiple measures. Particularly, class grades have little reliability and non-achievement criteria such as effort, attendance, and classroom participation are often factored into assigning class grades.

Furthermore, there is a great deal of flexibility in weighting the measures. One can choose to give 70% of weight to class grades and only 30% to standardized test scores in judging student performance. This will paint a very different picture of student achievement from district to district in California. CDE needs to set clear policy guidelines in implementing the assessment and accountability system in order to ensure that there is an equity in the system for judging student performance at or above grade level standards.

2. *Purpose of accountability*

CDE has not clarified the purpose of the accountability reports. The purpose has been specified as for identifying Coordinated Compliance Review (CCR) school visits, California School Recognition Program and Achieving School recognition program, and Title I identification of Program Improvement schools. It is not clear how the non-Title I schools accountability information will be used and the purpose of collecting the accountability report for these schools, besides using this information to identify schools as distinguished schools. One question that comes to mind is whether these results be used to compare districts and schools. Will these results be made public by releasing to the newspapers? If so, what kinds of information will be released to the newspapers? CDE needs to clarify the purpose of collecting accountability information and how these information will be used.

3. *CDE indecisions and district planning*

CDE informed the assessment and accountability procedure to the district on June 30, 1997 in a memo from Ruth McKenna, Chief Deputy Superintendent. That was not soon enough for most districts to gather multiple measures of student achievement and report standards-based student performance by November 1, 1997. There should have been a reasonable amount of time for districts to plan and implement the assessment and accountability system and for staff development. Furthermore, the role of the new statewide norm-referenced standardized test, to be adopted by the State Board of Education on November 14, 1997, is not clear either. CDE should give firm, clear directions to districts about the role of the new test in the accountability system and more clear and precise directions for the use of multiple measures in order for district to collect valid and reliable student performance information.

4. *Support to districts and Program Improvement schools*

CDE has not been given enough capacity building to implement a new methodology of standards-based assessment and accountability system. It is not clear how and in what capacity the state will provide the technical support for nearly half of the Title I schools in the state that are likely to be identified as Program Improvement schools. The districts consider this approach of accountability very promising, but a great deal of effort at the local and state level is needed to make this system meaningful for all involved.



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