

The No Child Left Behind Act of 2001 requires each state to produce an annual report card that summarizes assessment results of students statewide and disaggregated by student subgroup. Information must also be included on high school graduation rates, teacher qualifications, other indicators used in each tate's definition of Adequate Yearly Progress (AYP), d the AYP status of all schools and districts in the Questions about this state report card may be to the Evaluation, Research, and Analyse Policy and Evaluation Division at California Department of F

Grading the Report Card:

A Report on the Readability of the School Accountability Report Card (SARC)

Gabriel Baca, Andrea Luquetta, Neil Peretz University of California, Los Angeles



Grading the Report Card:

A Report on the Readability of the School Accountability Report Card (SARC)

By:

Gabriel Baca, Andrea Luquetta, and Neil Peretz
University of California, Los Angeles

Introduction	3
Enter The SARC	3
The Report Card on the Report Card	4
Recommendations	4
Background: The Legislative Intent behind the SARC	5
Proposition 98	
No Child Left Behind Act (NCLB)	6
Williams Lawsuit Settlement	6
Part I: Objective Readability Tests of the SARC	7
FOG Index	8
Flesch Reading Ease Scale	8
Dale-Chall Formula	8
SMOG Formula	8
FORCAST Formula	9
The Results	9
Part II: Survey of Community Members about the SARC	. 11
The Subject Pool	. 11
The Survey	. 11
The Results	
Knowledge of the SARC	. 12
Section Popularity	. 12
SARC Section on Academic Data	
(Standardized Testing and Reporting)	. 12
SARC Section on Teacher and Staff Information	. 13
SARC Section on Post-Secondary Preparation	
Part III: Focus Groups with Parents about the SARC	
Focus Group Participants and Methods	. 15
Focus Group Results	. 16
SARC Section on Teacher and Staff Information	. 16
SARC Section on Academic Data	. 17
SARC Section on Post-Secondary Education	. 17
SARC Section on School Safety	
Other observations	
Part IV: Addressing Language Barriers	. 20
Conclusion	. 21

Introduction

In California, public K-12 education receives the largest share of total state spending—about \$31 billion in 2004, representing 32 percent of the total state budget. Local tax sources make significant additional contributions to public education as well.

Like any investor, taxpayers, parents, and employers want to know how their investment in education is faring. To evaluate the return on a mutual fund, an investor need only look at the Return On Investment (ROI) calculation in the annual report to shareholders. Measuring the return on investment in education, however, is much more complex.

Enter The SARC

In 1988, the People of California approved Proposition 98, which mandated a guaranteed minimum level of funding for California public schools. In exchange for this budget floor, educators would be held "accountable for the job they do and the tax dollars they spend," and the People of California would be able to "ensure that our schools spend money where it is most needed. The "annual report to shareholders" of the education system would be called the School Accountability Report Card and nicknamed the "the SARC."

In 2001, this state mandate was strengthened by a federal one through the accountability provisions of the No Child Left Behind Act. This act also requires schools to report on children's education progress, teacher credentials and school quality. The intent of the legislation is to empower parents, taxpayers and others in the community to assess school performance and to hold schools accountable when they fail to measure up.

Finally, in 2004, California state legislators passed Senate Bill (SB) 550 (Chapter 900, Statutes of 2004) as part of the settlement agreement in the case of *Williams, et al.* v. *State of California, et al.* SB 550 adds additional reporting requirements to the SARC. Primarily, these relate to needed facility maintenance, reporting how many teachers are assigned to roles they are not qualified to teach, the number of vacant teacher positions, and the availability of sufficient textbooks and other instructional materials.

The SARC plays an important part of meeting the goals of three very important articles of legislation. The SARC is also regarded by parents as a potentially useful tool for school choice and improvement.

The Report Card on the Report Card

This Report summarizes a tripartite investigation into the reality of the SARC by faculty and graduate student researchers at the UCLA School of Law. The report examines whether the implementation of the SARC is truly meeting the needs of parents and community members.

The authors of the report first examined the Intent of the Legislation that created the SARC. The statutes that created the SARC offer an objective benchmark against which the SARC's efficacy can be gauged.

Next, the UCLA researchers surveyed Rotary Club members in Los Angeles and Ventura counties about the SARC's comprehensibility and usefulness. The survey demonstrated that even well-educated, successful members of the community could not determine the answer to simple questions about a particular school from the SARC, even when the information was purportedly well-labeled and explained. The Rotarians reported their experience with the SARC as "frustrating" and "useless."

The UCLA researchers then conducted in-depth focus groups with parents of school-aged children in Los Angeles. The parents who evaluated the SARC had various levels of education, ranging from some high school to graduate degrees. Regardless of education, however, the parents reported that the SARC is unclear, confusing, and not helpful to their understanding of their school's strengths and weaknesses. They reported they wanted a clearer, more useful document to help them make choices about where to send their children and how to improve their schools.

Lastly, the UCLA researchers conducted an objective assessment of the readability complexity of an average SARC. Using well-established measures of linguistic complexity, it was determined that the average SARC is actually more complicated than the U.S. Internal Revenue Service (IRS) Form 6251 for Alternative Minimum for Individuals, IRS Form 1040A Instructions, Microsoft Windows XP Software Driver Installation Instructions, and an Official Lease Agreement for Month to Month Tenancy.

The unanimous results of these surveys, focus groups, and objective assessments of the SARC are clear. The SARC fails. The SARC fails to inform parents and taxpayers about the quality of their schools. The SARC fails to identify what areas of schools need improvement. And the SARC fails to tell taxpayers whether the single largest portion of their tax dollars is being spent effectively.

Running the school system without a useful and understandable SARC is like driving a \$100,000 sports car with a broken speedometer, temperature gauge, and gas gauge. It doesn't cost a lot to fix the dials, yet they are essential to the driver who wants to ensure that the car doesn't overheat, run out of gas, or drive 50 mph in a school zone. Similarly, fixing the SARC is likely a small expenditure, yet it is essential to ensuring that parents and taxpayers who invest in California's education system can avoid, diagnose and fix any potential problems.

Recommendations

Fortunately, the SARC can be fixed. While this report is a start, the California Department of Education should conduct a more thorough study of the SARC template to identify all of the SARC sections that are unclear. In addition, the Department should test new formats and explanations for each unclear SARC section to determine how to clarify the meaning of each section for parents.

Based on the findings of this report for example, the Department should test using standardized metrics within the SARC to utilize percentages instead of percentiles and eliminate double-counting. Wherever possible, charts and tables in the SARC should be made less dense. Instead of presenting multiple measures, the charts should highlight a few key variables. These charts should also be accompanied with a summary of the data (such as the Scorecard GPA and Compliance Rating used in the School Safety section of the SARC). The number of technical and unfamiliar terms used in the SARC should be reduced. Complicated terms and data should be accompanied with definitions. Finally, the sections of the SARC should include contextual statements that help parents understand how the information presented relates to their children's education.

A new SARC template should be created based on the results of both the diagnosing process suggested and formats tested for readability. Finally, the Department should launch a campaign to raise parent awareness of the SARC.

Background: The Legislative Intent behind the SARC

Proposition 98

The legislation introducing the SARC called for its primary purpose as a vehicle for educators to notify parents and community members about each school and each district's "progress on test scores, dropout rates, classroom discipline, class size, instructional materials, the quality of instruction, and school leadership," as well as "an annual audit accounting for [school] ...funds."

Proposition 98 specified certain types of assessments to be included in the first version of the SARC:

- (1) Student achievement in and progress toward meeting reading, writing, arithmetic and other academic goals.
- (2) Progress toward reducing drop-out rates.
- (3) Estimated expenditures per student, and types of services funded.
- (4) Progress toward reducing class sizes and teaching loads.
- (5) Any assignment of teachers outside their subject areas of competence.
- (6) Quality and currency of textbooks and other instructional materials.
- (7) The availability of qualified personnel to provide counseling and other student support services.
- (8) Availability of qualified substitute teachers.
- (9) Safety, cleanliness and adequacy of school facilities.
- (10) Adequacy of teacher evaluations and opportunities for professional improvement.
- (11) Classroom discipline and climate for learning.
- (12) Teacher and staff training, and curriculum improvement programs.
- (13) Quality of school instruction and leadership.

After producing yearly SARC reports, each school district was also mandated to publicize them and make copies available to parents upon request.

No Child Left Behind Act (NCLB)

The *No Child Left Behind Act*, passed by Congress in 2001, requires annual school assessments in each state that measure what children know and learn in reading and math in grades 3-8. The intent of the law's primary sponsor, President Bush, was to empower parents, citizens, educators, administrators, and policymakers with data from those assessments. It was intended that, with this information, schools can be held accountable for closing any achievement gaps in student learning.

The NCLB accountability provisions require schools to report, through "annual report cards," on the quality of the school, the qualifications of teachers, and students' progress in key subjects. Schools that do not make progress must provide supplemental services, such as free tutoring or after-school assistance; take corrective actions; and, if still not making adequate yearly progress after five years, make dramatic changes to the way the school is run. California adopted these provision and built the reporting requirements into the SARC.

Williams Lawsuit Settlement

As part of the settlement agreement in the case of *Williams*, et al. v. State of California, et al., Senate Bill (SB) 550 (Chapter 900, Statutes of 2004) was enacted into law on September 29, 2004. SB 550 adds additional reporting requirements to the SARC relating to:

- (1) any needed maintenance to ensure school facilities are sufficiently clean, safe, and functional;
- (2) the number of teachers "misassigned" to roles they are not qualified to teach;
- (3) the number of "vacant teacher positions" where there is no single designated certificated employee assigned; and
- (4) the availability of "sufficient textbooks and other instructional materials" to ensure that each pupil has a textbook or instructional materials, or both, to use in class and to take home to complete required homework assignments.

The SARC fails legislative intent

The readability tests, surveys and focus groups done by the researchers reveal that the SARC fails to inform taxpayers and parents about the quality of their schools. Its dense and complicated language and hard to decipher charts make the SARC too incomprehensible for parents to use it as intended. To meet the intent of Proposition 98, the No Child Left Behind Act, and SB 550, the SARC template should be re-written to make it more readable, and therefore more useful, to parents and taxpayers who rely and invest in California schools.

Part 1: Objective Readability Tests of the SARC

Readability is the measure of how easy it is to read and comprehend a document. Readability tests are mathematical formulas that can determine the suitability of text for students at a certain age, or grade level. The formulas are based around the average words to a sentence, and the average syllables used per word.

Readability tests provide a quantifiable indication that the content of a document may be too dense. For a document to be easily understood, the writing style should be clear and simple. This involves a writing style that is direct, and familiar to the intended reader. The structure of the document should be logical, unambiguous, and avoid redundant words. Texts that use words encountered frequently by readers tend to be less difficult to understand than words that readers rarely see.

Most readability formulas are based on a semantic factor (the difficulty of words) and a syntactic factor (the difficulty of sentences). Words are either measured against a frequency list or are measured according to their length in characters or syllables. Sentences are measured for the average length in characters or words.

To assess the current status of the SARC, the study's authors analyzed multiple SARC's published by the Los Angeles Unified School District (LAUSD). The LAUSD SARC was chosen as a model because it uses the SARC template designed by the California Department of Education. In addition, LAUSD is the nation's second largest district, covering 704 square miles, with a K-12 student enrollment of more than 746,800.

Surveys of parents indicate that they care most about: (1) Teacher and Staff Credentials, (2) Post-Secondary Education Preparation, and (3) Standardized Test Scores. Accordingly, the study analyzed the SARCs used by Crenshaw High School, Cleveland High School, and Fairfax Senior High School, all LAUSD schools, to determine how readable each SARC was regarding the above three sections.

To provide an objective benchmark for additional comparison, the readability of each SARC was compared to the readability of the following common documents:

- U.S. Internal Revenue Service Instructions for Form 6251 Alternative Minimum Tax— Individuals
- U.S. Internal Revenue Service Form 1040A Instructions
- Microsoft Windows XP Software Driver Installation Instructions
- Uniform Residential Mortgage Agreement
- Official Lease Agreement for Month-to-Month Tenancy
- VIOXX Patient Information from Merck
- Morgan Stanley Annual Report to Shareholders
- FDA Warning about COX-2 Inhibitor Drugs
- California Proposition 98

To ensure a thorough analysis, the excerpts from the Crenshaw, Fairfax, and Cleveland High School SARCs were analyzed according to several established Readability indices: the FOG Index, the Flesch Reading Ease Scale, Flesch Grade Level Formula, the Dale-Chall Formula, the SMOG Formula, and the FORCAST Formula.

FOG Index

Robert Gunning's Fog Index was one of the first efforts to quantify the readability of textual material. The FOG Index, describes how many years of education is required to comprehend a document. The lower the number, the more understandable the content will be to the reader.

To calculate a text's FOG Index, one must first divide the total number of words by the total number of sentences to determine the average number of words per sentence. Then the number of words with more than three syllables is divided by the total number of words, yielding the percentage of difficult words.

The FOG Index is calculated by adding the average number of words per sentence and the percentage of difficult words, and then multiplying the total by 0.4.

Some readability experts feel that no technical material should score higher than 14 on the FOG Index, no business material higher than 12, and no clerical material higher than 8.

Flesch Reading Ease Scale

The most popular Readability Formula is the Flesch Reading Ease Scale. The Flesch Reading Ease Formula considers the number of words, syllables and sentences in adult reading materials.

Flesch measures reading from 100 (for easy to read) to 0 (for very difficult to read). The higher the score, the easier it is to understand the document. The lower the number, the more difficult the material. A zero score indicates text has more than 37 words on average in each sentence and the average word is more than 2 syllables. Flesch identified a score of 65 as a benchmark for "Plain English" writing.

In response to demand, Flesch also provided an interpretation table to convert the scale to estimated reading grade and estimated school grade completed. The Flesch Grade Level Formula, sometimes referred to as the "Flesch-Kincaid" formula, considers the number of words, syllables and sentences. The formula is calculated based on the Flesch Reading Ease Score.

FLESCH READING EASE SCORE

GRADE LEVEL REQUIRED

90–100	5 th grade
80–90	6 th grade
70–80	7 th grade
60-70	8 th and 9 th grade
50-60	10 th –12 th grades
30-50	college student
0-30	college graduate

Dale-Chall Formula

The Dale-Chall Formula uses a proprietary vocabulary list, plus factors in a text's total number of words and sentences, to measure the text's complexity. The formula is designed for assessing the comprehensibility of upper elementary and secondary level materials.

SMOG Formula

The SMOG Formula relies on a single variable — the number of words containing three or more syllables. Whereas most formulas predict the grade level necessary for 75% - 85% comprehension, SMOG focuses on 100% comprehension. For this reason SMOG often calls for a higher grade level than most other formulas.

FORCAST Formula

The FORCAST Formula ignores the number of sentences and their lengths within a text sample. The formula focuses on functional literacy, and is usually used in evaluating adult questionnaires, forms, tests, and job materials, even if they are not in narrative form and lacking any end punctuation such as periods or question marks.

The Results

Using the Flesch Reading Ease Test, an analysis of the SARC reports from Crenshaw, Fairfax, and Cleveland High Schools revealed that each required the reader to have a complete college education, and possibly a graduate degree in order to understand the report. The Flesch Grade Level Score of these SARCs indicated that 18 to 21 years of education, which suggests at least a master's degree, was required to comfortably read these SARCs.

Using the same Flesch Readability Metrics, the SARC reports from each of these schools were less readable than the:

- U.S. Internal Revenue Service Instructions for Form 6251 Alternative Minimum Tax— Individuals
- U.S. Internal Revenue Service Form 1040A Instructions
- Microsoft Windows XP Software Driver Installation Instructions
- Official Lease Agreement for Month-to-Month Tenancy.

Further, the Standardized Test Score section of the Fairfax High School SARC was also less readable on the Flesch scale than the:

- VIOXX Patient Information from Merck
- California Proposition 98.

The FOG Index is also a well-established Readability Metric. Many popular publications have been given FOG Index scores:

- Reader's Digest: 8
- Most popular novels: 8-10
- Time, Newsweek: 10
- Wall Street Journal: 11
- The Times, The Guardian: 14



By comparison, all of the SARCs tested in this study yielded FOG Index scores of greater than 20. Even technical material, according to Readability Experts, should score no higher than 14 on the FOG Index, and clerical material should score 8 or lower. The SARCs were basically 1.5 to 2 times harder to read than even highly complex technical materials.

The Dale-Chall test, which analyzes how broad of a vocabulary is required to understand the SARC, revealed that the SARC did contain more complex words than:

- U.S. Internal Revenue Service Instructions for Form 6251 Alternative Minimum Tax— Individuals
- U.S. Internal Revenue Service Form 1040A Instructions
- Microsoft Windows XP Software Driver Installation Instructions.

However, the SARC's vocabulary was only slightly simpler than the Morgan Stanley Annual Report and a Uniform Residential Mortgage Agreement. However mortgage agreements are usually interpreted by highly trained (and highly paid) lawyers and annual reports by portfolio managers. The SARC, on the other hand, needs to be interpreted by lay people and thus considerably easier to read.

A SMOG Formula analysis of the SARC, which focuses on 100% comprehension, revealed significant shortcomings. Like the Flesch test, the SMOG Formula indicated readers of the SARC need at least a four year college degree to fully understand the SARC. Further, the SARC was less readable than the:

- U.S. Internal Revenue Service Instructions for Form 6251 Alternative Minimum Tax—Individuals
- U.S. Internal Revenue Service Form 1040A Instructions
- Microsoft Windows XP Software Driver Installation Instructions
- Official Lease Agreement for Month-to-Month Tenancy

It is particularly interesting to note that these SARCs were also less readable than California Proposition 98 itself, which created the SARC. It is rare that enabling legislation is less complicated than the resulting output from the government agency.

Even the FORCAST Formula, which focuses on purely functional literacy by ignoring the number of sentences and their lengths within a text sample, revealed that the SARCs were all more complex than both the U.S. Internal Revenue Service Instructions for Form 6251 Alternative Minimum Tax—Individuals and the U.S. Internal Revenue Service Form 1040A Instructions. People hire accountants to help them interpret tax forms, so one would expect such documents to be more functionally incomprehensible than the SARC.

Part II: Survey of Community Members about the SARC

The Subject Pool

In order to assess firsthand whether parents and taxpayers find the SARC to be informative, useful, and an appropriate method of maintaining school accountability, we surveyed 45 actual members of the community.

In April 2005, we visited Rotary Clubs in Los Angeles and Ventura County and provided excerpts of the SARC to members and sought their feedback. Rotary is a worldwide organization of business and professional leaders that provides humanitarian service, encourages high ethical standards in all vocations, and helps build goodwill and peace in the world. Rotary is firmly rooted in the California firmament: the second Rotary Club in the world was founded in San Francisco in 1908. Rotary now has 1.2 million members and 31,000 clubs worldwide.

The Rotary Club membership represents a cross-section of the community's business and professional men and women. We chose to survey Rotary Clubs about the SARC for several reasons:

- a. Rotary membership tends to be well-educated
- b. The main objective of Rotary is community service² which means that Rotarians truly care about California's public schools. Many Rotary community service activities are educationfocused.
- c. Rotary Clubs are nonpolitical, nonreligious, and open to all cultures, races, and creeds.
- d. Many Rotary Club members are parents.

The Survey

Survey respondents were presented three sections of the Fairfax Senior High School SARC with the name of the school redacted. Fairfax High School was chosen as a representative SARC because it uses the California Department of Education SARC template and it belongs to California's largest school district: Los Angeles Unified. Second, we picked a high school that, being neither at the top nor the bottom of state rankings, would not prompt extreme reactions to the description of the high school itself.

The purpose of the survey was not to assess the quality of Fairfax Senior High School itself, but to assess the quality and usefulness of the SARC template itself. The three sections of the Fairfax High SARC given to survey respondents were:

- a. Teacher and Staff Information
- b. Post-Secondary Preparation
- c. Academic Data (Standardized Testing and Reporting)

Respondents were then asked subjective and objective questions about each section to assess the clarity and usefulness of the section.

The Results

Knowledge of the SARC

Despite being actively engaged in the community and well-educated, only 31% of Rotarians surveyed claimed to be familiar with the SARC before the survey.

Section Popularity

Respondents were asked to rate the importance of each section of the survey. The rankings were:

Section of SARC

Percent Ranking Section as Most Important

Post-Secondary Preparation	55%
Academic Data (Standardized Testing and Reporting)	15%
Teacher and Staff Information	30%

SARC Section on Academic Data

(Standardized Testing and Reporting)

Of the respondents who reviewed this section, nearly 45% were unsatisfied with its format and content. 29% rated it as Fairly Uninformative, and 14% rated it Not Informative At All.

The respondents who replied to questions about this section of the SARC were also asked objective questions about the data contained in the SARC they were given. In this section, *nearly a third of respondents* could not accurately determine how to read Norm-Referenced Test (NRT) scores when asked the True/False question of whether Latinos in this school were performing 33% higher than the national average.

Other Observations

Several respondents queried whether test scores of students studying with more credentialed teachers were higher than test scores of students with improperly credentialed teachers.

No respondents noticed the divergence between scores on the California State Test (CST) and the Norm-Referenced Test (NRT), which measures according to a national standard. Typically, because California state standards are higher than national standards, students typically score lower on the CST than the NRT.

Few, if any, survey respondents commented on the API, however they did compare CST and NRT scores between the school and the district, and state averages.

Quotes from respondents about this section of the SARC include:

- o "It seems like we are buried in data"
- o "Kind of confusing."
- o "Inadequate comparative data"
- o "Too standardized. Not many kids are prepared for the real world."

SARC Section on Teacher and Staff Information

Of the respondents who reviewed this section, 30% were unsatisfied with its format and content. 19% rated it as Fairly Uninformative, and 11% rated it Not Informative At All.

The respondents who replied to questions about this section of the SARC were also asked objective questions about the data contained in the SARC they were given. In this section, *over sixty percent of respondents* could not accurately determine:

- a. whether the number of credentialed teachers in the school is increasing or decreasing
- b. whether the school is fully staffed.

Other Observations

Almost half of the respondents specifically questioned whether revealing teacher credentials provided sufficient information about whether the teachers were truly qualified and effective in the classroom.

Many respondents said they did not know what credentialing entailed and thus had no way to evaluate the link between possession of a credential and effective teaching.

Some respondents expressed concern about an inability to compare teachers to each other.

Quotes from respondents about this section of the SARC include:

- o "The numbers seem inconclusive on all subjects"
- o "Cannot reach any conclusion based on these tables"
- o "Uncertain. Is being fully-credentialed the primary factor in being qualified to teach?"
- o "Is there any evaluation on their effectiveness/quality of their teaching skills?"
- o "There could be more competition How many teachers are retained or fired? How many teachers have 'real life' experience as opposed to mere academic credentialing?"
- "Teacher credentials section doesn't have a relativity scale, therefore, can't conclude [whether] % growth of full credentialed teachers is the same as % growth of total teachers."
- o "Teacher qualifications are important, but it doesn't mean a teacher is any good at what they do."
- o "Misapplied"
- o "No criteria as to how teachers are considered 'qualified.' Is it based on results/student performance?"

SARC Section on Post-Secondary Preparation

Of the respondents who reviewed this section, over 40% were unsatisfied with its format and content. 32% rated it as Fairly Uninformative, and 9% rated it Not Informative At All.

The respondents were also asked objective questions about the data contained in the SARC they were given. In this section, *over eighty five percent of respondents* could not accurately determine how many students were taking college preparatory courses in the school. This problem may stem from the SARC's use of duplicated counting methods in some tables and not others.

Other Observations

Many respondents noted that this section does not reveal post secondary success relative to actual student motivation. For example, a student who really wants to attend a UC or CSU school who cannot be admitted is a bigger problem than high school students who do not go on to UC or CSU schools because of a lack of interest or financial means.

Many respondents noted that tracking actual student trajectories and successes after graduation would be the best indicator of secondary school success.

Some respondents noted that this section of the SARC does not tell much about practical student preparation for entering the workforce.

Quotes from respondents about this section of the SARC include:

- o "Can't tell from data shown what is my biggest conclusion about this section of SARC."
- o "Information does not really answer the question."
- o "Better data would show performance in college and college graduation rates. Won't this show how well they were really prepared."
- o "Seems to be too much disparity between training and graduation numbers."
- o "Need a metric to measure number of students wanting higher education and % of students getting there."
- o "Waste of time" and "need 'much more' time to review data."
- o "Difficult to follow if not familiar with it."
- o "Need comparative data disparity between enrollment and graduation."

Part III: Focus Groups with Parents about the SARC

To gain an in-depth understanding of the readability and usability of the SARC we held two focus groups with parents of school-aged children. Over the course of two hours, we asked participants to rate and discuss the readability sections of the SARC. The questions we asked included: How clear is the SARC? Is it easy to understand? Is the format clear and easy to follow? Is the data presented in the SARC easy or difficult to understand?

The resounding conclusion was clear. The SARC is not clearly written and is difficult to understand. Most parents wanted the SARC to be shorter and easier to read. Most parents thought the language and charts used to report information needed to be simplified or, as one parent put it, "dumbed down."

Specifically, they wanted charts and tables that are less dense - highlighting one or two key variables rather than trying to present every possible piece of data together. Even parents with graduate degrees had difficulty interpreting complex numeracy concepts such as percentiles and double-counting used in several SARC charts. Focus group participants were also concerned about the SARC's use of technical and unfamiliar terms. Parents said they wanted explanations of how the data in the SARC pertained to the reality of their childrens' education. Finally, they wanted definitions of technical terms and statements that would help explain the purpose of the measurements they were reading.

Focus Group Participants and Methods

Participants were all parents of school-aged children. They included graduate students, professors, administrators, and janitorial workers at the University of California Los Angeles. In total, fourteen parents from various income levels, different racial and ethnic backgrounds, and from various communities in greater Los Angeles participated. Their children ranged in age from pre-kindergarten to twelfth grade, including seven elementary school-aged children, seven in middle school and seven in high school. The education level of Focus Group Participants ranged from some high school education up to those with multiple graduate degrees. All spoke English though several also spoke other languages at home including Spanish, Tagolog, and Japanese.

SARC sections evaluated by the Focus Groups included Teacher and Staff Information, Academic Data including students' standardized test scores, School Safety, and Post-Secondary Preparation. All SARC sections evaluated were drawn from the Cleveland High School SARC with the name of the school redacted. The Cleveland High School SARC was chosen because it uses the SARC template provided by the California Department of Education and because it is neither a below- or above-average school.

Focus Group Results

SARC Section on Teacher and Staff Information

The first SARC section evaluated by the Focus Groups was Teacher and Staff Information. This section of the SARC contains information about teachers and staff. It is organized into subsections including: "teacher credentials," "core academic courses not taught by NCLB compliant teachers," "teacher missasignments," "teacher education levels," "vacant teacher positions," "teacher evaluations," "substitute teachers," "counselors and other supports staff," and "academic counselors."

The Focus Group Participants were ask to rate the clarity of the <u>Teacher and Staff Information</u> section on this scale:

VERY		SOMEWHAT		NOT CLEAR AT
CLEAR		CLEAR		ALL
5	4	3	2	1

All focus group participants ranked this section as either "Not at all Clear" or "Somewhat Clear."

Despite several minutes of study, the parents found both the charts and the text of the section confusing and difficult to understand. One, a parent of a middle school child, described the experience by saying, "I can understand the words and the numbers but its not making any sense to me." Another parent, a law student and former teacher said, "I taught for years and I still don't understand this." Another said, "[If] you give this to a person who does not have at least a high school diploma, they would not be able to understand."

This feedback suggests that the SARC's current text and chart format does not effectively communicate the intended information to parents.

One shortcoming of this SARC section was its Sentence Density. For example, some participants were baffled by a sentence purporting to explain NCLB compliance. The sentence reads: "For a school, the data reported are the percent of a school's classes in core content areas not taught by NCLB compliant teachers." The participants trying to decipher this sentence noted "there are too many ideas in the sentence all mixed together." Another observed, "It's too complicated." In other cases, the terms used were unfamiliar and meaningless to participants. One parent, a school administrator and mother of an eighth grader, said, "I did not understand the teacher missassignment section at all. I have no idea what that means."

The charts were also often misinterpreted. Several parents incorrectly concluded that the charts of teacher credentials indicated that the school's teachers were being regularly tested. Meanwhile, another erroneously thought the "teacher missassignment" chart described the number of students assigned to the wrong teacher. Several parents also improperly concluded that the chart describing the number of "full-time equivalent" counselors, librarians, nurses, and other staff listed the actual number of people in those positions.

The lack of clarity and difficulty understanding of the SARC led many parents to conclude that they did not trust the school and thus would be concerned about sending their children there. One parent concluded, "I would not send my child there" after observing the absence of librarians and nurses on staff. Another stated, "There are things I don't understand" about the teacher credential chart. She then asked, "How are you going to know who has a credential and who doesn't when that's not what they are saying?"

SARC Section on Academic Data

The SARC section that describes standardized test scores of students fared only slightly better. Parents thought this section rated only "Somewhat Clear" on the clarity scale.

Parents who were well-educated and those with only some high school education agreed that this section presented too much information, yet lacked sufficient directions to make the information understandable. For example, a parent with only some high school education appreciated the comparisons provided between test scores of the school, the district and the state, but could not form a clear conclusion about what the information said. She asked, "It's good to have information but they need to make it simpler. What good is getting the information if you don't understand it?" A law professor had trouble making sense of the test score results without more information about the academic purpose. He asked, "What [are] the school's goals and some statement about what these metrics mean?"

Many parents found it difficult to understand the charts in the academic data section. A parent of seventh and twelfth graders commented about the California Standards Test charts, "I don't have any idea how to understand this... Are those percentages? Or are these definite numbers?" A parent with only some high school education said, "parents would not understand this." Another, a law student and father of two children in middle and pre-school, found the Norm-Referenced Test chart troubling. "[It says] 48% of students scored over the 50th percentile. You have to read that twice to figure out what that means. It would be meaningless to a normal parent."

The consensus among all focus group participants was that the information should be presented in a way that can be more easily and quickly understood. One parent suggested the information be presented in a form similar to student report cards. "[When students] bring you their report card, they are very simple, very easy to understand." She continued, "But, if you see something like this, you think, 'I've got five minutes' so you flip through it and that's it." "People want an easy way to understand, make it easy," she urged. Another parent agreed, "Report cards are something we see regularly and we know what we are looking for." He suggested that if the SARC was written more clearly and provided to parents as consistently as student report cards, "maybe we can get accustomed to it and eventually we'll be able to understand."

SARC Section on Post-Secondary Education

All of the parents who read this section had trouble understanding the charts. On average, they rated this section only slightly higher than "Somewhat Clear."

Both the text and the charts were difficult to decipher. A former math major was frustrated with information that seemed to make little sense. He pointed out that in one chart the school reports that 111% of students took the SAT college entrance exam. In another section, the school reports that 22,555

students are enrolled in classes necessary to gain admission to the University of California or California State University but only 514 graduate. He indicated that only an assumption of double-counting would enable a parent to avoid the erroneous conclusion that there are 2,500 students in each grade. He said a typical parent who was not a math major might be unable to draw such an inference and to correctly interpret the data.

Another participant, a college graduate with an eighth-grade child, said the SARC did not explain the difference between an Advanced Placement ("AP") class and an International Baccalaureate program. She continued, "You need to be familiar with schools to have any sense of what these things are. If you are a parent who is not familiar with the California [university] educational system, or that there are even [such things as] AP classes that can help you get into college, this would make no sense at all because they don't explain it at all." Another parent told us he was concerned about immigrant parents in particular. He said that in his family, he was the only one who knew what was necessary to get into college. "Most parents have no idea of the level of CAL state classes their children need to take, they don't even know about the SAT."

The frustration of one parent, a law student and father of a kindergartener was apparent when he said, "[W]e have lawyers in here, people that are fairly bright and we are asking ourselves, 'what the hell is this?" He later went on, "They need to dumb this down by at least 4 or 5 grade levels." He continued, "I think a statistician took the numbers and wrote the report without sending it to a writer that understands their audience... Don't they understand that people need context? You need to [be able to] read that and understand it and what you're getting is a bunch of numbers and statements."

SARC Section on School Safety

The section of the SARC dedicated to describing school safety and climate for learning was seen most favorably among the SARC sections evaluated. Parents who read this section considered it to be between "Somewhat Clear" and "Very Clear."

They found the charts easier to read and were able to make conclusions about the school's safety. For example, parents quickly pointed out that the school did not report when it had last reviewed its prevention programs and emergency procedures. This troubled parents because it indicated that the school is not complying with its own requirements.

Parents also looked to the "Scorecard GPA" and "Compliance Rating" to form a conclusion about the school's safety. Most thought that a "2" score should not merit a "Fair" compliance rating. "If it's supposed to be rated from 1 to 10 and this school has a 2, it shouldn't say 'fair'" said one parent. Another agreed that "with a score of 2, the school should be closed down."

More troubling to focus group participants, however, was the lack of information about the safety plan itself. "What is the plan? It doesn't tell you that!" said one parent. Another added, "There's no information about [what they do about] weapons." The facts of the safety plan were seen as essential to drawing a conclusion about school safety. One parent, the mother of a twelfth grader, described that it was not the SARC that informed her about her child's school safety plan for earthquake recovery – instead she asked the school and was told. "You go to the intersection [where the school is located]...

give your name, your child's name and present ID, and someone gets your child." She said knowing this safety plan made her feel better. Another parent added that knowing the plan allows her to talk to her children about it.

Not all conclusions drawn from the section were accurate however. One parent concluded that the school was "clean" even though there is no such information in the SARC. She made this conclusion even though the SARC describes only the protocol for cleaning and repairs but does not state whether the facility is in fact clean.

Other observations

None of the parents who participated in the focus groups knew that the SARC existed. Many were shocked to learn that it existed because it had never been furnished to them. They asked how to get a copy of the SARC for their school.

This request for a copy of the SARC was surprising in light of the negative evaluations of the SARC by participants. One parent went so far as to say, "It's a mess. It's badly presented. It needs [a] general rethinking." Nonetheless, the participants thought the SARC could be useful. Several participants thought they could use the SARC to make decision about where to send their children by comparing the SARC's of individual schools. Others said the SARC could help by providing parents with empirical support for changes they seek within the schools.

Part IV: Addressing Language Barriers

In the United States the ability to speak English plays a large role in how well people can perform daily activities. How well a person speaks, reads and writes English may indicate how well he or she communicates with public officials, such as school personnel, and/or how well they understand written materials and can engage public records, such as the SARC. People who do not have a strong command of English and who do not have someone in their household to help them on a regular basis are at even more of a disadvantage than those who are fluent native speakers of English.

One of the main issues with the way the SARC is constructed and the information is presented is that parents for whom the information is intended to benefit is not written in a manner that can help parents make informed decisions about important conditions that affect their children's ability to learn. And for parents who have limited literacy skills in English that means almost complete isolation and alienation from democratic public engagement with information systems. While it is presumed that the SARC is also available in other languages, such as Spanish, it cannot be assumed that parents for whom Spanish is their native language will understand the information reported in the SARC since a large proportion of the adult Spanish speaking population in California do not possess the technical linguistic expertise in their own native language to decipher and make sense of such a document.

Consider the following, according to the U.S. Census of 2000, in California, for the population 18 years and over, 38.6% were speakers of a non-English language at home, 62.1% being Spanish as that non-English language spoken. Of this 38.6% that used a language other than English to communicate with family members, 31.1% spoke English either "not well" or "not at all." In addition, of the total population under the non-English language spoken at home category, 27% in California were considered "linguistically isolated"—namely that NO individual in the household aged 14 or over spoke English at least "very well." While the Census does not report information on how well speakers of a non-English language at home were literate in their own native language, there is empirical evidence that suggest that many of the new immigrants coming into this country have little or no formal schooling (Center for the Education and Study of Diverse Populations, 2000).

What good is it to have a document where the intended beneficiaries of the information cannot make sense of what is being reported? The following are recommendations:

- Whenever possible modify the language of the SARC to reduce the use of low-frequency vocabulary terms and complex language structures (in whatever language the SARC is being presented). Average sentence length is about 7-15 words. Remember that as average sentence length increases, the sentences tend to become more linguistically complex, containing more embedded clauses. Also, whenever possible provide terms that can be represented visually.
- Provide clear definitions of technical terms that are not conceptually abstract or possess multiple
 meanings and forms. Whenever possible provide examples explaining how a parent should
 interpret each metric covered in the SARC.

Conclusion

Since 1988, state law has required that all California public schools receiving state funding prepare and distribute a SARC to evaluate and compare schools on a variety of indicators. A similar requirement is mandated by the federal No Child Left Behind Act of 2001 so that parents and taxpayers can assess how well schools are meeting their educational mandate. With legislation coming from the settlement of the *Williams, et al.* v. *State of California, et al.*, California legislators added to the reporting of school facilities, teachers and materials. Parents who participated in focus groups also reported that they want a SARC that can help them make school choices and help them improve the schools that their children attend.

This study reveals that the current SARC template fails to deliver on these goals. Objective readability tests, surveys of community-minded professionals, and focus groups of parents of school-aged children all provided the same results: The current SARC is too difficult to read and understand to make it a useful tool to parents and taxpayers. The template's use of dense charts, technical language and high-level numeracy concepts renders it impermeable. Parents with multiple professional degrees cannot even understand it.

To make the SARC as useful as it was envisioned by voters and legislators, it must be made to be more easily understandable. This study points to several areas where improvements can be made, including:

- (1) Reducing the use of undefined and unfamiliar language
- (2) Providing definitions and explanations of the significance of data provided
- (3) Providing easy to read summaries of the data, such as simple indicators of how well the school meets the goals in the subject area discussed (such as the Scorecard GPA and Compliance Rating in the School Safety Section of the SARC)
- (4) Providing statements that tell parents how the data relates to their children's educational future (such as by providing an explanation of the purpose of "AP" classes)
- (5) Simplifying charts and metrics
- (6) Avoiding high-level numeracy concepts such as double-counting and percentage/ percentile combinations that most parents do not understand
- (7) Reducing the use of complex, abstract phrases and sentences with multiple parts. Use instead clear direct statements that can be understood, and if necessary, translated easily.

This study is a start. However, to make the SARC as useful as it can be, the state should dedicate resources to testing the template more thoroughly. The entire template should be evaluated for readability and usability. Once problem areas are identified and diagnosed, the state should develop a new, tested template that is readable. Finally, the more useful SARC should be advertised so that parents know it is accessible and can use it for the purposes intended by voters, taxpayers and legislators.

Footnotes

¹ The LAUSD SARC's reviewed relied on the CDE template for the year specified. This template has been modified in May 2005. Unfortunately, the modifications did nothing to improve the readability. Subsequent to completing this report, Professor Gary Blasi ran the same suite of readability assessments on the new template (available at http://www.cde.ca.gov/ta/ac/sa/documents/tempword05.doc) and compared it to the template utilized in the LAUSD SARCs tested (available at http://www.cde.ca.gov/ta/ac/sa/documents/tempword04.doc). The new template was rated as *less* readable than the former template on every measure reported here.

² The Rotary motto is *Service Above Self*.