The Merced County Attendance Project (MerCAP)
Year 2 Impact and Process Study

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SUMMARY OF KEY FINDINGS AND CONCLUSIONS

Process Study:

- Two unanticipated changes have significantly changed the context within which MerCAP operates. The first is the decline in TANF caseloads, such that MerCAP impacts a much smaller proportion of the student population than originally expected (approximately 9,000 students rather than 16,000). The second is the change in school funding formulas as a result of SB 727, which has created strong new incentives for schools to improve their attendance for *all* students regardless of TANF status.
- MerCAP is primarily perceived and operated as a "sanction" program, without an expansion of family case management activities as anticipated in the original program design.
- School personnel appreciate having a program that provides real consequences for families. In effect, the sanction threat can replace the past pattern of relying solely on repeated exhortation to parents by school officials. On the other hand, schools feel the time required to implement the program—adapting computer software, updating TANF student rolls, keeping on top of absences, sending letters, and meeting with parents—is overly burdensome.
- In implementing MerCAP, schools use considerable judgement and discretion, especially regarding which absences are excused, how many second chances are allowed, whether corrective action plans are designed specific to each situation, and whether parent conferences are devoted to problem-solving or conveying the threat of sanctions.
- An important lesson from the MerCAP experience is the importance of getting early buy-in from school districts, and seeing to it that administrators communicate support for the program to front-line school staff. Intra-school dynamics play an important role to either aid or impede implementation.
- As was the case during Year 1, we find that MerCAP parents support the basic idea of MerCAP, and often express appreciation for the fact that it provides them with additional leverage in encouraging their children to attend school regularly. On the other hand, MerCAP parents were not well-informed about basic elements of the program, and many felt mistreated by particular MerCAP procedures.
- Doctor's notes play a key role in the relationship between parents and schools. The notes provide a way to give the policy "teeth." But many families have difficulties getting a doctor's excuse, and many schools believe doctors are too ready to sign notes excusing unnecessary absences. This suggests the type of community networking and collaboration that must exist for an attendance program to succeed.
- A major unanticipated effect of MerCAP has been to highlight the limitations of certain school attendance software (e.g. MacSchool) to support an adequate record keeping system. As in other aspects of welfare reform, developing data management systems to perform new tracking and monitoring functions is a key requirement for reform to succeed.

Impact Study:

- TANF students during 1998-99 had slightly lower attendance rates than non-TANF students. This finding is driven primarily by the experience of the schools entering MerCAP in Year 2 (1998-99), since schools entering in Year 1 (1997-98) did not evidence a statistically significant difference between TANF and non-TANF attendance in either Year 1 or Year 2.
- The data are inconclusive about the impact of MerCAP on TANF student attendance. At best there seems to be a very modest increase in TANF student attendance.

- The data seem to suggest that MerCAP is supporting higher overall attendance in participating schools. We speculate that this may be due to the increased focus on attendance functions for all students as a result of their devoting time and attention to MerCAP.
- The data provide compelling evidence that there is no relationship between attendance rates and achievement, as measured by performance on the SAT9 reading test. A wide range of statistical tests at the individual, school, and district levels of analysis support this finding.
- Taken together, the impact analysis suggests that if the goal of the policy intervention were to improve student achievement, it would make sense to emphasize factors other than attendance and TANF status.

<u>Considerations for potential program modifications</u>

- While its impact on attendance and achievement of TANF students appears minimal, MerCAP reinforces a popular community norm: "parents should get their children to attend school regularly." What seems needed is a way of adapting the program so that this norm can be upheld through a less cumbersome sanction program, while at the same time working harder to develop supportive case management services that help families meet the norm (i.e. reducing the sanction rate).
- One place to start would be in rethinking the wisdom of tracking the attendance of TANF students separately from non-TANF students, and the accompanying need for the monthly lists of TANF students produced by the Human Services Agency and sent to schools. These lists create substantial work for both HSA and school staff and, despite good intentions and effort, are routinely plagued with errors and irregularities. One suggestion we have heard would allow school districts to develop attendance programs and standards applicable to all students, regardless of TANF status. When students reach the point in the process at which punitive action against the family is deemed necessary, schools would check with HSA to see if the family is on TANF, in which case a sanction could be initiated. This approach would appear to solve many of the problems that have plagued MerCAP during years 1 and 2, while retaining the sanction program in a form that would be appealing to stakeholders.
- The time freed up could then be profitably spent by engaging HSA personnel in partnerships with school family case management activities targeted at TANF families with low attendance. This would be particularly helpful in rural areas, where schools often feel isolated and lacking in supportive resources. To speed progress on family case management activities, a combination of a focused local initiative, state-level technical assistance, and/or provision of new or redirected resources will be necessary.

BACKGROUND

MerCAP Objectives and Assumptions

The Merced County Attendance Project (MerCAP) is a joint effort of social service agencies and schools to support better school attendance among students receiving Temporary Assistance to Needy Families (TANF). The program's primary objective is to interrupt the intergenerational cycle of financial dependence in a TANF household. The means is early intervention to curb absenteeism and support long-term educational accomplishment. The program design includes both a financial sanction to discourage excessive unexcused absences, and family case management to support better attendance.

MerCAP targets children ages 6-15. This is unlike the Cal-Learn program, the San Diego School Attendance Demonstration, and similar programs in other states that focus only on older teens. The aim is to establish good attendance habits early, because poor attendance patterns in later years are considered more difficult to change.

MerCAP is being implemented at a time when the old social services paradigm of entitlement is being challenged by a new emphasis on using government policy to encourage desired behavior, what some call "the new paternalism." At the same time, there is a shift from categorical programs designed at the federal level toward a new emphasis on devolution, flexibility, and community collaboration. As designed and implemented, MerCAP reflects both the pull of the new emphases and the continuing relevance of the old. Monitoring its implementation provides an occasion for learning about the directions social policy is taking in the current setting.

Context

Merced County lies in the heart of California's Great Central Valley, and agriculture is the traditional economic base. The county is medium-sized for California, with a population of about 200,000—50 % of which is non-white and 40% of which lives in unincorporated areas. The county has a large Hispanic population, and a fairly large Southeast Asian community. Median household income is $25,548, well below the state average of $35,798. Like many valley counties, its unemployment level is routinely at or near double-digit levels. In December 1998, unemployment stood at 15%. The poverty rate is estimated at nearly 26%.

At the time MerCAP was initiated in 1997, Merced County served approximately 10,000 AFDC (Aid to Families with Dependent Children, now TANF) households, with 17% (34,000) of its 200,000 residents receiving AFDC. Between their peak in 1995 and June 1999, county caseloads have declined by 23%, attributed to welfare reform and a relatively strong economy (statewide caseload decline is 30%).

On average Merced County's TANF households have three children, ranking it at the top of California counties in number of children per case. It consistently ranks in the top ten among the 58 California counties in teen pregnancy rate. These and related concerns were part of the original impetus for creating MerCAP.

In Merced County schools, 47% of students are Hispanic and 12% Asian. The percentage of Limited English Proficient (LEP) students (31.8%) is well above the state average of 24.2%. Results from the recent statewide achievement tests show that Merced reading test scores fall

well below the state average for all grades. Per pupil spending based on average daily attendance is about average for the state, while the high school dropout rate of 2.4% (in 1996-97) is below the state average of 3.3%. Like the state average, the reported Merced dropout rate has been steadily falling since 1992-93.

Effective July 1, 1998, SB 727 changed the way in which attendance is calculated for the purpose of school funding. Previously, attendance rates were adjusted to include excused absences. After SB 727, only actual attendance (seat time) is counted. This change, initiated in the second year of MerCAP, has created a strong incentive for schools to improve attendance for all students. In some cases, it has also resulted in increased referral of low-attending students to alternative school programs.

Program Scope

MerCAP operates for a three-year period under a waiver from the state Department of Social Services granted on June 5, 1997. During each subsequent school year a portion of the county schools have joined the program, with all schools participating as of the 1999-2000 school year. This includes over 80 schools and approximately 9,000 MerCAP students, significantly fewer due to declining TANF caseloads than the 16,000 children originally expected. The program excludes kindergarten students for whom school attendance is not statutorily mandated, older teens (age 16-18), children who are home schooled, and those attending private schools.

The MerCAP waiver suspends Welfare and Institutions Code 11450 (the Maximum Aid Payment schedule) in order to allow MerCAP sanctions, and for the first time permits Merced County's Human Services Agency to share with schools lists of TANF students (only after parents are notified and arrangements are made for maintaining strict confidentiality standards). The waiver was approved after federal welfare reform legislation (The Personal Responsibility and Work Opportunity Act of August 1996) and immediately before the state passed its CalWORKS (California Work Opportunity and Responsibility to Kids) legislation in August 1997.

MerCAP Procedures and Operations

Basic features of the program[1] include:

- Schools playing an active role with families to resolve problems underlying frequent absenteeism through conferences, referrals, Corrective Action Plans, etc.
- Attendance action "triggers": at 5 absences (at any time over the course of the school year) the school sends a letter to the parent; at 7 absences the school sends a second letter scheduling a parent conference at which the school will seek to resolve problems; and at 10 absences at which point the school notifies HSA to sanction the family.
- The financial sanction can be imposed if the family fails to respond to the request for a parent conference or if the child continues to miss school and 10 absences are reached.
- The financial sanction is for one month and represents the child's portion of the TANF grant (in contrast to CalWORKs sanctions that only affect the adult portion of the grant).
- The financial sanction ends when parents cooperate (by attending a conference) or the one-month period is up.

[1] A detailed description of MerCAP procedures and operations can be found in the program Handbook, available from the Merced County Human Services Agency.

- Subsequent absence(s) during the year can result in another request by schools to HSA for an additional sanction.
- Schools make “good cause” determinations to determine which absences will not apply toward the 10-absence limit.

EVALUATION ACTIVITIES

Overview

California is one of 40 states to make TANF support contingent upon parents insuring that their children attend school regularly. Under CalWORKs, responsibility for determining how this provision of welfare reform will be implemented is the responsibility of county governments. Because MerCAP predated CalWORKs, and because many counties have yet to determine how they will implement the school attendance provision, there is significant interest in learning from the MerCAP experience. This evaluation, under contract with the state Department of Social Services, seeks to understand MerCAP's impact on attendance, achievement, and parent-school relations, and to learn from the implementation process.

This report covers activities through the second year (1998-99) of the three-year project. As in most complex undertakings, the first two years have presented significant challenges in establishing collaborative relationships, setting operational policies and procedures, and solving a variety of implementation problems. We appreciate the good faith effort to meet these challenges, and hope the reflections in this report contribute to ongoing program modifications, and greater clarity about what programs such as MerCAP can and cannot achieve.

One major challenge to evaluating the impact of MerCAP is the new state policy on how school attendance relates to funding allocations (SB 727). Beginning in the 1998-99 school year (i.e. MerCAP Year 2), schools are funded based on actual attendance (i.e. seat time) rather than on attendance adjusted for excused absences. Thus schools have a new and strong incentive to improve attendance for all students, making it more difficult to isolate the effect of MerCAP in improving attendance for TANF students.

MerCAP was based on the assumption of excessive school absenteeism among families receiving welfare cash aid. The program was expected to make an impact in two areas—improvement in attendance of children whose families receive Temporary Assistance to Needy Families (TANF), and—as a result of more regular attendance—improvement in their school achievement.

To test the underlying assumption, and the degree to which MerCAP has achieved its intended outcomes, we have made comparisons based on two primary data sets, both based on data maintained by individual Merced schools. The first set is made up of aggregate-level school attendance data, coded by school and grade, and differentiating TANF and non-TANF attendance patterns. The second data set is made up of individual student attendance records, collected from a sample of TANF students enrolled in selected MerCAP schools.

Two important caveats should be kept in mind in interpreting the findings of this report. The first is that MerCAP is neither designed nor conducted according to an experimental design. The analytical comparisons available for the evaluation are rich, but not of the type associated with evaluations that can compare experimental and control groups. The second caveat is that at this mid-way point of the evaluation, there is still a significant amount of missing data in both the aggregate school data set and the individual student data set. We have limited ourselves in this report to findings that can be supported within these data limitations. Our final MerCAP report will incorporate whatever additional data is available to us, and address more directly the

question of whether missing data compromises the ability to draw generalizations from the findings.

Comparing Year 1 and Year 2 MerCAP Schools

Year 1: In 1997-98, 21 schools in eight school districts began MerCAP. None were year-round schools; none had more than one track. As a special comparison in Year 1 only, schools in the Livingston Elementary School District were restricted to use of family case management and not sanctions. As we have reported in more detail in earlier reports, this proved unworkable for two reasons: the threat of sanctions was present even though no sanctions were invoked, and the particular attendance software used in the district (MacSchool)[2] did not yield separate attendance data for TANF students.

Year 2: In 1998-99, 34 schools (64 if counting each track as a school, as was necessary for our data collection and analysis purposes) started MerCAP. Two of these schools were brand new (Delhi Middle and Delhi High Schools). Several are year-round schools, with multiple tracks. The task of collecting, entering, and processing data from Year 2 schools was thus about triple the work of the preceding year.

Characteristics of all Merced County schools, grouped by Year Starting MerCAP, are displayed in *Appendix 1*. In general, Year 1 and Year 2 schools have about the same percentages of students on TANF and receiving free or reduced cost lunches. Year 1 schools have a much higher percentage (41%) of students with Limited English Proficiency than Year 2 schools (28%), with a higher percentage of Hispanic and lower percentage of white students. Less than 5% of students in either Year 1 or 2 schools were Asian, compared to about a quarter of students in Year 3 schools.

School Attendance Data Collection

Under MerCAP, schools are responsible for reporting both general attendance and MerCAP "attendance actions taken" (AAT) data to the evaluation team in a form that enables us to perform the necessary analysis. Since the beginning of the project, missing monthly data from schools has been a significant problem. While most of the schools (Year 1 and Year 2) were very cooperative in providing copies of their monthly attendance reports for all students and for TANF students, some glitches were experienced. In most cases these were problems of copying the wrong document (e.g. month 4 instead of month 5) or getting lost in the mail. A few schools had computer problems—e.g., changing to a new computer system and records not being accessible for a period of time.

In regard to AAT data, out of 52 potential reporting units in Year 2, 31 schools reported on 9 or more months; 12 reported for less than 9 months but did send in at least one report; and 9 sent in no reports of attendance actions taken. We made repeated efforts to obtain missing data, but for a variety of reasons this was not possible. In some cases there are obvious explanations. For example, Merced High School stopped keeping these records when its attendance liaison died. For other schools there is no apparent reason. It is possible that some schools did not report on months when there were no actions taken, despite our instructions. Eight schools did not report MerCAP actions at all, and another two provided only a few months of AAT data. As we

[2] In Year 1 Livingston and Planada schools used the MacSchool attendance software.

discuss in detail in the process study, these same 10 schools requested 45 sanctions. This raises the question of whether these schools are following the program, and simply not sending in reports, or requesting sanctions without following the program protocols.

Difficulties were compounded by the use of MacSchool software in three of the Year 2 districts—Hilmar, Los Banos, and McSwain. An attempt was made to mitigate the problems of flagging TANF students so that Year 1 and Year 2 schools using this system could adequately monitor and report TANF attendance. We contracted with MacSchool service representatives to provide a specially-designed template and hands-on workshops on how to use it. However, this did not prove usable for attendance personnel at all the schools using this software. It did not allow schools to give us an accurate monthly account of the actual and possible attendance of all TANF students. A number of the schools provided us with an end of year attendance printout for all TANF students from which we could derive a year-end percentage actual attendance for the whole group. This involved a great deal of work and was not feasible for multi-track schools with large TANF enrollments. We hope that some of these data can be retrieved in the final year of the MerCAP experiment so that we can include them in our final analysis and report.

Sample of Individual TANF Students

A sample of individual TANF students was selected from schools starting MerCAP in 1997-98. An additional sample was drawn from schools beginning in 1998-99. The sampling frame for each year included elementary, junior high/middle, high and K-8 schools. An attempt was made to include schools with relatively high and relatively low attendance histories, and schools from districts in different parts of the county. A sample of 55 students was randomly selected from the roster of TANF students at the 8 schools selected in each year. The actual number of students varied slightly from one school to another; some students had never been enrolled in the school; others had been there for only a few months before moving.

We have attempted to collect for each individual in the sample the following data:

- attendance for the 1996-97, 1997-98, and 1998-99 school years;
- grade and school attended (if any and if known) in each of those years;
- the number of schools attended during that 3-year period;
- the most severe attendance action taken (if any) during each year;
- the student's score on the Reading Comprehension section of the Stanford Achievement Test (Version 9)—the state-mandated test—in 1997-98 and 1998-99 for all that were eligible and attempted to take the test.

The original sample of 868 students has diminished due to family moves outside Merced County, student placement in a program (e.g. Special Day Classes, continuation schools, independent study) not included in this evaluation, and inability to locate the student in the school s/he was believed to attend. We have been able to maintain data collection for many of the students who have been promoted or moved from one school to another within the county. We have not dropped any students who may have fallen off the TANF rolls after they were selected into the sample.

The current sample consists of 696 students. *Appendix 2* provides a description of the sample, including the numbers for whom key data elements are available. A sample of students from the

Merced City Schools will be added in the 1999-2000 school year. There is a high probability that there will continue to be attrition among the current sample.

The cooperation of the schools from which the samples were drawn and the additional schools to which sample students have now moved has been remarkable. They have provided room for members of the evaluation team to spend hours to find and copy applicable test scores; they have accessed and printed out current and former year attendance and enrollment records of sample students; they have even searched district records to 'find' students not enrolled in their former schools. Any missing data in this data base is not attributable to lack of interest and willingness on the part of the participating schools.

Other Sources of Data

To broaden our understanding of MerCAP dynamics, and provide further tests of findings from the primary data sets, we have also drawn on district level data available from the state Department of Education (described in the impact study). In addition, we have collected information from the Human Services Agency on the frequency of sanction requests, and from schools on their estimated costs of implementing MerCAP.

School Area Meetings

In lieu of site visits to individual schools (as we did during Year 1), we met with principals and attendance clerks in Year 1 and Year 2 schools during the fall of 1998 and spring of 1999. The meetings met a dual purpose: providing us with information on how schools are implementing MerCAP, and providing an occasion for schools to share ideas and viewpoints. Feedback indicated that most schools found this format valuable. During the spring meetings schools received data from the evaluation team on attendance patterns in their schools and districts. In addition, each person attending filled out a short survey asking for their opinions on how well MerCAP is meeting its goals; how effective and difficult different program elements have been; the degree to which they are integrating MerCAP with regular attendance protocols; and what they believe to be the main reasons for attendance problems. Findings from the survey were reported in full in our Year 2 third quarterly progress report, and are incorporated into this report under the appropriate topics. A total of 73 individuals attended the four fall meetings, and 47 attended the six spring meetings.

Steering Committee Meetings

We observed the three MerCAP steering committee meetings held during the year (in September 1998, December 1998, and March 1999). The steering committee includes representatives of both the Human Services Agency and the schools, and is facilitated by the Human Services Agency's MerCAP project coordinator. Other members include: superintendents from two Year 1 and two Year 2 schools; attendance staff from elementary, middle school, and high school levels; the Merced County Office of Education Assistant Superintendent; and HSA Deputy Director. Others are invited as needed. The agenda is set by the HSA project coordinator based on concerns voiced by members.

Parent Focus Groups

As we did in Year 1, we conducted focus groups with parents/guardians (some grandparents) of MerCAP students to discuss their experience with the program. This year invitations went to parents of students in the Year 2 sample schools. Unlike the invitations last year, which were issued jointly with an accompanying letter from the school, and which were translated into Spanish or Hmong when appropriate, this year's invitation letter came directly from the evaluation team in English only. As a result, participation in this year's focus groups was substantially lower than last year (31 compared to 121).

Between May 4-6, 1999, a total of five groups were conducted, two in Hmong, two in English, and one in Spanish. Parents were informed about our roles as evaluators, and assured that we would not divulge their names as sources of particular comments. Questions concerning school attendance in general, their knowledge of MerCAP, and their opinions of MerCAP were asked, using the same protocol as we did in the previous year. As a token of our thanks for their participation, each family received scrip worth $10 at a local supermarket.

Other Evaluation Activities

We participated in briefings held quarterly with the state Department of Social Services and county representatives to review evaluation progress reports and address any problems that had emerged. We also communicated frequently by phone with school, Human Services Agency, and DSS personnel and kept a phone log indicating comments made by school personnel about MerCAP. We have also collected documents (e.g. school attendance policies) related to MerCAP.

PROCESS STUDY

Attendance Actions Taken

Tables A, B, and C in *Appendix 3* report the number of attendance actions taken for MerCAP and non-MerCAP students at the schools for whom we have at least nine months of data reported. This is true for 31 schools out of the total of 52 participating at this time. Collectively these schools have 1,872 TANF students (55% of the total in all 52 schools) and 16,864 non-TANF students (69% of the total in all 52 schools). The large percentage of missing data makes it hard to determine the degree to which the findings reported reflect the entire population.

Patterns observable in this data include:

- The % of TANF students for whom a sanction is requested is higher in the older grades (6% elementary, 9% in middle, and 27% in high schools).
- Similar to last year, the total number of sanctions imposed for failure to attend the parent conference is about equal to those imposed for 10-absences.
- Of those students who receive the 7-absence letter, 21% end up being sanctioned for 10 absences.
- If you compare the percentage of TANF students for whom schools must schedule a parent conference with the percentage of non-TANF students who require a conference, attendance supervision, or referral to a School Attendance Review Board (SARB), the percentages are roughly equivalent in elementary and middle schools. High schools report significantly more attendance problems among TANF students.
- The number of corrective action plans reported is substantially less than the total number of parent conferences. It may be that absences were determined to be for good cause and that a CAP was inappropriate. We have also heard school personnel say that they often do not use a CAP because they believe it will not help in certain cases.

A strong majority of those surveyed at the spring area meeting supported the effectiveness of all the basic program components, including the 5 and 7-day letters, parent conferences, corrective actions plans, and sanctions. They believe the sanction to be the most effective element of the program, followed closely by the parent conference.

All the program elements were considered somewhat difficult to implement; none of the program elements was singled out as being particularly difficult compared to the others.

Sanctions

According to Human Service Agency records, during the 1998-99 school year 206 sanctions were imposed on 169 children, resulting in a reduction of 260 benefit months. This represents approximately 5-6% of MerCAP students, slightly lower than the percentage during the previous school year. Of the 206 sanctions, 108 were for 10-absences without good cause (resulting in a non-curable one month sanction), and 98 because the family did not cooperate by attending the required conference (curable if the family cooperates promptly upon notification). A detailed account of sanction activity is provided in *Tables D and E in Appendix 3*.

Of those sanctioned:

- 23 children had more than one sanction during the school year
- 32 children remained in uncured conference sanctions at the end of the school year
- 13 children also had sanctions in Year 1
- 6 households had sanctions in Year 1 with a different sibling

Without knowing details of the individual cases, it is difficult to interpret the meaning of these data. The relatively low number of repeat sanctions from Year 1 to Year 2 may suggest the sanction is having the desired effect in encouraging attendance, but it could also mean that sanctioned families moved to schools not in MerCAP, or outside the county. At the same time, the number of multiple month sanctions and uncured conference sanctions suggests that there are some families for which MerCAP efforts have not immediately brought about the desired results.

Cost and Savings Implications of Implementing MerCAP

The Human Service Agency estimates the savings in TANF benefits not paid due to MerCAP sanctions to be $26,000 (based on 260 sanction months). Because the cost to the county budget of TANF is 2.5% of the total grant, the county portion saved is $650. Under the terms of SB 727, school districts would save money if MerCAP actually increased student attendance. But specifying the precise amount would be impossible because multiple factors influence school attendance.

The major cost of implementing MerCAP is the time school personnel must devote to implementing the program. As we did in the previous year, we asked personnel in each school implementing MerCAP to estimate the total number of hours of clerical and professional staff time devoted to implementing MerCAP during the first four months. Table 1 presents a summary of the data reported by Year 1 and Year 2 schools. All but four of the 52 Year 1 and Year 2 reporting units have reported these estimates.

Table 1. Average Startup Hours in Year 1 and Year 2 Schools

	1997-98		1998-99	
	Professional	Clerical	Professional	Clerical
Year 1 Schools (n=21)	19.4	57.0	11.4	51.3
Year 2 Schools (n=31)			13.8	26.5

These data suggest that MerCAP has been somewhat less costly to implement during Year 2. But our conversations with school personnel subsequent to receiving these estimates suggest that their validity is suspect. Many school personnel report that they had a very difficult time separating out time spent on MerCAP from time spent on regular attendance functions. This is understandable given the increasing time spent by all schools on attendance due to SB 727. Adding to our doubts about these data is the extremely wide variation in the estimates across schools. Estimated clerical hours range from a high of 152 to a low of 7. Estimated professional hours range from a high of 51 to a low of 0. To some degree the variation reflects the number of MerCAP students enrolled in each school, with higher MerCAP counts resulting in increased time to implement. But even schools with similar enrollments report widely varying time estimates.

Due to these concerns, we did not collect cost data from the schools at the end of the year to estimate the time required (after start-up) to implement MerCAP. We are instead planning to

revise our strategy during the 1999-2000 school year. At the beginning of the year we will ask principals to estimate the time that they and other staff (clerical and professional) expect to devote to the total attendance function at their schools in the 1999-2000 year. Then, at the end of the year, we will ask the same question as well as asking the portion of that time attributable to MerCAP only. This should enable us to obtain more reliable estimates that distinguish MerCAP from other attendance functions.

Many school personnel continue to find MerCAP unduly burdensome to implement. At the same time, they are beginning to realize that extra time taken to improve attendance for all students may pay dividends given the new school funding formulas. From a school perspective, it is this broader cost-benefit calculation that is becoming more important to monitor.

Congruence of intended project goals with actual activities

Overall finding: Our Year 2 evaluation of project activities reaches similar conclusions to those in our Year 1 report. Both school personnel and the Human Services Agency continue to make a good faith effort to implement the program as designed, but the lack of resources to support family case management efforts means that MerCAP is primarily perceived and operated as a "sanction" program. As we indicated last year, the primary reasons this is the case is that MerCAP provides no new resources to schools or the Human Services Agency, and that essential case management activities are not clearly defined in either the waiver, the project description, or subsequent program protocols. Given this, it would be inappropriate to draw conclusions about the efficacy of a case management program to improve attendance based on MerCAP.

Among both school personnel, Human Services Agency staff, and other social service case workers, the sanction is viewed as a tool which can be used in trying to elicit the cooperation of parents in getting children to school. The availability of this tool is highly valued by school personnel, since it provides a concrete way to "give teeth" to school attendance policies. Most feel the tool is valuable and appreciate the leverage it provides, even if it is not always effective.

Nearly 2 of every 3 persons surveyed (N=47) at the spring school area meetings believe that the program is meeting its goal of curbing excessive absenteeism. Some qualify the point by noting that it seems to work better on borderline cases than on the really problematic kids and families. Others qualify by noting that local School Attendance Review Board (SARB) policies, and the new state policy linking reimbursement to actual attendance (SB 727), have more to do with any changes in attendance patterns than MerCAP. At least one school reported that their faculty does not support the idea of MerCAP-type programs, since they increase the incidence of children who are ill attending school.

In short, rather than providing a new family support program, or better coordination of existing family support resources in the community, MerCAP has provided a tool (the sanction, and the steps leading to it) which is used in the course of existing school and agency interaction with families. Schools appreciate having a program that provides real consequences for families. In effect, the sanction threat can replace the past pattern of relying solely on repeated exhortation to parents by school officials.

Family case management: Our area meetings confirmed the previous finding that schools have little time to engage in attendance-related case management, and no clear strategy for involving community resources in a systematic way. For some, case management means identifying

community resources to which families can be referred. For others, it means attempting to build relationships with parents and working toward school success. In both cases, school personnel are frustrated that they have so little time to devote to such important work.

Most schools can name a few community agencies to which they sometimes refer families. These include:

School Attendance Review Board (SARB),
Supportive Ongoing Services (S.O.S.),
Probation,
Drug Abuse Resistance Education (DARE),
Mental Health, Child Protective Services,
Public Health (for lice),
Mental Health,
A Woman's Place,
Recovery Assistance for Teens (RAFT),
Redirect,
Tough Love,
Parenting classes at school (required by some SARBs or as part of a Corrective Action Plan),
Police/truant officer,
School resource officer,
Human Services Agency,
District Attorney's office.

We do not know how frequently schools referred students or parents to these agencies/programs, or what kind of follow up may have occurred. Many school personnel appeared to have difficulty recalling any non-school resources to which they had referred families. On the other hand, at least two school districts have social workers and family counselors available to work with families with problems.

Almost half of those surveyed at the spring 1999 area meeting were "not sure" whether MerCAP was meeting the goal of providing support services that enable families to meet the attendance standards. And 2 of 3 reported that since MerCAP began, their use of community resources has "stayed the same" or "decreased."

Many schools, particularly in rural areas, have a strong sense that there are few community resources on which to draw. One told us: "Those resources are mostly concentrated in the city of Merced, not in our community." Many take the view that "if it is going to get done, we have to do it ourselves." One said, "It would take more time than I have just to explain the problem to someone else." In light of these comments, we will be particularly interested to see if the experience of Merced City schools with family case management in Year 3 is significantly different from that of Year 1 and Year 2 schools.

Some school officials express concern that the program may not be reaching many of those for whom it was intended. They note that children with attendance problems are moving as they approach the potential sanction, and that the parents of children with the most severe attendance problems are the least likely to show up for conferences.

Sanction Program: Project leaders have continued to emphasize the need for MerCAP to insure fair and legally correct treatment of recipients. Out of 206 sanctions imposed on 169 children,

six hearings were filed during Year 2. According to Human Services Agency records, 2 were resolved by parent cooperation, 1 parent withdrew, 1 parent was a no-show and the hearing was closed, 1 is left open pending additional verification by the household and the county, and 1 was still pending at the time the report was completed.

A comparison of Human Service Agency records with the Attendance Actions Taken reports filed by schools with the evaluation team reveals discrepancies that may be of significance. Two schools reported a total of 5 sanction requests to the evaluation team that are not revealed in the Human Service Agency sanction report (dated 8/24/99 and later revised after a phone conversation on 9/9/99). The 5 requests reported only by the schools may have been mistakenly attributed to other schools, or cured before being registered. The more troubling discrepancy is the omission of reports to the evaluation team by 10 schools who were credited by the Human Services Agency for a total of 45 sanction requests. In some cases these schools have provided no reports at all to the evaluation team, and in others their reports vary from Human Service Agency records by between 1 and 16 sanction requests. Some difference is understandable—a sanction request may be cured before it is recorded, for example. The explanation for others is not obvious. School staff have noted at area meetings that they do not always find out what happens to the requests they submit; perhaps requests are not reaching the appropriate person at the Human Services Agency. In other cases, it appears that school personnel are simply not cooperating with the record keeping requirements necessary to manage and evaluate the program.

Consistency of Implementation Across Schools and Over Time

Having resolved many of the detailed implementation questions during Year 1, project leaders took steps in Year 2 to regularize program operations. These included:

Handbook. With help from a number of school personnel, the Human Services Agency prepared the MerCAP Resource Guide for Schools. The guide serves as a handbook detailing MerCAP's operational policies and procedures. Sections of the handbook deal with the history of the project, an operational flowchart, HSA lists to the schools, tips for using SASI attendance software to prepare MerCAP reports and suggestions for tracking attendance and communicating with parents. The handbook also contains forms needed for notifying HSA of sanctions, and for the evaluation. A resource list of project personnel and some county agencies is also provided. The handbook is designed in loose-leaf fashion so that it can be updated as needed. Preparation of the handbook demonstrated the growing collaboration between schools and HSA; its existence marks the gains made in codifying the program during the first year.

Training. On August 18-20, 1998, HSA held three training sessions designed to orient Year 2 schools to the MerCAP project. A total of 58 school personnel attended, and all Year 2 schools were represented. At the training, copies of the handbook were distributed to each school. In addition, Katie Roeser of HSA provided background on the project, Debbie Buzbee provided information on using SASI, and David Campbell and Marilyn Rotnem explained the importance of the evaluation. Brent Saich of HSA CWS Social Services provided information on an integrated social services program operating in the county to which schools can refer families. The training appeared to be well received by most participants.

Oversight Committee: A MerCAP Oversight Committee was established in the Fall of 1998 and met three times during the 1998-99 school year (see details in other sections of this report).

Even with the Year 1 experience to draw on, many questions still arise during the normal course of implementing MerCAP. Examples of the types of questions raised by schools during Year 2 include:

- If a student has 10 unexcused absences by Nov. 10, and then accumulates 5 more that month, how do those five count? Or do they?
- What happens after age 16 if the school reports a child to HSA for non-attendance?
- From whom do 'leaving' and 'gaining' schools find out what school a child moves to/from? From whom does HSA find out where children go when they graduate or move away from one school?
- For year-round schools, when does the MerCAP year start?
- If children are disenrolled for a short period (e.g. moving to another state for a month) is it necessary to notify HSA?
- Does the school keep on tracking the attendance of children who have been dropped from the TANF list because they are being sanctioned?
- If a child is absent more than 1 day while being sanctioned, does each missed day result in one more month of sanction?
- Do children who turn 16 during their sophomore year have to be taken off MerCAP? (Some students have been heard to say that no one cares whether they come to school any more).

Discretion. Confirming what we found in our previous yearly report, both Year 1 and Year 2 schools continue to exercise considerable discretion in implementing various elements of the MerCAP program. The program may be most effective in settings where schools know families well, and can use this knowledge to make the most effective use of program components. In area meetings school personnel acknowledge that judgement and discretion play a large and important role in how they are implementing MerCAP (or any attendance program). Discretion comes into play in many ways: which absences are excused, how many second chances are allowed, whether corrective action plans are employed or not, whether parent conferences are devoted to problem-solving or conveying the threat of sanctions, etc.

Monitoring practices vary substantially. Some schools do MerCAP tracking once a week or more frequently for special cases, others only once a month. As we found last year, some schools send the first letter for *any* 5 absences, others for 5 *unexcused* absences.

There is a good deal of variation in how schools are handling corrective action plans (CAPs). Many have their own form, or use the SARB plan as a CAP. Others rely on oral agreements. Still others question the value of any CAP. Among the comments we heard were: "How can you make a plan with a parent who won't carry it out? The only plan is 'Get your kid to school!'" "I don't waste time with them. I just lay down the law." In other cases school personnel view the problems as too ill-defined to plan a remedy, whereas the CAP is useful when there is a clearly defined problem. Some schools take a broader view of what the parent conference and CAP might accomplish: "I schedule the conference before I send the letter, so that the letter is a reminder. It softens the blow of the letter so that the focus remains on fixing the problem rather than pulling the money."

Some schools have a good SARB with lots of concerned agencies that really do try to make examples of egregious truancy through the District Attorney's office. Other schools said the District Attorney does nothing. It was noted in one meeting that the judicial system would not

handle any cases in which absences and parent-school interaction about those absences has not been thoroughly documented.

There are many questions about whether and how tardies can be handled under MerCAP. Currently there is significant variation in how schools treat tardies. For example, in one school the attendance policy is that three tardies are treated as the equivalent of one unexcused absence. Other schools, such as those entering in Year 3, have adopted a policy that treats each tardy of 30 minutes or more as the equivalent of an absence.

A number of other factors also impact the uniformity of implementation. For example, some schools are more aggressive than others in deliberately moving children with attendance problems into alternative programs or independent study. A few school districts have adjusted their academic calendars to accommodate the desire of many families to take extended vacations in Mexico over the holiday season.

High schools continue to experience greater difficulties in implementing the program. Possible reasons suggested by school personnel are that high school is too late to change attendance patterns; that high schools are unable to give the needed personal attention due to the large numbers of students; and that the dollar amount of the sanction means less to high school kids and their families.

Relatively few Year 1 and Year 2 schools have made MerCAP and non-MerCAP attendance policies uniform, so that record keeping is simplified. Of those surveyed, only 1 in 4 said that their attendance policies for MerCAP and non-MerCAP students are "substantially the same." [Note: This may change substantially in Year 3. The Merced City schools, all of which enter the program in Year 3, have adopted a uniform attendance policy for all students. So has the Hilmar Unified School District.]

As noted elsewhere in this report, there continues to be considerable variation across school sites in how completely and promptly data have been provided to the evaluators, as well as in how accurately data reporting instructions have been interpreted. In a few cases where reports have not been sent regularly, it is difficult to ascertain if the school is monitoring attendance sufficiently to implement the program properly.

Coordination Between Stakeholders

Oversight Committee: During Year 2 a steering committee was developed to facilitate coordination between schools and the human services agency. As indicated earlier in this report, the committee includes approximately a dozen regular members, representing schools and the Human Services Agency, including some front-line staff. Three meetings were held during the school year, with a variety of topics addressed. The September and December 1998 meetings focused primarily on the relationship between schools' procedures for handling absences by MerCAP and non-MerCAP students, with an eye toward how processes and protocols developed for the MerCAP program can be used for all students with attendance problems. Comments and concerns expressed during the March 1999 meeting included the following:

- The importance of having the full blessing and support of the school principal in order to assure full and effective implementation of MerCAP;
- Continuing concerns about the speed by which HSA lists are updated;

- The number of schools who are in areas with no School Attendance Review Board (SARB) or other process to deal with truancy;
- The concern expressed by one Superintendent that the focus of MerCAP in Year 3 should be on the concept of early intervention to provide resources and support that enable families to meet the community norm around school attendance.

In order to communicate the committee's deliberations to school personnel and others, a newsletter named The MerCAP Mentor was distributed after the December meeting.

Coordination compared to Year 1: During Year 2 we have found the level of coordination and cooperation between schools and the Human Services Agency to be slightly higher than in Year 1. Most schools report that their direct queries to the agency are being handled effectively. Of those surveyed at the spring area meetings, 60% agreed that the collaboration and coordination between the schools and the Human Services Agency is healthy and productive.

On the other hand, many schools do not like the fact that they do not receive notification that a sanction has actually occurred. In general, schools still feel that the agency has left them mostly to their own devices in implementing the program. A number expressed a desire for more active help and support from the agency in understanding the program, and meeting staffing requirements.

Schools appreciate the improvements made to TANF student lists by the agency. They report that it was easier this year to follow drops and adds; and that faxing back the list with corrections is easy. Despite these improvements, schools are still concerned about the number of inaccuracies in HSA lists, and the fact that corrections are not immediately made after they report them to the agency (some errors may appear on lists for two or more subsequent months). It appears that schools and the Human Service Agency operate with somewhat different time frames, which exacerbates coordination issues. Schools must track attendance on a daily or weekly basis, whereas the agency procedures are geared to monthly reporting requirements.

Impact on Schools

Year 2 Findings: As detailed in our reports since the program began, the major impact of MerCAP on schools has been the significant time required implementing the program. Adapting computer software, keeping on top of absences, sending letters, and meeting with parents requires significant focus and energy. These are not tasks easily accomplished during normal school hours, given the near constant state of interruption that characterizes school offices, and chronic understaffing.

Since no new resources accompany the program, schools have had to cope as best they can with the program requirements. In some cases this has meant that attendance clerks have stayed late or come in on weekends to handle MerCAP-related monitoring, letters, and reports. In other cases schools were simply unable to monitor attendance as frequently as they would have liked, leading to delays in when absence letters were sent, conferences held, etc. Often such schools failed to provide all the reports necessary for the evaluation, this being a lower priority (understandably) from their perspective.

Despite some increased efficiencies gained by learning from the Year 1 experience, MerCAP continues to require a major commitment of time by school personnel. Only 1 in 3 of those surveyed at the school area meetings felt that the time that is required for school personnel to implement MerCAP was reasonable. Most schools report being "always behind" with MerCAP record keeping, since clerks have little or no time free to get to it. The lack of time/clerical support continues to be the most significant barrier to program implementation.

Schools in their second year of implementing MerCAP vary in whether the program has been more or less difficult in the second year. Some report having more work to do with conferences, others less. One clerk noted: "It is taking more time this year, but it is less obtrusive, since I now have built it into my normal routine." Another noted: "Finding uninterrupted time is a major problem. And we are a small school; we only have 25-30 MerCAP students. I work on it quite a bit and it takes me many hours a day just for that."

Schools would be more supportive of the program if they had the funds to have one person, or part of a person, to deal just with MerCAP. As things currently stand, most cannot keep up with all the required program elements.

The only other impact on schools that we have heard about is the feeling among some faculty at one school that MerCAP is causing sick children to attend school. We have discovered no other evidence that this is a pressing concern. Some schools make a point of encouraging parents to bring children to the school nurse to determine whether they should stay home.

Impact on Parent-School Relations

During Year 1, we found that MerCAP parents supported the basic idea of MerCAP, and often expressed appreciation for the fact that it provided them with additional leverage in encouraging their children to attend school regularly. On the other hand, we also found that MerCAP parents were not well-informed about basic elements of the program, and many felt mistreated by particular MerCAP procedures.

Year 2 findings: Once again, the impact seems mixed. Of the school representatives surveyed at the spring area meeting, 40% believe MerCAP is improving parent school relations and 27% believe it is not. School personnel confirm what we have heard from parents, many of whom appreciate MerCAP because it "backs them up" in the task of motivating their children to attend school. On the other hand, some parents resent having school personnel hold them to account, or intervening between them and the Human Services Agency. A number of school personnel insist that MerCAP "just gives them another tool—hitting them in the pocketbook" in dealing with parents, and that relationships are essentially the same as they have always been.

Many principals report that when they talk to parents at conferences it is the first time many parents have heard about or understood the program. Some complain that families do not easily understand the written material. One said: "Every time a parent calls, or I call a parent, they say, 'I don't know anything about MerCAP.'" She wondered if it would help to send MerCAP families a reminder about the program every three months.

In general, and for reasons not necessarily related to MerCAP, schools are doing more to communicate to parents the importance of good attendance. Quite a few indicated that, ideally,

building relationships with parents is something that should happen "outside" of attendance functions, or prior to problems occurring.

Doctor's notes play a key role in the relationship between parents and schools. The notes provide a way to give the policy "teeth." But many families have difficulties obtaining notes for routine illnesses. On the other hand, schools believe some doctors are too ready to sign notes excusing absences. This is a good example of the type of community networking and collaboration that must be built for an attendance program to succeed.

Parent perspectives: The 3 major findings from last year's parent focus groups were confirmed this year:

1. **Parents have a limited and often inaccurate understanding of MerCAP.** A few of those participating claimed the letter inviting them to the focus group was the first time they heard about MerCAP. Others had only a vague recollection of the program: "I guess after a certain number of absences they can cut your check." Many were confused, unable to decipher the meaning of terms like "sanction," or to distinguish MerCAP sanctions from other CalWORKs sanctions: "My caseworker told me they could sanction me for 3 months."

2. **Parents generally support the idea of the program.** The typical comment is that "some parents don't care so a program like this is necessary." A few state: "I'm all alone with my kids, and I appreciate any help that I can get in motivating them to go to school." Many seemed to appreciate the attention they received from school personnel during conferences.

3. **Some parents feel mistrusted or mistreated by the program.** One called MerCAP, and similar programs, "an invasion of privacy." A few feel their kids are already picked on or discriminated against, and this only adds to the problem. One believes the threat of MerCAP sanction has "scared" her son into attending school when his health didn't warrant it.

Most parents find much to like about their children's schools, including the chance to learn English, field trips, personal attention from teachers, the support of the DARE officer, and phone calls when children are absent. At the same time, they wish schools provided more after school care and tutoring.

While not necessarily typical, the following vignettes suggest some of the difficulties with which MerCAP parents struggle:

- A female single parent has one son. She has extricated herself from an abusive relationship with the boy's father, and from drug addiction, but still has panic attacks. These interfere with her participation in the welfare-to-work program. After talking with the DARE officer, she discovered that her son was staying home from school and smoking pot.
- A single parent has custody of two daughters, one in high school and the other about to enter kindergarten. She speaks no English, and works in a hotel with no set hours. Her older daughter would often stay home from school on mornings when she went to work early, which she didn't know about until the school called. She has just moved to town and knows no one she can call on to help out with her daughters.
- A single Hmong parent knows no English, and is therefore unable to help with her child's homework, or deal with problems with the school bus driver which have caused attendance problems.

- A female grandparent lives alone with two children, ages 15 and 13. She obtained custody due to the drug problems of her daughter, their parent. She holds a good, steady job, but must commute 90 minutes each way daily, meaning that the children are on their own for long hours before and after school. Though their attendance is good, she worries what is happening to them outside of school hours.

Unanticipated Effects

During both Year 1 and Year 2, MerCAP has altered perceptions of school personnel, for whom the MerCAP lists often contained surprises as to which children were or were not on cash aid. It also has led to the recognition within many families that MerCAP gives kids the power to affect family income. At its best, this leads to a sense of pride for kids as contributors to family well-being; at its worst, it becomes a weapon that can be used by kids to blackmail their parents, particularly among the older kids. We have also found some confirmation during Year 2 of the concern by some that the program will lead to sick children attending school out of fear of the sanction.

A major unanticipated effect of MerCAP has been to highlight the limitations of certain school attendance software (e.g. MacSchool) in support an adequate record keeping system. As in other aspects of welfare reform, developing data management systems capable of handling new tracking and monitoring functions is a key requirement for reform to succeed.

Lessons Learned About Excessive Absences and Effective School Strategies

One goal of MerCAP is to learn more about the reasons for attendance problems, and effective school or community strategies for encouraging attendance. In focus groups parents have suggested a broad range of reasons for why attendance problems occur:

- illness
- problems with homework or kids doing poorly in school
- kids feeling picked on by other kids
- problems with their teacher, particularly feeling embarrassed by the teacher
- problems “fitting in” due to dress or other social pressures
- independence/rebellion in older kids
- logistical issues associated with single parent families
- family conflict issues (especially lack of support from divorced spouse, or alcohol, drugs, etc.)
- either parent or child too lazy to get up

In our survey of school personnel at the spring area meeting, the top three reasons given for why families have problems with attendance were 1) routine health problems, 2) lice, and 3) parents who either allow absences or are incapable of managing their child’s attendance. Issues related to children liking school, getting along with peers, or being irresponsible were rated considerably lower as factors. During the meetings, extended trips to Mexico were frequently mentioned as a cause of absences. Kids being bored with the curriculum, especially at the high school level, was also mentioned.

In most schools, excessive absence problems are limited to a relatively small number of families that are well known to school personnel. Schools vary in how much effort they make to reach

out to these families with referrals, resources, or personal attention, but it is typical for almost all schools to reach a point where they feel that further such effort is unlikely to change the behavior of certain problem families. It is for this very reason that school personnel welcome the sanction program, since it provides a new tool for motivating parental cooperation in cash-aid families.

Most schools have regular programs to support good school attendance. Common elements in these are rewarding good attendance, calling the homes of absent students, monitoring absences regularly, and involving students in engaging and fun activities. Given the new school funding regulations, schools put even more emphasis on attendance during this past year.

IMPACT STUDY

The following sections describe the major findings from our impact study analysis. It is important to keep in mind that these findings reflect only the first two years of a three-year pilot program. They reflect the experience of the three-fourths of all Merced schools that lie outside the Merced City School District. Until we have three full years of data, the analytic comparisons available to us are somewhat restricted. We have limited ourselves in this report to those findings that can be supported within the limits of the data currently available. The reader should keep in mind these limits and the specific caveats discussed below.

Basic Questions Addressed by the Impact Study

The second year impact study sought to answer the following questions:

1. Do TANF students have lower attendance rates than non-TANF students?
2. Does participating in MerCAP improve the attendance of TANF students?
3. What impact, if any, does MerCAP have on overall school attendance in participating schools?
4. Are the attendance rates of TANF students related to their school achievement?

The remainder of this section of the report will be organized around these questions. Variable definitions and statistics from all analyses are shown in Appendix 4.

Question 1. Do TANF students have lower attendance rates than non-TANF students?

The goal of this analysis was to determine whether TANF students in schools participating in MerCAP during the 1998-99 school year differed in their attendance from non-TANF students in the same schools and grades. From each participating MerCAP school the number of days of actual attendance and of possible attendance (days enrolled) for **all** and **TANF** students were collected for each grade (and track, where applicable) for the 1998-99 school year. An average percentage actual attendance was calculated for all students (**PAA98**), TANF students (**MPAA98**) and non-TANF students (**NPAA98**) for each grade and track.

Test 1*:* We compared the mean attendance of TANF (MPAA98) and non-TANF (NPAA98) students in the 270 school/track grades for which data are available out of a possible total of 292 school/track grades.

Results: There is a significant difference between the average attendance of all TANF students in 1998-99 (MPAA98 = .9485) and their non-TANF classmates (NPAA98 = .9557). This differs from a comparison of last year's TANF students (in Year 1 schools only) and their peers, where TANF average attendance (MPAA97 = .9466) was not significantly different from non-TANF average attendance (NPAA97 = .9510). Results of the t-tests are shown in *Appendix 4, Analyses 1 and 2.*

Test 2: To further examine this finding we sought to determine if the 1998-99 differences between TANF and non-TANF students were similar in schools starting in MerCAP Year 1 (1997-98) and those starting in MerCAP Year 2 (1998-99). Using the attendance measures described above, t-tests were conducted separately for schools that started MerCAP in 1997-98 and those that participated starting in 1998-99 (See *Analyses 3 and 4 in Appendix 4*).

Results: For schools that started in 1997-98 (MerCAP Year 1), the difference between TANF attendance (MPAA98 = .9556) and non-TANF attendance (NPAA98 = .9587) averaged across the 100 school/track grades was not statistically significant. As pointed out above, the differences between TANF and non-TANF attendance in the same schools during the previous year were also not significant.

For those schools that started in 1998-99, TANF attendance (MPAA98=.9443) was significantly different from the attendance of the non-TANF students (NPAA98=.9539) in the same 170 school/track grades.

Finding: Overall, this year's TANF students have slightly lower attendance rates than non-TANF students, and the difference is statistically significant. This finding is driven primarily by the experience of the schools entering MerCAP in Year 2 (1998-99), since schools entering in Year 1 (1997-98) did not evidence a statistically significant difference between TANF and non-TANF attendance in either Year 1 or Year 2. Next year we will be able to repeat these tests with 1999-2000 data from all Merced schools.

Question 2. Does participation in MerCAP improve the attendance of TANF students?

Four comparisons were made to address this question, three using individual student data from our sample, and one using aggregate attendance data for TANF students as reported by participating MerCAP schools.

Comparison #1: For individual students enrolled in a MerCAP school in 1997-98, we compared their 1997-98 attendance with their attendance in the previous, non-MerCAP year (1996-97). If MerCAP was working, we would expect to see a significant rise in attendance during the first MerCAP year. The data (*Analysis 5, Appendix 4*) reveal a slight *increase* (statistically significant) in the means of individual student attendance (IPAA 96-97=.9443 vs. IPAA 97-98=.9518).

Comparison #2: For individual students entering the program in 1998-99, we compared 1998-99 attendance with attendance in 1997-98 (i.e. the previous, non-MerCAP year). Again, we would expect a rise in attendance rates during the first year in MerCAP. These data (*Analysis 6*) revealed no significant change in mean attendance rates (mean IPAA 1997-98 is .945 vs. mean IPAA 1998-99 is .938; N=244).

Comparison #3: Aggregating *all* individual students in the MerCAP sample (i.e. those entering in either 1997-98 or 1998-99), we compared 1997-98 and 1998-99 attendance rates. The differences between means of individual TANF students' attendance in 1998-99 (.9419) and in 1997-98 (.9467) show a slight *decrease*, but were not statistically significant (*Analysis 7*).

Comparison #4: A separate test (*Analysis 8*) compared attendance across the same two years (1997-98 and 1998-99), this time using aggregate TANF attendance data from the 83 Year 1 school/grades for whom these data were available. This test revealed a small but statistically significant gain from Year 1 (MPAA=.9465) to Year 2 (MPAA=.9543).

Finding: These tests are inconclusive about the impact of MerCAP on TANF student attendance. Two tests comparing individual attendance in 1997-98 with that in 1998-99 revealed slight decreases in attendance, though neither was statistically significant. Two tests revealed slight

increases in attendance, one focused on individual attendance and the other on school-level attendance, and both of these were statistically significant. At best there seems to be a very modest increase in attendance across all TANF students. We will run similar tests on the larger data set available after Year 3 to see if a more definitive conclusion is warranted.

Question 3. What impact, if any, does MerCAP have on the overall attendance rate in participating schools?

We compared overall attendance (TANF plus non-TANF) in schools during their first MerCAP year with the same school's overall attendance during the previous (non-MerCAP) year (*Analyses 9 and 10*). In both Year 1 and Year 2 schools, overall attendance improved during the first year in MerCAP. The improvement is small, but statistically significant. For Year 1 schools, the improvement continued in their second year participating in MerCAP (*Analysis 11*). Again, the increase was small, but statistically significant.

The 1998-99 overall attendance increases in both Year 1 and Year 2 schools might be attributed to the implementation of SB 727 in 1998-99, when the basis of state school funding switched for most schools from apportionment to actual attendance. But our examination of 1998-99 overall attendance in Merced City Schools, which are starting MerCAP in the current year (1999-2000), shows no evidence of increased attendance (*Analysis 12*).

Figure 1. Relationship of 1996-97, 1997-98, and 1998-99 overall attendance rates among the Year 1, Year 2 and Year 3 schools

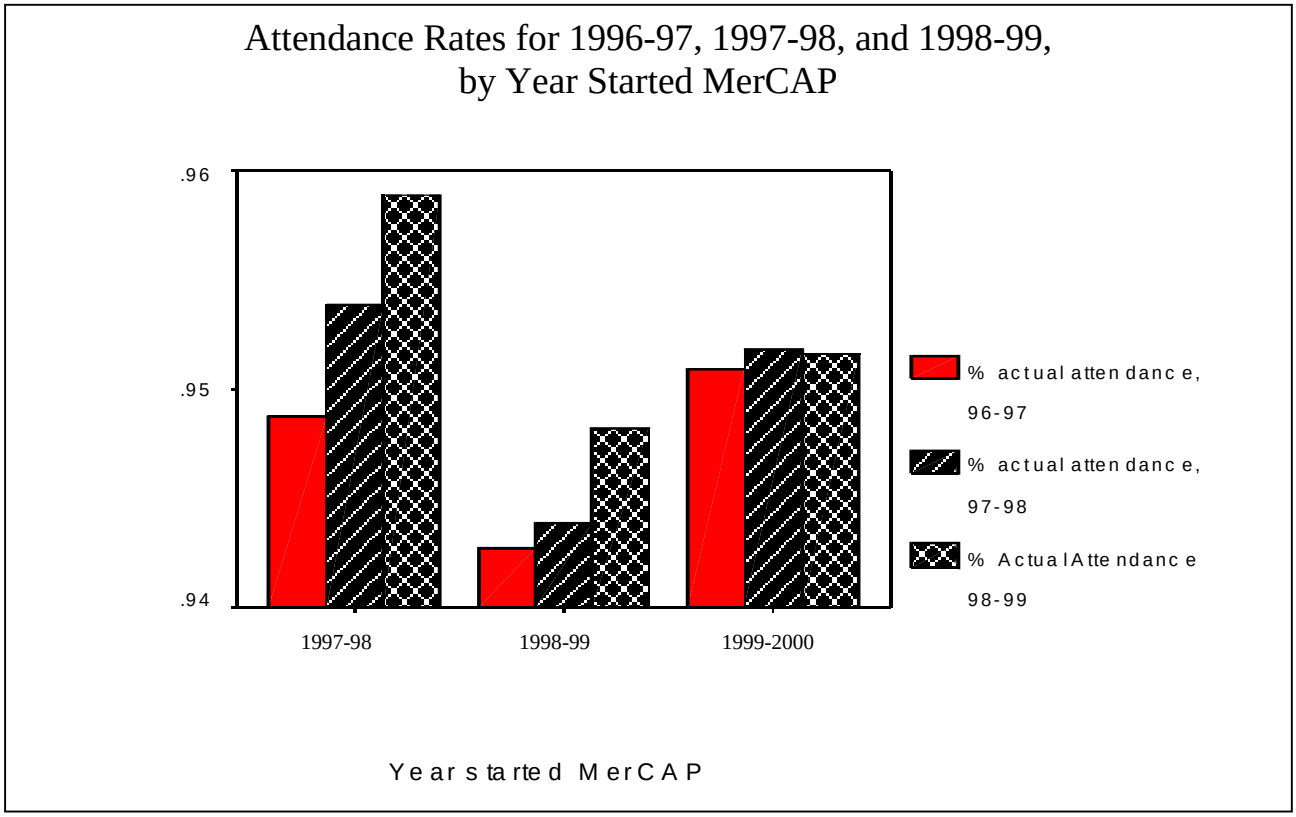


Figure 1 shows the relationship of 1996-97, 1997-98, and 1998-99 overall attendance rates among the Year 1, Year 2, and Year 3 schools. In Year 1 schools, overall attendance improved in the first year of MerCAP (1997-98) and again in the second year (1998-99). In Year 2 schools, overall attendance improved in their first year of MerCAP (1998-99). In Year 3 schools, virtually no changes are apparent in overall attendance rates—although they are higher than Year 2 schools in all three years.

Implication: While the evidence of MerCAP's impact on the attendance of individual TANF students attendance is not strong, it does appear that MerCAP is having a positive impact on overall student attendance. We speculate that this may be the result of a spillover effect due to the increased focus on attendance functions (for all students) on the part of school personnel as a result of their devoting time and attention to MerCAP. The available evidence does not support the alternative hypothesis that SB 727, and not MerCAP, is responsible for 1998-99 attendance increases. Since this evidence is admittedly slim, neither does it conclusively rule out that SB 727 has played a significant role.

The high correlation of one year's attendance with that in previous years was confirmed in an analysis of variance of 1998-99 percentages of actual attendance, using 1996-97 and 1997-98 attendance rates as covariates. Attendance also varies significantly by grade and the year the school started MerCAP (*Analysis 13*). Note that the Year 1 schools have a higher overall attendance rate than either the year 2 or 3 schools, and that attendance rises after kindergarten and levels in the elementary years, then falls in junior and senior high school (*Tables 1 and 2, Analysis 13*).

Question 4. Are the attendance rates of TANF students related to their school achievement?

Using the individual TANF student data, we calculated correlation coefficients to test whether a relationship exists between attendance and achievement (*Analysis 14*). No significant correlations were detected between individual attendance in 1997-98 and the 1998 SAT9 reading score (N=455), or between individual attendance in 1998-99 and the 1999 SAT9 score (N=505) (*see Correlation Matrix 1*).

A separate test using district level measures also failed to find a statistically significant correlation between attendance and test scores at any grade level (across all students, TANF and non-TANF). In this comparison we ran correlations using the average SAT9 reading scores for each Merced County school district (as reported on the California Department of Education website), and the average PAA for each district. Figures 2 and 3 illustrate the results.

Finding: Among our sample TANF students, and across all students in Merced County, there is no relationship between attendance rates and achievement, as measured by performance on the SAT9 reading test. This is consistent with evidence from the majority of research studies that have explored this topic (see the research cited in our Year 1 report), that have also failed to find such a relationship.

Figure 2. Average SAT9 Reading Scores for Each Merced County School District (as reported by the California Department of Education) by Year Starting MerCAP

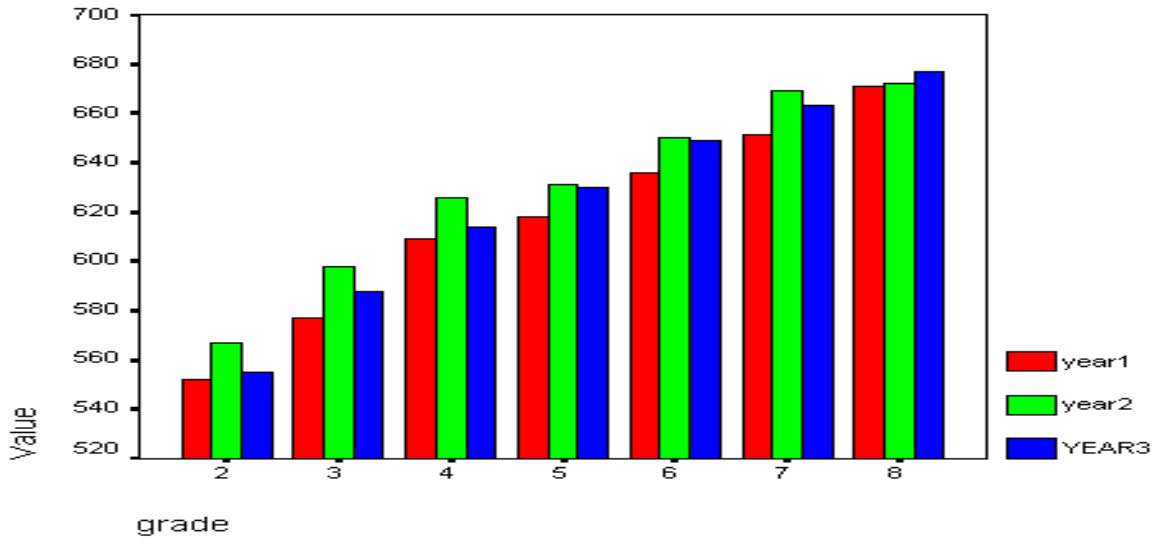
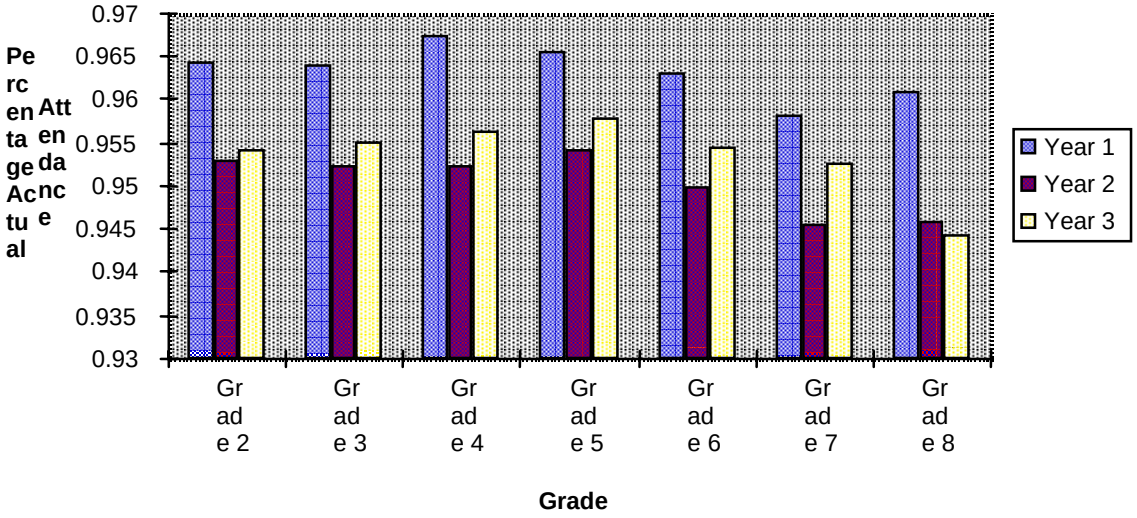


Figure 3. Average Percentage Average Attendance Across School Districts by Year Starting MerCAP

Figure 3. 1998-99 PAA by Grade



To further explore the implications of this finding, we used the state Department of Education's district-level database to run correlations (*Analysis 15 - Correlation Matrix 2*). In addition to test scores, this database contains breakdowns of the percentages of students in various categories, including ethnicity, TANF status, limited English proficiency, and free and reduced lunch. Findings are summarized below.

Attendance and achievement.. The percentage days attended to days possible in a school year were averaged across districts and correlated with the test scores and demographic data as well.

There is no statistically significant relationship between attendance and test scores at any grade level. There is also no statistically significant correlation between any of the ethnic categories and attendance. Furthermore, attendance does not correlate significantly with the percentage of LEP, AFDC, or Free/Reduced lunch students in a district.

Student status and achievement. We found no significant correlation between TANF status and reading scores. At the same time, there are strong, negative and statistically significant correlations between reading scores and both LEP (ranging from -.589 to -.883 in grades 2-7; sig. .05) and free and reduced lunch (ranging from -.581 to -.825 in grades 2-7. Sig. .05).

Ethnicity and achievement. Among ethnic groups, strong and significant correlations with test scores are found only among districts with high percentages of Hispanics (negative correlations ranging from -.589 to -.913) or of whites (positive correlations ranging from .651 to .875). While % Hispanic is strongly correlated with a district's free and reduced lunch population (.721 at .01 sig), it is not correlated at all with TANF status.

Other findings from the analysis of the district level data base include:

Limited English Proficiency. The percentage of LEP students in a district does NOT correlate significantly with the percentage of TANF recipients in a district. There is a statistically significant correlation between LEP and the percentage of Hispanic students in a district (.590 at a .01 significance level). None of the other ethnic groups, except whites, correlates significantly with LEP percentages. The percentage of students in a district receiving free or reduced lunch also correlates highly with the percentage of LEP students (.691 at .01 significance level)

AFDC/ TANF. The percentage of AFDC/TANF students correlates highly with three of the ethnic groups: African Americans and Asians with high and statistically significant positive correlations, and Whites with a significant negative correlation. AFDC/TANF percentages DID NOT correlate in a statistically significant way with percentages of Hispanic, Filipino, Native American, or Pacific Islander students. Interestingly, there is NOT a significant correlation between AFDC/TANF and LEP, so schools with higher percentages of Limited English Proficient students do not tend to also have higher percentages of public aid recipients.

Free/Reduced Lunch. Districts with high percentages of students on free or reduced lunch also tended to have a high percentage of students who were LEP. (.691, significant at .01) This is in contrast to the non-significant correlation between AFDC/TANF and LEP. Additionally, among the ethnic group variables, only Hispanic and White percentages correlated significantly with free or reduced lunch. Districts with high Hispanic populations tended to have high numbers of free/reduced lunch students (.721 at .01 significance), whereas districts with high numbers of White students tended to have lower numbers of students receiving free/reduced lunch (-.817 at .01 significance). Note here the disparity between the free/reduced lunch correlations with Hispanic population and that of Hispanic population and AFDC use, which was small and not significant.

Keep in mind that none of these correlations by themselves establish a causal explanation. But the data do clearly suggest that if the ultimate goal of policy interventions is to improve student achievement, we would do better to emphasize factors other than TANF status. This seems to be particularly true if the situation of Hispanic students is a priority concern.

CONCLUSIONS AND DISCUSSION

MerCAP: From Problem Perceived to Program Design

The idea for MerCAP originated in community concern over the perceived high absenteeism rates among students whose families received welfare cash assistance. This concern was linked to a broader set of related problems in Merced County, including a high rate of teen pregnancy, large numbers of families on cash assistance, and inter-generational welfare dependency.

Inspired by the Learnfare program in Wisconsin, and similar efforts to link welfare assistance to regular school attendance, County Supervisor Gloria Keene championed the idea of a school attendance program. Unlike other programs, this would be focused on young children (ages 6-15). The hope was that early intervention to curb excessive absenteeism would promote school achievement, help prevent social problems, and interrupt the cycle of intergenerational welfare dependency.

A group of Merced County school superintendents met with officials of the Merced County Human Services Agency to begin designing a school attendance program. Because a program including possible sanctions for TANF families would require a waiver from provisions of the Welfare and Institutions code, officials from the state Department of Social Services joined in the deliberations over program design. Among other concerns, the state officials insisted that the program include a family case management component rather than being operated solely as a sanction program.

The originally intended goals and procedures for MerCAP are articulated in two places: 1) the waiver signed by the Department of Social Services Director on June 5, 1997, and 2) the project description prepared by the AFDC Policy Development Bureau of DSS in June 1997. According to the waiver:

> The demonstration project will test the efficacy of reducing school absenteeism among 6 through 15 year-old school children by using a combination of family case management and sanctions. Schools will work closely with families of non-attending children, making referrals to a variety of community services as necessary. After exhausting all other avenues to insure the child attends school, the school will recommend to the County Welfare Department that the family be sanctioned.

Similarly, the project description is clear that notice to the Human Services Agency to impose a financial sanction is to occur only after “all other avenues” are exhausted. Both statements suggest that the emphasis in MerCAP would be on family case management first, and then on sanctions as a last resort.

MerCAP: From Program Design to Implementation:

The first task of our evaluation has been to ascertain whether the sanction and family case management provisions of MerCAP have been implemented as originally intended. The answer, convincingly supported by a wide range of evidence from the process study in both Year 1 and Year 2, is that the sanction and attendance supervision elements of MerCAP have been consistently implemented as intended, but they have not been accompanied by an expansion of family case management activities beyond previous levels.

Contrary to the original intent to establish supportive case management including referrals to community resources, MerCAP is operated and widely perceived as a sanction program. By default, the threat of sanction has become a central component of the interaction between school personnel and the families of TANF students with attendance problems. As we suggested in our Year 1 report, the primary reasons this is so are the failure to define essential case management activities in either the original project description or subsequent program protocols, and the fact that MerCAP provides no new staff or fiscal resources.

This has left those implementing the program with no clear guidance as to what case management activities were expected. Since MerCAP is only one of many pressing demands on those who must implement it, it is understandable that the program reflects what stakeholders can accommodate within their existing routines and established priorities. It is not surprising that the sanction element of the program, which builds on existing attendance functions of schools, and existing legal protocols within the welfare department, has taken priority. By contrast, the task of expanding family case management services would require more open-ended and time-consuming collaborative planning that is not so easily accomplished.

For school personnel, it is extremely difficult to engage in more case management with no new resources. By contrast, the availability of the sanction as a tool in dealing with problem families is viewed as saving time that might otherwise be spent in fruitless exhortation. From this perspective, many school personnel appear to believe that communicating the threat of sanction is in itself an effective part of their existing family case management activities.

The MerCAP experience suggests important policy lessons. One is that implementing the new CalWORKs policy linking school attendance to welfare payments will not be as easy as one might expect. While based on a relatively simple policy idea, the school attendance provision requires developing new procedures and new patterns of communication between organizational entities and individuals (the welfare department, schools, TANF parents) that have little history of working together. MerCAP has required coordination between the county and the state, the Human Services Agency and schools, and within each sector between different levels of the bureaucracy (from Superintendents and agency directors, to mid-level and front-line staff). Adding to the complexity is the relative independence of each school and school district in interpreting and implementing day-to-day attendance policies and procedures. Even after two years, establishing operational procedures and insuring that they are clearly understood and consistently implemented by a wide range of actors continues to challenge project leaders.

Another lesson is the need to define clearly the roles and authority of schools and the welfare department as collaboration develops. Power and trust are key issues in any collaborative program. MerCAP program documents are somewhat ambiguous about where responsibility for the program rests. The state waiver suggests that MerCAP is a Human Services Agency project, with school and community support, while the project description refers to MerCAP as being jointly conducted by the Human Service Agency and the schools. In practice, project leadership has rested primarily in the hands of the Human Services Agency, even though much of the work required for implementation has fallen on the schools. While both parties have made good faith efforts to make this arrangement work, it creates tensions that might undercut the support for an otherwise popular program.

Finally, MerCAP suggests the importance of getting early buy-in from school districts, and seeing to it that administrators communicate support for the program to front-line school staff. Intra-school dynamics play an important role to either aid or impede implementation. In schools where there is conflict over who should handle MerCAP, or where employees working on the program are not given proper training and instruction, the program can either fall through the cracks or become unnecessarily time consuming. By contrast, schools that have developed a strong esprit de corps tend to fair better. One example is the schools using a Johns Hopkins reading and attendance support program called *Success for All*. In these schools, teachers, the principal, nurse and counselors all work together—making calls home every day, sending out the lice patrol/lice pickers, etc.

MerCAP: Impacts on Attendance and Achievement

MerCAP is premised on the following chain of program logic:

1. Family case management and sanctions support better school attendance
2. Better attendance supports higher academic achievement
3. Higher achievement supports reduced risk of welfare dependency.

Data from the MerCAP pilot provide a means of testing the first two of these premises, while the third is beyond the scope of this evaluation.

Our analysis of statistical data on school attendance and student achievement continues to raise doubts about the effectiveness of focusing on TANF student attendance if the goal is improved student achievement that interrupts the cycle of welfare dependency. To begin with, TANF attendance rates are only slightly lower than overall attendance rates. Chronic attendance problems in most schools are concentrated in children from a relatively small number of families, not all of whom are on TANF. Indeed, both Limited English Proficiency and qualifying for free and reduced lunch programs are more highly correlated with low attendance than is TANF status.

In addition, we have found no conclusive evidence that MerCAP is actually improving TANF student attendance. At best, the improvement is marginal. Given the way MerCAP has been implemented to date, we cannot ascertain whether that would be the case if a stronger case management element accompanied the sanction program. Interestingly, the available data suggests that schools implementing MerCAP improve their overall attendance, apparently related to the increased emphasis on attendance monitoring that MerCAP encourages.

The most definitive statistical finding is that there is no significant correlation between attendance and student achievement, measured in this study as performance on the SAT9 reading achievement test. This finding holds across a wide range of statistical tests at the individual, school, and district levels of analysis. It is consistent with a wide body of previous research that has reached similar conclusions. The clear implication is that policy interventions aimed at improving school achievement must focus on something other than student attendance.

None of this is to dispute the testimony of school personnel that MerCAP does improve attendance for some children, often with positive effects on their overall school experience. Both our interviews and our analysis of attendance patterns suggest that MerCAP letters and conferences often have an immediate effect in improving attendance by many children. The

overall effect, however, is fairly modest. Whether these marginal improvements are worth the substantial costs to schools of the extra work in tracking student attendance is not clear. Certainly many schools have told us that they question whether the results are worth the effort. Others would simply prefer that the program provide additional resources for staff devoted to the program.

MerCAP: Reflections and Potential Adaptations

Despite the questions raised by our process and impact studies, and the relatively high cost in time spent implementing MerCAP, support for the program within the county and among various stakeholders remains high. This is due in part to the manner in which MerCAP reinforces a popular community norm: "parents should get their children to attend school regularly." What seems needed is a way of adapting the program so that this norm can be upheld through a less cumbersome sanction program, while at the same time working harder to develop supportive case management services that help families meet the norm (i.e. reducing the sanction rate).

One place to start would be in rethinking the wisdom of tracking the attendance of TANF students separately from non-TANF students, and the accompanying need for the monthly lists of TANF students produced by the Human Services Agency and sent to schools. These lists create substantial work for both HSA and school staff and, despite good intentions and diligent efforts, are routinely plagued with errors and irregularities. Based on experience to date, and on the new school emphasis on improving attendance for all students, it appears that a more efficient approach is possible. One suggestion we have heard would allow school districts to develop attendance programs and standards applicable to all students, regardless of TANF status. When students reach the point in the process at which punitive action against the family is deemed necessary, schools would check with HSA to see if the family is on TANF, in which case a sanction could be initiated.

This approach would appear to solve many of the problems that have plagued MerCAP during Year 1 and 2, as well as building on aspects of the program that have been the most appealing. The monthly lists, a focus of concern and aggravation, would be eliminated. Each school district could adopt attendance policies and procedures, and related monitoring functions, that make sense in terms of their staff limits and local circumstances, rather than being forced to adopt (and then adapt) a one size fits all set of attendance guidelines. Those concerned that those standards might be too lenient could be reassured by the fact that schools have a direct fiscal incentive to improve attendance. Those concerned that they might be too strict, or imposed with inappropriate discretion, could be reassured by a well-managed appeal process.

Rather than treating all TANF students as in need of special monitoring, which is not consistent with the data demonstrating that TANF and non-TANF have quite similar attendance patterns, schools could focus their monitoring efforts on poorly attending students. MerCAP and the Human Services Agency personnel who administer the program could be looked upon as a resource to which schools can turn to "give teeth" to their efforts to work with particularly troublesome children and families, rather than the source of unwelcome new paperwork.

Potentially, the time freed up from creating the lists and related program details could then be profitably spent by engaging HSA personnel in partnerships with school family case management activities targeted at TANF families with low attendance. This would be

particularly helpful in rural areas, where schools often feel isolated and lacking in supportive resources.

In short, our evaluation suggests that the while MerCAP's overall goal of reducing dependency is laudable, the premises on which the program was initially developed need to be rethought in light of the information revealed in this evaluation and the changing context. Given the new school attendance funding situation, and declining TANF caseloads, it makes more sense to concentrate activities not on a costly and unnecessary sanction infrastructure, but on building case management partnerships. The benefits of the sanction program can be retained at greatly reduced costs to schools and the agency, and the time savings reaped can be redirected toward case management activities that are currently underdeveloped. To speed progress on family case management activities, a combination of a focused local initiative, state-level technical assistance, and/or provision of new or redirected resources will be necessary.

APPENDIX 1
Schools and School Districts by Year Entered MerCAP

Entered MerCAP 1997-98 (Year 1)

Atwater Elementary School District
- Aileen Colburn (K-6)
- Bellevue (K-6)
- Elmer Wood (K-6)
- Mitchell Elementary (K-6)
- Mitchell Senior Elementary (7-8)
- Shaffer (K-6)
- Thomas Olaeta (K-6)
- Peggy Heller (K-8)

Dos Palos USD
- Bryant Middle School (6-8)
- Dos Palos ES (K-2)
- Marks ES (3-5)
- Dos Palos High School (9-12)

Le Grand Elementary School (K-8)

Le Grand High School (9-12)

Livingston Elementary School District
- Campus Park (K- 3)
- (Schelby)
- Yamato Colony (K-5)
- (Walnut)
- Livingston Middle School (6-8)

Merced Unified High School District
- Atwater High School (9-12)
- Livingston High School (9-12)

Plainsburg Elementary School (K-8)

Planada Elementary School (K-8)

In 1997-98 21 schools began MerCAP. None were year-round schools; none had more than one track. Livingston & Planada Schools used MacSchool software for attendance monitoring and reporting.

Entered MerCAP 1999-2000 (Year 3)

Merced City School District
- Burbank Elementary (Yr-round K-5)
- Chenoweth Elementary (Yr-round K-5)
- Franklin Elementary (Yr.-round K-5)
- Fremont (K-5)
- Givens Elementary (K-5)
- Gracey Elementary (Yr-round K-5)
- Hoover Middle School (6-8)
- Muir Elementary (Yr-round K-5)
- Peterson Elementary (Yr-round K-5)
- Reyes Elementary (Yr-round K-5)
- Rivera Middle School (6-8)
- Sheehy Elementary (K-5)
- Tenaya Middle School (6-8)
- Wright Elementary (K-5)
- Cruickshank Middle (6-8)

Stowell Elementary (K-5)

In 1999-2000 16 schools (37 if counting each track as a school) in the Merced City School District started MerCAP. They all use the same software and accumulate attendance data at the district office.

Entered MerCAP 1998-99 (Year 2)

Ballico-Cressy SD
- Ballico (4-8)
- Cressy (K-3)

Delhi USD (Yr.-round)
- El Capitan (K-6)
- Schendel (K-6) [5 tracks]
- Delhi Middle School (7-8) [5 tracks]
- Delhi High School (9-12)

El Nido Elementary School (K-8)

Gustine Unified School District
- Gustine Elementary School (K-5)
- Gustine Middle School (6-8)
- Gustine High School (9-12)
- Romero Elementary School (K-5)

Hilmar Unified School District
- Elim Elementary School (5 tracks)
- Hilmar Middle School (7-8)
- Hilmar High School (9-12)
- Merquin Elementary (K-6)

Los Banos Unified School District
- Charleston Elementary (K-5)
- Henry Miller Elementary (K-5) [4 tracks]
- Los Banos Elementary (K-5) [4 tracks]
- R. Miano Elementary (K-5) [4 tracks]
- Volta Elementary (K-5)
- Los Banos Junior High (7-8) [3 tracks]
- Los Banos High School (9-12)
- Westside UIS (6) [founded in Year 3]

McSwain Elementary School (K-8)

Merced River School District
- Hopeton Elementary (K-3)
- Washington Elementary (4-8)

Merced Unified High School District
- Golden Valley High School (9-12)
- Merced High School (9-12)

Snelling-Merced Falls Elementary (K-8)

Weaver School District (5 tracks)
- Pioneer (K-3)
- Weaver (4-8)

Winton School District
- Winton Middle School (6-8)
- Frank Sparks Elementary (K-5)
- Crookham Elementary (K-5)

In 1998-99 34 schools (64 if counting each track as a school) started MerCAP. Two of these schools were brand new (Delhi Middle School and Delhi High School). Several are year-round schools, with multiple tracks. Westside Union Integrated School, which will accommodate all 6th grades in the Los Banos Unified School District, begins in the 1999-2000 school year. The Hilmar, Los Banos, and McSwain Schools used MacSchool software.

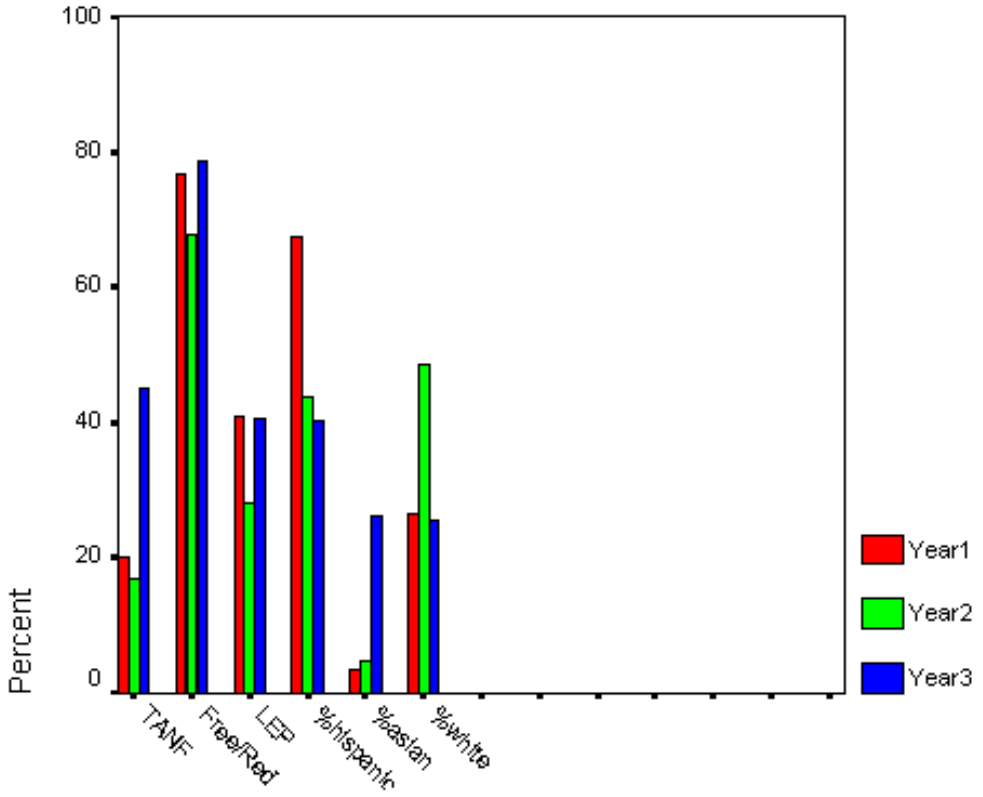
APPENDIX 1, continued

Descriptive information about these school districts were collected from District Profiles published by the State Department of Education and aggregated by Year Started MerCAP

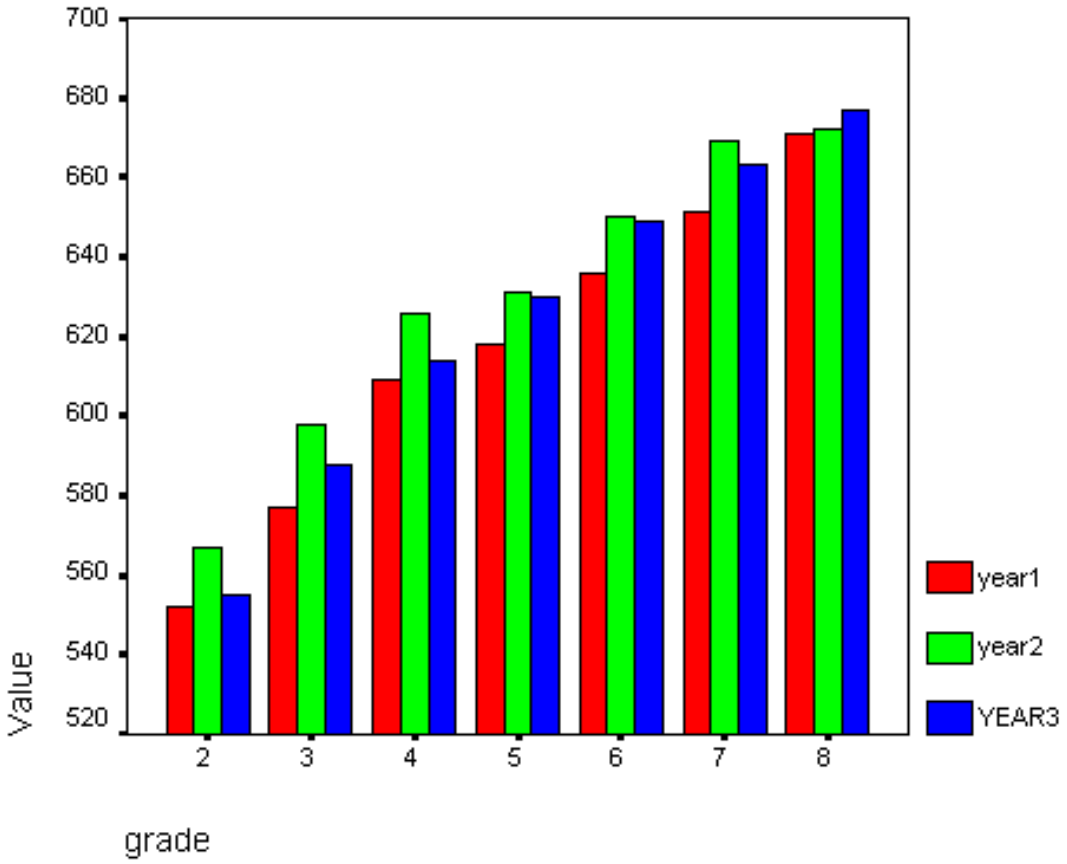
	1997-98	1998-99	1999-2000
Percentage of students on TANF	20.09%	16.88%	45.0%
Percentage of students eligible for free or reduced cost lunches	76.77%	67.86%	78.7%
Percentage of students with Limited English Proficiency	40.94%	28.17%	40.6%
Percentage of students classified			
Hispanic	67.46%	43.83%	40.2%
Asian	3.67%	4.75%	26.2%
White	26.47%	48.6%	25.6%
Mean SAT9 Reading Scores (administered in 1999)			
Grade 2	552	567	555
Grade 3	577	598	588
Grade 4	609	626	614
Grade 5	618	631	630
Grade 6	636	650	649
Grade 7	651	669	663
Grade 8	671	672	677

Figures 1 & 2. Differences in School Descriptors by Year Started MerCAP

1. Percentages of School Composition



2. 1999 SAT9 Reading Scores, by Grade



School District Attendance Patterns by Year Started MerCAP

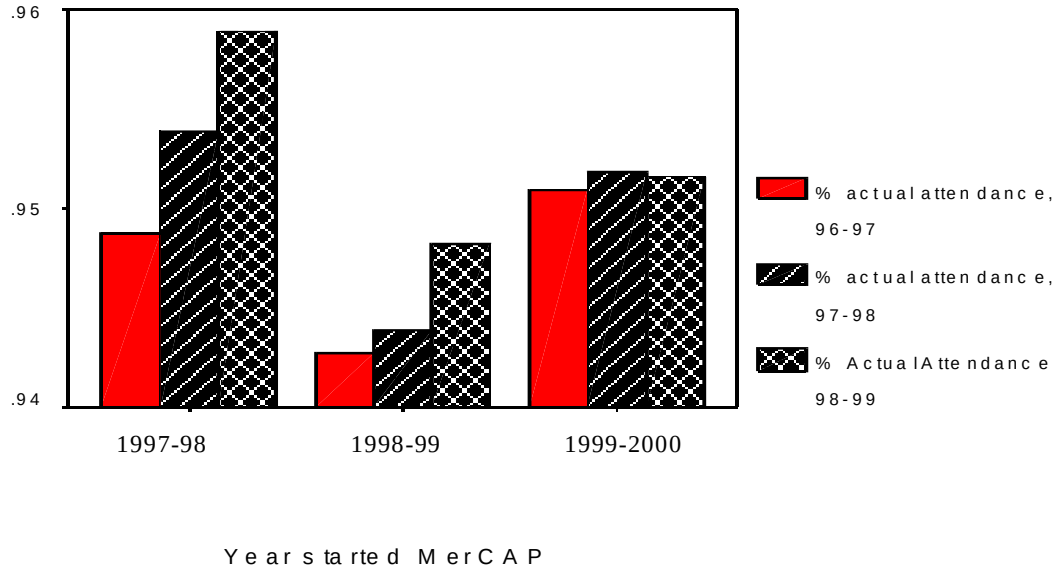
Attendance data collected in the MerCAP evaluation yield the following means of Percentage Actual Attendance for all School Districts in each group:

	Year 1 Started MerCAP In 1997-98	Year 2 Started MerCAP In 1998-99	Year 3 Started MerCAP In 1999-2000
PAA96-97	.9488 (N=120)	.9429 (N=283)	.9509 (N=204)
PAA97-98	.9539 (N=120)	.9456 (N=290)	.9518 (N=204)
PAA98-99	.9589 (N=120)	.9796 (N=321)	.9515 (N=204)
TANF PAA97-98	.9466 (N=87)	NA	NA
TANF PAA98-99	.9533 (N=87)	.9435 (N=136)	NA

[Note: PAA data are incomplete for some school districts in Year 2; TANF PAA data are incomplete for both years.]

APPENDIX 1, continued

Figure 3. Mean Percentages Actual Attendance for 1996-97, 1997-98, and 1998-99 by Year Started MerCAP



APPENDIX 2

Distribution of Students in Sample

Schools from which samples were drawn:

1997-98	1998-99
Aileen Colburn Elem. School (Atwater)	Gustine Elementary School (Gustine)
Mitchell Senior Elem. (Atwater)	Elim Elementary School (Hilmar)
Bryant Middle School (Dos Palos)	Los Banos Junior High (Los Banos)
Dos Palos High School (Dos Palos)	Los Banos High School (Los Banos)
Campus Park Elem. School (Livingston)	McSwain Elem. School (McSwain)
Livingston Middle School (Livingston)	Golden Valley HS (Merced UHSD)
Planada Elementary School (Planada)	Weaver & Pioneer Schools (Weaver)
Livingston High School (Merced UHSD)	Winton Middle School (Winton)

Total Number of Students Selected in 1997-98 and 1998-99 Samples 868

Number of Students Dropped from Sample

Reason	1997-98	1998-99	Total*
Moved	26	45	71
Never enrolled	19	33	52
Independent Study	9	19	28
Special Day Classes	12	17	29
Other	9	8	17
No information	30	23	53
TOTAL	105	145	250

*Note: Some of these students (e.g. Special Day Class students) are counted in both 1997-98 and 1998-99. These are not mutually exclusive totals.

Current Sample Size (including Special Day Classes & Independent Study) 696

Number of Students for Whom Key Data Elements Are Available

Data Element	N
Attendance for 1996-97, 1997-98, & 1998-99	191
Attendance for 1997-98 & 1998-99	518
Attendance for 1996-97 & 1997-98*	251
SAT9 Reading Comprehension Scores – '98 & '99	370
SAT9 Reading Comprehension Scores – '99 only	528

*Note: Some of these students are included in the group for whom 3 years of attendance data are available.

Appendix 2, continued

Grade Levels of Current Sample

1999-2000 Grade Level	N
Second Grade	39
Third Grade	51
Fourth Grade	50
Fifth Grade	42
Sixth Grade	50
Seventh Grade	52
Eighth Grade	85
Ninth Grade	106
Tenth Grade	133
Eleventh Grade	70
Twelfth Grade	18
	696

APPENDIX 3

Analyses for Process Study

Table A. Number of 1998-99 Attendance Actions Reported by Elementary Schools, by School Attendance Month

Action	Mo. 1	Mo. 2	Mo. 3	Mo. 4	Mo. 5	Mo. 6	Mo. 7	Mo. 8	Mo. 9	Mo. 10	Mo. 11	Total **(*)**	**%**
TANF													
5-absence letters	5	40	60	67	94	50	61	57	36	17	7	494	**40%**
7-absence letters	1	8	12	31	41	33	31	55	18	16	5	251	**20%**
Parent conferences	1	9	10	17	21	15	12	16	19	15	7	142	**12%**
Non-cooperation sanctions	0	0	3	4	6	4	4	1	3	12	0	37	**3%**
Corrective Action Plans	1	5	4	5	11	11	8	10	1	12	5	73	**6%**
10-absence sanctions	0	0	4	3	11	2	5	6	6	4	0	41	**3%**
Non-TANF													
Parent conferences	5	13	5	18	11	20	54	19	24	15	8	192	**2%**
Students in attendance supervision	5	40	35	58	96	151	74	82	80	33	6	660	**8%**
Students sent to SARB	0	2	0	0	5	7	13	2	4	7	0	40	**1%**

Note: This table relies on data from 21 of the 34 elementary schools in MerCAP as of 1998-99. Included are those for whom at least 9 months of data were available. For TANF students N=1,226. For non-TANF students N=8,205.

(*) % = Percentage of the TANF or non-TANF students in these schools.

Table B. Number of 1998-99 Attendance Actions Reported by Middle Schools, by School Attendance Month

Action	Mo. 1	Mo. 2	Mo. 3	Mo. 4	Mo. 5	Mo. 6	Mo. 7	Mo. 8	Mo. 9	Mo. 10	Mo. 11	Total, **% (*)**
TANF												
5-absence letters	3	8	11	15	15	10	6	1	1	1	1	72 **21%**
7-absence letters	1	4	9	7	1	9	0	2	0	0	2	35 **10%**
Parent conferences	1	4	8	7	6	14	1	3	0	0	1	45 **13%**
Non-cooperation sanctions	0	0	1	2	2	10	0	1	1	0	1	18 **5%**
Corrective Action Plans	0	2	1	4	3	0	0	2	1	0	1	14 **4%**
10-absence sanctions	0	1	2	1	0	6	2	0	0	0	1	13 **4%**
Non-TANF												
Parent conferences	2	0	5	5	8	10	7	9	6	4	2	58 **3%**
Students in attendance supervision	2	5	13	16	37	25	29	32	7	24	7	197 **11%**
Students sent to SARB	0	16	0	1	1	8	7	8	18	0	0	59 **3%**

Note: This table relies on data from 4 of the 8 middle or junior high Schools participating in MerCAP during 1998-99—those for whom at least 9 months of data were available. For TANF students, N=337. For non-TANF students N=1,758.

(*) % = Percentage of the TANF or non-TANF students in these schools.

Appendix 3, continued

Table C. Number of 1998-99 Attendance Actions Reported by High Schools, by School Attendance Month

Action	Mo. 1	Mo. 2	Mo. 3	Mo. 4	Mo. 5	Mo. 6	Mo. 7	Mo. 8	Mo. 9	Mo. 10	Mo. 11	Total (*)	%
TANF													
5-absence letters	10	27	36	19	23	25	13	20	11	5	0	189	**61%**
7-absence letters	3	7	16	9	16	23	22	38	11	3	0	148	**48%**
Parent conferences	4	11	9	11	9	13	22	18	18	3	0	118	**38%**
Non-cooperation sanctions	0	2	4	3	7	5	10	8	1	2	0	42	**14%**
Corrective Action Plans	1	5	5	10	8	13	16	16	11	3	0	88	**28%**
10-absence sanctions	1	2	5	2	7	4	6	7	1	5	0	40	**13%**
Non-TANF													
Parent conferences	6	31	44	38	36	34	53	30	36	4	0	312	**5%**
Students in attendance supervision	28	36	38	66	41	84	37	41	19	18	0	408	**6%**
Students sent to SARB	0	3	2	2	4	4	7	9	1	7	0	39	**1%**

Note: This table relies on data from 6 of the 10 high schools that are participating in MerCAP as of 1998-99. Included are schools from whom at least 9 months of data are available. For TANF students N=309. For non-TANF students N=6,902.

(*) % = Percentage of the TANF or non-TANF students in these schools.

Table D. MerCAP Year 2 Sanction Activity (N=~3400 MerCAP students, count varies as TANF rolls change)

10 Day non-attendance sanctions (Total=108 sanction months)

88 sanctioned for 1 month
2 sanctioned for 2 consecutive months
1 sanctioned for 3 consecutive months
1 sanctioned for 4 consecutive months
1 sanctioned for 9 consecutive months

Conference non-cooperation (Total=98 sanction months)

31 cured prior to effective date
9 cured in 1-15 days
15 cured in 16 days to 1 month
4 cured in 2 months
5 cured in 3 months
0 cured in 4 months
1 cured in 5 months
0 cured in 6 months
1 cured in 7 months
32 still in sanction at the end of school year of which:
7 @ 1 month
10 @ 2 months
4 @ 3 months
3 @ 4 months
6 @ 5 months
0 @ 6 months
1 @ 7 months
1 @ 8 months

Source: Merced Human Services Agency

Table E. Student sanction counts by month (N=~3400 MerCAP students, count varies as TANF rolls change)

Nov 98	Dec 98	Jan 99	Feb 99	Mar 99	Apr 99	May 99	June 99	July 99
8	18	28	11	29	17	26	40	29

Source: Merced Human Services Agency

APPENDIX 4
Analyses for Impact Study

Definitions of terms

Merced County school districts started MerCAP in one of three cohorts, referred to in this report as Year 1 schools (those that began MerCAP in 1997-98), Year 2 schools (those that started in 1998-99), and Year 3 schools (those that started MerCAP with the 1999-2000 school year). One of the variables frequently used in these analyses are Year Starting MerCAP; its values are 1, 2 and 3, referring to the school years identified above.

A number of variables have been created for this analysis. At the school level, the primary dependent variable for attendance is the annual percentage actual attendance for all (PAA), TANF (MPAA), or non-TANF (NPAA) students in each participating school (or track) grade.

The unit from which a PAA is obtained is a school or track grade. In some year-round Year 2 and Year 3 schools there are as many as 5 tracks, each operating in some sense as a separate school, each with its own starting and ending dates and vacation times. In this report we refer to each unit as a school/track grade. The N (number of cases) identified in school-level analyses refers to the number of school/track grades from which data were available.

PAA Percentage Actual Attendance. The ratio of actual days of attendance (for all students in the unit) to the days of total student enrollment (sum of days enrolled for all students in the unit). May be calculated for a month or a year; may be applied to any school unit (e.g. grade, track, total school). PAA = Sum (days of actual student attendance for a given period) / Sum (days of student enrollment for the same period). When followed by numbers (e.g. PAA198) it indicates the Percentage Actual Attendance for a particular time period (e.g. School Month 1, 1998-99).

A similar variable has been created for individual TANF student annual percentage actual attendance.

IPAA Individual Percentage Actual Attendance. The percentage of days an individual student was enrolled that the student actually attended school. When followed by numbers (e.g. IPAA9899) it indicates the Individual Percentage Actual Attendance for a particular time period (e.g. 1998-99).

Individual attendance data were obtained from school records on students randomly selected from the TANF population in eight schools in each of the year 1 and year 2 schools. Each year the schools included some K- 5 or K- 6 elementary schools, some K- 8 schools, some junior high schools and some high schools.

In addition to attendance data (days enrolled and days actually attending), a measure of achievement was collected for individual students. This was the students' reading comprehension scores on the state-mandated SAT9 standardized achievement tests. Given first

in 1997-98, it is administered to all California students in regular classes beginning in the second grade.

The SAT9 is divided into sections, one of which is reading. The reading section includes both a vocabulary and comprehension test; it was believed that comprehension was a fairer measure of school achievement than vocabulary in Merced County due to the large proportion of students with Limited English Proficiency. The reading comprehension scores include a standardized score (SS), normal curve equivalent (NCE), and national percentile (NP)—all of which were collected for the impact study. Scores on the various sections of the SAT9 are available on the internet for all California schools by grade (http://star.cde.ca.gov).

This appendix is organized around the major research questions in the Impact Study of the Year 2 evaluation report.

Question 1. ***Do TANF students have lower attendance rates than non-TANF students?***

Analysis 1. t-test of mean 1998-99 percentage actual attendance of TANF and non-TANF students in paired school/track grades (N=270).

Paired Samples Statistics – all MerCAP schools

	Mean	N	Std. Dev.	Std. Error Mean
Pair 1 Non-TANF PAA 1998-99	.955653	270	1.313E-02	7.99E-04
TANF PAA 1998-99	.948508	270	3.118E-02	1.90E-03

Paired Samples Correlations – all MerCAP schools

	N	Correlation	Sig.
Pair 1 Non-TANF PAA - 1998-99 & TANF PAA 1998-99	270	.416	.000

Paired Samples Test – all MerCAP schools

Paired Differences	Mean	Std. Deviation	Std. Error Mean
Pair 1 Non-TANF PAA 1998-99 TANF PAA 1998-99	7.15E-03	2.84E-02	1.726E-03

t	df	Sig. (2-tailed)
4.140	269	.000

Analysis 2. t-test of mean 1997-98 percentage actual attendance of TANF and non-TANF students in paired school/track grades (N=87).

Paired Samples Statistics – all Year 1 Schools

	Mean	N	Std. Dev.	Std. Error Mean
Pair 1 Non-TANF PAA, 1997-98	.950974	87	1.497E-02	1.605E-03
TANF PAA - 1997-98	.946559	87	3.101E-02	3.325E-03

Paired Samples Correlations – all Year 1 Schools

	N	Correlation	Sig.
Pair 1 Non-TANF PAA, 1997-98 & TANF PAA – 1997-98	87	.462	.000

Question 1, continued

Paired Samples Test –all Year 1 Schools

	Paired Differences	Mean	Std. Deviation	Std. Error Mean
Pair 1	Non-TANF PAA, 1997-98 TANF PAA - 1997-98	– 4.41E-03	2.75E-02	2.95E-03

t	df	Sig. (2-tailed)
1.497	86	.138

Analysis 3. t-test of mean 1998-99 percentage actual attendance of TANF and non-TANF students in paired school/track grades in Year 1 schools (N=100).

Paired Samples Statistics – for TANF=1

		Mean	N	Std. Dev.	Std. Error Mean
Pair 1	Non-TANF PAA - 1998-99	.958694	100	1.378E-02	1.378E-03
	TANF PAA 1998-99	.955636	100	2.465E-02	2.465E-03

Paired Samples Correlations – for TANF=1

		N	Correlation	Sig.
Pair 1	Non-TANF PAA - 1998-99 & TANF PAA 1998-99	100	.542	.000

Paired Samples Test – for TANF=1

	Paired Differences	Mean	Std. Deviation	Std. Error Mean
Pair 1	Non-TANF PAA 1998-99 TANF PAA 1998-99	3.06E-03	2.073E-02	2.07E-03

t	df	Sig. (2-tailed)
1.475	99	.143

Analysis 4. t-test of mean 1998-99 percentage average attendance of TANF and non-TANF students in paired school/track grades in Year 2 schools (N=170).

Paired Samples Statistics – for TANF=2

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Non-TANF PAA - 1998-99	.953865	170	1.24E-02	9.53E-04
	TANF PAA 1998-99	.944314	170	3.38E-02	2.59E-03

Paired Samples Correlations for TANF=2

		N	Correlation	Sig.
Pair 1	Non-TANF PAA - 1998-99 & TANF PAA 1998-99	170	.340	.000

Paired Samples Test – for TANF=2

	Paired Differences	Mean	Std. Dev.	Std. Error Mean
Pair 1	Non-TANF PAA 1998-99 TANF PAA 1998-99	9.55E-03	3.182E-02	2.44E-03

t	df	Sig. (2-tailed)
3.913	169	.000

Question 2. ***Does participation in MerCAP improve the attendance of TANF students?***

Analysis 5. t-test of difference of mean percentage annual attendance between the first year in MerCAP and the previous year for the sample of TANF students whose schools started MerCAP in 1997-98.

Paired Samples Statistics – for TANF students in Year 1 schools

Pair 1	Mean	N	Std. Deviation	Std. Error Mean
Individual PAA for 96-97	.944258	219	5.66E-02	3.83E-03
Individual PAA for 97-98	.951844	219	5.29E-02	3.57E-03

Paired Samples Correlations – for TANF students in Year 1 schools

		N	Correlation	Sig.
Pair 1	Individual PAA for 97-98 & Individual PAA, 98-99	244	.309	.000

Paired Samples Test – for TANF students in Year 1 schools

Paired Differences		Mean	Std. Dev.	Std. Error Mean
Pair 1	Individual PAA for 96-97 – Individual PAA for 97-98	-7.58E-03	4.50E-02	3.04E-03

t	df	Sig. (2-tailed)
-2.494	218	.013

Analysis 6. t-test of difference of mean percentage annual attendance between the first year in MerCAP and the previous year for the sample of TANF students whose schools started MerCAP in 1998-99.

Paired Samples Statistics – for TANF students in Year 2 schools

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Individual PAA for 97-98	.9450	244	6.42E-02	4.11E-03
	Individual PAA for 98-99	.9380	244	9.48E-02	6.07E-03

Paired Samples Correlations – for TANF students in Year 2 schools

		N	Correlation	Sig.
Pair 1	Individual PAA for 97-98 & Individual PAA for 98-99	244	.309	.000

Paired Samples Test – for TANF students in Year 2 schools

Paired Differences		Mean	Std.Dev.	Std. Error Mean
Pair 1	Individual PAA for 97-98 – Individual PAA for 98-99	6.97E-03	9.67E-02	6.19E-03

t	df	Sig. (2-tailed)
1.126	243	.261

Analysis 7. t-test of difference of mean percentage annual attendance between the first and second years of MerCAP for the whole sample of TANF students, whether their schools started MerCAP in 1997-98 or 1998-99.

Paired Samples Statistics – for the whole sample of TANF students (Year 1 and Year 2

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Individual PAA for 97-98	.9467	518	5.87E-02	2.58E-03
Individual PAA for 98-99	.9419	518	8.07E-02	3.54E-03

Paired Samples Correlations – for TANF students in Year 2 schools

	N	Correlation	Sig.
Pair 1 Individual PAA for 97-98 & Individual PAA for 98-99	518	.416	.000

Paired Samples Test – for TANF students in Year 2 schools

Paired Differences	Mean	Std.Dev.	Std. Error Mean
Pair 1 Individual PAA for 97-98	4.84E-03	7.76E-02	3.41E-03
Individual PAA for 98-99			

t	df	Sig. (2-tailed)
1.419	517	.157

Analysis 8. t-test of difference of mean percentage annual attendance between the first and second years of MerCAP for TANF students in all schools starting MerCAP in Year 1 (1997-98).

Paired Samples Statistics for all Year 1 schools

	Mean	N	Std. Dev.	Std. Error Mean
Pair 1 TANF PAA 1997-98	.946558	83	3.12E-02	3.42E-03
TANF PAA 1998-99	.954387	83	2.12E-02	2.33E-03

Paired Samples Correlations for all Year 1 schools

	N	Correlation	Sig.
Pair 1 TANF PAA - 1997-98 & TANF PAA 1998-99	83	.506	.000

Paired Samples Test for all Year 1 schools

Paired Differences	Mean	Std. Dev.	Std. Error Mean
Pair 1 TANF PAA 1997-98 - TANF PAA 1998-99	-7.83E-03	2.75E-02	3.01E-03

t	df	Sig. (2-tailed)
-2.597	82	.011

Question 3. ***What impact, if any, does MerCAP have on the overall attendance in participating schools?***

Analysis 9. t-test of difference of mean percentage annual attendance between the first year of MerCAP and the preceding year for **all** students in schools starting MerCAP in Year 1 (1997-98).

Paired Samples Statistics for all Year 1 schools

	Mean	N	Std. Dev.	Std. Error Mean
Pair 1 PAA 1997-98	.9538	119	1.452E-02	1.33E-03
PAA 1996-97	.9487	119	1.387E-02	1.27E-03

Paired Samples Correlations for all Year 1 schools

	N	Correlation	Sig.
Pair 1 PAA - 1997-98 & PAA 1996-97	119	.808	.000

Paired Samples Test for all Year 1 schools

	Paired Differences	Mean	Std. Dev.	Std. Error Mean
Pair 1	PAA 1997-98 - PAA 1996-97	5.05E-03	8.811E-03	8.08E-04

t	df	Sig. (2-tailed)
6.248	118	.000

Analysis 10. t-test of difference of mean percentage annual attendance between the first year of MerCAP and the preceding year for **all** students in schools starting MerCAP in Year 2 (1998-99).

Paired Samples Statistics for all Year 2 schools

		Mean	N	Std. Dev.	Std. Error Mean
Pair 1	PAA 1997-98	.9438	214	1.872E-02	1.280E-03
	PAA 1998-99	.9481	214	1.564E-02	1.069E-03

Paired Samples Correlations for all Year 2 schools

	N	Correlation	Sig.
Pair 1 PAA - 1997-98 & PAA 1998-99	214	.541	.000

Paired Samples Test for all Year 1 schools

	Paired Differences	Mean	Std. Dev.	Std. Error Mean
Pair 1	PAA 1997-98 - PAA 1998-99	-4.29E-03	1.669E-03	1.141E-03

t	df	Sig. (2-tailed)
-3.759	213	.000

Analysis 11. t-test of difference of mean percentage annual attendance between the first and second years of MerCAP for **all** students in schools starting MerCAP in Year 1 (1997-98).

Paired Samples Statistics for all Year 1 schools

		Mean	N	Std. Dev.	Std. Error Mean
Pair 1	PAA 1997-98	.9538	119	1.452E-02	1.331E-03
	PAA 1998-99	.9590	119	1.362E-02	1.249E-03

Paired Samples Correlations for all Year 1 schools

	N	Correlation	Sig.
Pair 1 PAA - 1997-98 & PAA 1998-99	119	.777	.000

Paired Samples Test for all Year 1 schools

	Paired Differences	Mean	Std. Dev.	Std. Error Mean
Pair 1	PAA 1997-98 - PAA 1998-99	-5.19E-03	9.442E-03	8.656E-04

t	df	Sig. (2-tailed)
-5.992	118	.000

Analysis 12. t-test of difference of mean percentage annual attendance for school years 1997-98 and 1998-99 (both pre-MerCAP) for **all** students in schools starting MerCAP in Year 3 (1999-2000).

Paired Samples Statistics for all Year 3 schools

		Mean	N	Std. Dev.	Std. Error Mean
Pair 1	PAA 1997-98	.9518	204	1.522E-02	1.07E-03
	PAA 1998-99	.9516	204	1.388E-02	9.71E-04

Paired Samples Correlations for all Year 1 schools

	N	Correlation	Sig.
Pair 1 PAA - 1997-98 & PAA 1998-99	204	.443	.000

Paired Samples Test for all Year 1 schools

Paired Differences	Mean	Std. Dev.	Std. Error Mean
Pair 1 PAA 1997-98 - PAA 1998-99	1.77E-04	1.539E-02	1.08E-03

t	df	Sig. (2-tailed)
.165	203	.869

Analysis 13. Analysis of variance of percentage actual attendance for 1998-99 (PAA9899), with attendance rates for the two preceding years (PAA9798 and PAA(9697) as covariates, by grade and year started MerCAP (TANF).

UNI-VARIATE ANOVA – PAA98 WITH PAA97 AND PAA96, BY TANF & GRADE

Tests of Between-Subjects Effects
Dependent Variable: Percentage Actual Attendance for 98-99

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	5.551E-02	36	1.542E-03	11.571	.000
Intercept	2.080E-02	1	2.080E-02	156.066	.000
PAA97	3.475E-03	1	3.475E-03	26.078	.000
PAA96	4.469E-03	1	4.469E-03	33.536	.000
TANF	3.619E-03	2	1.810E-03	13.580	.000
GRADE	3.001E-03	12	2.501E-04	1.877	.035
TANF * GRADE	1.252E-03	20	6.259E-05	.470	.977
Error	6.663E-02	500	1.333E-04		
Total	486.661	537			
Corrected Total	.122	536			

TABLES. ESTIMATED MARGINAL MEANS (UNIVARIATE ANOVA – ANALYSIS 13)

1. YEAR STARTED MERCAP (TANF)
Dependent Variable: Percentage Actual Attendance for 98-99

Year started MerCAP	Mean	Std. Error
1	.956	.001
2	.949	.001
3	.950	.001

2. GRADE
Dependent Variable: Percentage Actual Attendance for 98-99

GRADE	Mean	Std. Error
K	.948	.002
1	.952	.001
2	.956	.001
3	.954	.002
4	.954	.002
5	.955	.002
6	.954	.002
7	.953	.003
8	.953	.003
9	.947	.004
10	.949	.004
11	.948	.004
12	.949	.004

3. GRAND MEAN
Dependent Variable: Percentage Actual Attendance for 98-99

Mean	Std. Error
.952	.001

Question 4. ***Are the attendance rates of TANF students related to their school achievement?***

Analysis 14. Correlation Matrix 1 (attached) shows coefficients of relationships among 1996-97, 1997-98 and 1998-99 attendance rates of students in the sample of TANF students, with three versions (Normal Curve Equivalent – NCE; National Percentile (NP); and Standardized Score – SS) of their SAT9 Reading Comprehension Scores for 1997-98 and 1998-99. Other variables include their grades in 1997-98 and 1998-99, and their years in MerCAP.

Analysis 15. Correlation Matrix 2 (attached) shows coefficients of relationships among the 1998 reading scores of all students in Merced County schools in all grades eligible to take SAT9 examinations, plus other characteristics of the total student population in the county's schools. The 1997-98 percentage actual attendance of Merced County students included as a measure of attendance was derived from the MerCAP evaluation data.

Correlation Matrix 1 – Individual level variables, including attendance and reading comprehension test scores

		Gradeof student 97-98	Gradeof student 98-99	individual paa for 96-97	individual paa for 97-98	individual paa, 98-99	SAT9nce score, 1998	SAT9np score, 1998	SAT9ss score, 1998	SAT9 nce score, 1999	SAT9 np score, 1999	SAT9 ss score, 1999	Years in MerCAP
Grade of student, 97-98	Pearson Correlation	1.000	.999	-.071	-.151	-.160	-.029	-.037	.681	-.114	-.102	.654	.150
	Sig. (2-tailed)	.	.000**	.261	.000**	.000**	.522	.404	.000**	.009**	.019*	.000**	.000**
	N	768	746	254	594	633	498	498	498	522	525	522	753
Grade of student, 98-99	Pearson Correlation	.999	1.000	-.056	-.118	-.137	-.026	-.034	.681	-.112	-.101	.654	.183
	Sig. (2-tailed)	.000	.	.373	.004**	.000**	.561	.448	.000**	.010**	.019*	.000**	.000**
	N	746	799	251	613	677	496	496	496	527	530	527	789
individual paa, 96-97	Pearson Correlation	-.071	-.056	1.000	.646	.519	.165	.151	.005	.032	.048	.072	.109
	Sig. (2-tailed)	.261	.373	.	.000**	.000**	.024*	.038*	.945	.687	.545	.373	.084
	N	254	251	254	251	193	188	188	188	157	160	157	253
individual paa, 97-98	Pearson Correlation	-.151	-.118	.646	1.000	.416	.050	.048	-.041	.045	.031	.010	.025
	Sig. (2-tailed)	.000	.004	.000	.	.000**	.292	.304	.386	.367	.537	.842	.535
	N	594	613	251	625	518	455	455	455	400	403	400	621
individual paa, 98-99	Pearson Correlation	-.160	-.137	.519	.416	1.000	.064	.064	-.090	.001	-.003	-.064	.031
	Sig. (2-tailed)	.000	.000	.000	.000	.	.186	.184	.062	.974	.947	.152	.414
	N	633	677	193	518	690	430	430	430	505	508	505	690
SAT9 nce score, 1998	Pearson Correlation	-.029	-.026	.165	.050	.064	1.000	.969	.682	.705	.710	.548	-.024
	Sig. (2-tailed)	.522	.561	.024	.292	.186	.	.000**	.000**	.000**	.000**	.000**	.595
	N	498	496	188	455	430	499	499	499	370	372	370	499
SAT9 np score, 1998	Pearson Correlation	-.037	-.034	.151	.048	.064	.969	1.000	.661	.708	.737	.547	-.039
	Sig. (2-tailed)	.404	.448	.038	.304	.184	.000	.	.000**	.000**	.000**	.000**	.385
	N	498	496	188	455	430	499	499	499	370	372	370	499
SAT9 ss score, 1998	Pearson Correlation	.681	.681	.005	-.041	-.090	.682	.661	1.000	.403	.405	.821	.149
	Sig. (2-tailed)	.000	.000	.945	.386	.062	.000	.000	.	.000**	.000**	.000**	.001**
	N	498	496	188	455	430	499	499	499	370	372	370	499

SAT9 nce score, 1999	Pearson Correlation	-.114	-.112	.032	.045	.001	.705	.708	.403	1.000	.968	.652	-.019
	Sig. (2-tailed)	.009	.010	.687	.367	.974	.000	.000	.000	.	.000**	.000**	.663
	N	522	527	157	400	505	370	370	370	528	528	528	528
SAT9 np score, 1999	Pearson Correlation	-.102	-.101	.048	.031	-.003	.710	.737	.405	.968	1.000	.647	-.032
	Sig. (2-tailed)	.019	.019	.545	.537	.947	.000	.000	.000	.000	.	.000**	.460
	N	525	530	160	403	508	372	372	372	528	531	528	531
SAT9 ss score, 1999	Pearson Correlation	.654	.654	.072	.010	-.064	.548	.547	.821	.652	.647	1.000	.035
	Sig. (2-tailed)	.000	.000	.373	.842	.152	.000	.000	.000	.000	.000	.	.420
	N	522	527	157	400	505	370	370	370	528	528	528	528
Years in MerCAP	Pearson Correlation	.150	.183	.109	.025	.031	-.024	-.039	.149	-.019	-.032	.035	1.000
	Sig. (2-tailed)	.000	.000	.084	.535	.414	.595	.385	.001	.663	.460	.420	.
	N	753	789	253	621	690	499	499	499	528	531	528	826

**
Correlation is significant at the 0.01 level (2-tailed).
*
Correlation is significant at the 0.05 level (2-tailed).

Highlighted areas in the upper right half of the matrix identify significant relationships between test scores (achievement) and individual attendance rates. It is not clear why students' attendance rate in 1996-97 should be related to their national percentile and normal curve equivalent test scores on Reading Comprehension in the following year.

Correlation Matrix 2. District-level data including 1998 SAT9 reading scores for all grades, 1997-98 percentage actual attendance, and selected characteristics of the county school population.

		All Gr 2	All Gr 3	All Gr 4	All Gr 5	All Gr 6	All Gr 7	All Gr 8	All Gr 9	All gr10	All gr11	LEP *1	TANF *2	% AA *3	% F *4	% H *5	% NA *6	% PI *7	% W *8	%A *9	Yr in Mer-cap *10	% free lnch *11	PAA 9798 *12
All gr2	P. Corr	1.00	.553*	.767**	.553*	.797**	.730**	.205	.105	.273	.235	-.633*	-.483	-.247	-.219	-.589*	-.194	-.071	.651**	.020	.291	-.581*	.142
	Sig.	.	.033	.001	.033	.001	.002	.463	.867	.656	.765	.011	.068	.376	.432	.021	.489	.802	.009	.945	.293	.023	.644
	N	15	15	15	15	14	15	15	5	5	4	15	15	15	15	15	15	15	15	15	15	15	13
All gr3	P. Corr	.553	1.00	.623	.703**	.745**	.782**	-.544*	.734	.890*	.923	-.589*	-.393	-.251	-.105	-.773**	-.159	.150	.858**	-.042	.336	-.825**	-.334
	Sig.	.033	.	.013	.003	.002	.001	.036	.158	.043	.077	.021	.147	.367	.708	.001	.570	.594	.000	.882	.221	.000	.265
	N	15	15	15	15	14	15	15	5	5	4	15	15	15	15	15	15	15	15	15	15	15	13
All gr4	P, Corr	.767	.623	1.	.798**	.921**	.795**	.277	.474	.704	.815	-.831**	-.321	-.173	-.312	-.796**	-.231	-.009	.826**	-.027	.345	-.608**	.165
	Sig.	.001	.013	.	.000	.000	.000	.281	.420	.185	.185	.000	.210	.506	.223	.000	.373	.972	.000	.918	.176	.010	.558
	N	15	15	17	15	14	15	17	5	5	4	17	17	17	17	17	17	17	17	17	17	17	15
All gr5	P Corr	.553	.703	.798	1.000	.882**	.744**	.055	.776	.923*	.989*	-.692**	-.094	.127	.095	-.879**	.166	.409	.800**	.241	.460	-.827**	-.242
	Sig.	.033	.003	.000	.	.000	.001	.845	.123	.025	.011	.004	.738	.652	.735	.000	.555	.130	.000	.387	.085	.000	.426
	N	15	15	15	15	14	15	15	5	5	4	15	15	15	15	15	15	15	15	15	15	15	13
All gr6	P Corr	.797	.745	.921	.882	1.000	.868**	.042	.456	.694	.839	-.833**	-.225	.028	-.143	-.913**	.040	.293	.862**	.221	.542*	-.773**	-.060
	Sig.	.001	.002	.000	.000	.	.000	.886	.440	.194	.161	.000	.439	.923	.626	.000	.891	.310	.000	.448	.045	.001	.853
	N	14	14	14	14	14	14	14	5	5	4	14	14	14	14	14	14	14	14	14	14	14	12
All gr7	P Corr	.730	.782	.795	.744	.868	1.000	-.050	.625	.774	.968*	-.773**	-.401	-.235	-.225	-.795**	-.015	.365	.875**	-.067	.571*	-.704**	-.104
	Sig.	.002	.001	.000	.001	.000	.	.859	.260	.125	.032	.001	.139	.398	.420	.000	.959	.181	.000	.813	.026	.003	.735
	N	15	15	15	15	14	15	15	5	5	4	15	15	15	15	15	15	15	15	15	15	15	13
ALL gr8	P Corr	.205	-.544	.277	.055	.042	-.050	1.000	-.654	-.811	-.808	-.185	.059	.058	-.058	-.035	.181	.058	-.009	.102	.038	.088	.469
	Sig.	.463	.036	.281	.845	.886	.859	.	.231	.096	.192	.477	.821	.826	.824	.893	.487	.825	.973	.697	.884	.736	.078
	N	15	15	17	15	14	15	17	5	5	4	17	17	17	17	17	17	17	17	17	17	17	15
ALL gr9	P Corr	.105	.734	.474	.776	.456	.625	-.654	1.000	.731	.612	.301	-.242	.007	.266	-.899**	.293	.093	.799*	.396	.066	-.326	-.751
	Sig.	.867	.158	.420	.123	.440	.260	.231	.	.062	.196	.513	.602	.988	.564	.006	.524	.843	.031	.379	.888	.476	.085
	N	5	5	5	5	5	5	5	7	7	6	7	7	7	7	7	7	7	7	7	7	7	6
ALL gr10	P Corr	.273	.890	.704	.923	.694	.774	-.811	.731	1.000	.872*	-.207	-.372	-.467	.015	-.745	.082	-.119	.729	.351	-.017	-.537	-.322
	Sig.	.656	.043	.185	.025	.194	.125	.096	.062	.	.024	.656	.411	.290	.974	.055	.861	.800	.063	.440	.971	.214	.533
	N	5	5	5	5	5	5	5	7	7	6	7	7	7	7	7	7	7	7	7	7	7	6
ALL gr11	P Corr	.235	.923	.815	.989	.839	.968	-.808	.612	.872	1.000	-.430	-.011	-.300	.415	-.612	.540	.003	.456	.695	-.287	-.199	.030
	Sig.	.765	.077	.185	.011	.161	.032	.192	.196	.024	.	.395	.984	.563	.413	.196	.269	.995	.364	.126	.581	.706	.955
	N	4	4	4	4	4	4	4	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
LEP	P Corr	-.633	-.589	-.831	-.692	-.833	-.773	-.185	.301	-.207	-.430	1.000	.293	.027	.433	.590**	.127	-.012	-.670**	.187	-.059	.691**	.248
	Sig.	.011	.021	.000	.004	.000	.001	.477	.513	.656	.395	.	.210	.910	.057	.006	.593	.960	.001	.429	.806	.001	.321
	N	15	15	17	15	14	15	17	7	7	6	20	20	20	20	20	20	20	20	20	20	20	18

TANF	P Corr	-.483	-.393	-.321	-.094	-.225	-.401	.059	-.242	-.372	-.011	.293	1.000	.815**	.295	.118	.379	.080	-.493*	.759**	.067	.447*	-.066
	Sig.	.068	.147	.210	.738	.439	.139	.821	.602	.411	.984	.210	.	.000	.207	.620	.099	.737	.027	.000	.779	.048	.795
	N	15	15	17	15	14	15	17	7	7	6	20	20	20	20	20	20	20	20	20	20	20	18
%AA	P Corr	-.247	-.251	-.173	.127	.028	-.235	.058	.007	-.467	-.300	.027	.815	1.000	.274	-.165	.374	.198	-.194	.652**	.084	.130	-.340
	Sig.	.376	.367	.506	.652	.923	.398	.826	.988	.290	.563	.910	.000	.	.243	.488	.104	.403	.413	.002	.724	.584	.167
	N	15	15	17	15	14	15	17	7	7	6	20	20	20	20	20	20	20	20	20	20	20	18
% F	P Corr	-.219	-.105	-.312	.095	-.143	-.225	-.058	.266	.015	.415	.433	.295	.274	1.000	.079	.715**	.210	-.308	.489*	-.113	.297	.011
	Sig.	.432	.708	.223	.735	.626	.420	.824	.564	.974	.413	.057	.207	.243	.	.742	.000	.375	.186	.029	.637	.204	.965
	N	15	15	17	15	14	15	17	7	7	6	20	20	20	20	20	20	20	20	20	20	20	18
% H	P Corr	-.589	-.773	-.796	-.879	-.913	-.795	-.035	-.899	-.745	-.612	.590	.118	-.165	.079	1.00	-.045	-.260	-.899**	-.238	-.348	.721**	.129
	Sig.	.021	.001	.000	.000	.000	.000	.893	.006	.055	.196	.006	.620	.488	.742	.	.849	.268	.000	.312	.132	.000	.611
	N	15	15	17	15	14	15	17	7	7	6	20	20	20	20	20	20	20	20	20	20	20	18
%NA	P Corr	-.194	-.159	-.231	.166	.040	-.015	.181	.293	.082	.540	.127	.379	.374	.715	-.045	1.000	.401	-.194	.475*	-.340	.284	-.088
	Sig.	.489	.570	.373	.555	.891	.959	.487	.524	.861	.269	.593	.099	.104	.000	.849	.	.080	.413	.034	.143	.225	.728
	N	15	15	17	15	14	15	17	7	7	6	20	20	20	20	20	20	20	20	20	20	20	18
% PI	P Corr	-.071	.150	-.009	.409	.293	.365	.058	.093	-.119	.003	-.012	.080	.198	.210	-.260	.401	1.000	.203	.009	.168	-.144	-.063
	Sig.	.802	.594	.972	.130	.310	.181	.825	.843	.800	.995	.960	.737	.403	.375	.268	.080	.	.391	.969	.478	.544	.804
	N	15	15	17	15	14	15	17	7	7	6	20	20	20	20	20	20	20	20	20	20	20	18
% W	P Corr	.651	.858	.826	.800	.862	.875	-.009	.799	.729	.456	-.670	-.493	-.194	-.308	-.899	-.194	.203	1.000	-.197	.282	-.817**	-.104
	Sig.	.009	.000	.000	.000	.000	.000	.973	.031	.063	.364	.001	.027	.413	.186	.000	.413	.391	.	.405	.228	.000	.680
	N	15	15	17	15	14	15	17	7	7	6	20	20	20	20	20	20	20	20	20	20	20	18
%A	P Corr	.020	-.042	-.027	.241	.221	-.067	.102	.396	.351	.695	.187	.759	.652	.489	-.238	.475	.009	-.197	1.000	.161	.188	.049
	Sig.	.945	.882	.918	.387	.448	.813	.697	.379	.440	.126	.429	.000	.002	.029	.312	.034	.969	.405	.	.498	.427	.846
	N	15	15	17	15	14	15	17	7	7	6	20	20	20	20	20	20	20	20	20	20	20	18
yr in mer cap	P Corr	.291	.336	.345	.460	.542	.571	.038	.066	-.017	-.287	-.059	.067	.084	-.113	-.348	-.340	.168	.282	.161	1.000	-.172	.013
	Sig.	.293	.221	.176	.085	.045	.026	.884	.888	.971	.581	.806	.779	.724	.637	.132	.143	.478	.228	.498	.	.468	.960
	N	15	15	17	15	14	15	17	7	7	6	20	20	20	20	20	20	20	20	20	20	20	18
% free lnch	P Corr	-.581	-.825	-.608	-.827	-.773	-.704	.088	-.326	-.537	-.199	.691	.447	.130	.297	.721	.284	-.144	-.817	.188	-.172	1.000	.326
	Sig.	.023	.000	.010	.000	.001	.003	.736	.476	.214	.706	.001	.048	.584	.204	.000	.225	.544	.000	.427	.468	.	.187
	N	15	15	17	15	14	15	17	7	7	6	20	20	20	20	20	20	20	20	20	20	20	18
PAA 97-98	P Corr	.142	-.334	.165	-.242	-.060	-.104	.469	-.751	-.322	.030	.248	-.066	-.340	.011	.129	-.088	-.063	-.104	.049	.013	.326	1.000
	Sig.	.644	.265	.558	.426	.853	.735	.078	.085	.533	.955	.321	.795	.167	.965	.611	.728	.804	.680	.846	.960	.187	.
	N	13	13	15	13	12	13	15	6	6	6	18	18	18	18	18	18	18	18	18	18	18	18

*
Correlation is significant at the 0.05 level (2-tailed).
**
Correlation is significant at the 0.01 level (2-tailed).

Notes for Correlation Matrix 2:

‘All gr 2’ through ‘All gr 11’ = ‘All grades 2’ through ‘All grades 11’ in Merced County schools—these are the average district 1998 SAT9 reading scores.
*1 – LEP = % Limited English Proficiency
*2 – TANF = % Temporary Assistance to Needy Families
*3 - %AA = % African American
*4 - % F = % Filipino
*5 - % H = % Hispanic
*6 - % NA = % Native American
*7 - % PI = % Pacific Islander
*8 –% W = % White
*9 –% A = % Asian
*10 - Yr MerCAP = Year started in MerCAP (1, 2, or 3)
*11 - % Free lnch = % receiving free or reduced cost lunch
*12 - PAA 97-98 = Mean Percentage Actual Attendance of all Merced County School Districts in school year 1997-98

Except for PAA9798 and Year Started MerCAP, data were obtained from District Profiles maintained by the State Department of Education.