FIRST 5 KERN
ANNUAL REPORT
FISCAL YEAR 2010-2011

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PRINCIPAL INVESTIGATOR

FIRST 5 KERN

Acknowledgments

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- First 5 Kern Commission
- First 5 Kern Technical Advisory Committee (TAC)
- First 5 Kern Commission staff:
  - Jamie Henderson, Executive Director
  - Judith Harniman, Assistant Director
  - Kathy Ives, CPA, MPA, Chief Finance Officer
  - Sharon Powell, Administrative Assistant
  - Anastasia Lester, Program Officer
  - Paula De La Riva, Program Officer
  - Wilknica Jefferson, Program Officer
  - Dayana Ulloa, Interim Program Officer
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  - Heather Schreiner, Research Assistant
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  - Patti Taylor, Senior Finance Officer
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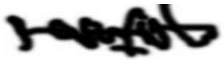
- Institutional Review Board of California State University, Bakersfield
- Larry J. Rhoades, past Interim Executive Director
- Marc Thibault, Consultant

Commissioners of First 5 Kern are recognized in Exhibit 1, and TAC members are identified in Appendix A. While appreciating their support, I conducted the data analyses, and shall be fully responsible for the report accuracy.

Jianjun "JJ" Wang, Ph.D.



Professor of Research Design and Statistics
Principal Investigator

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Executive Summary

First 5 Kern is funded by the Proposition 10 ballot initiative to support services for children prenatal to age five in Kern County. The state revenue comes from an extra 50-cent tax on tobacco products, and is distributed according to the proportion of live births in each county. Despite the statute of local control approved by California voters, the state assembly attempted to use Assembly Bill (AB 99) in April 2011 to take $11.7 million from First 5 Kern. This incident targeted the local reserve that has already been committed to a three-year funding cycle. Thus, this report covers a period of extraordinary difficulty to justify necessity of the state investment. In retrospect, improvement of the report capacity was originated from a two-year plan since 2009 to promote annual dissemination of compelling evidence and evaluation findings.

Summary of the Report Change

Annual reports prior to the last year contained about 500 pages, similar to the size of the state annual report before 2005. After the releasing of a *Statewide Evaluation Framework* (First 5 California, 2005), the state commission reduced its report volume to less than 100 pages. In accordance with the structure change initiated at the state level, the 2009-10 annual report for First 5 Kern was condensed to 84 pages to enhance its focus on *what works, for whom,* and *in which context*. The Context, Input, Process and Product (CIPP) paradigm developed by Stufflebeam (1983; 2003) was introduced to identify well-rounded findings on *program effectiveness* and *population impact*. In addition, past recommendations were reviewed and new recommendations were provided to facilitate ongoing improvement between adjacent years.

The 2010-11 Annual Report is built on the past progress to continue tracking and demonstrating Results-Based Accountability. More specifically, the report is based on a thorough analysis of multilevel data recommended by the state evaluation framework. At the first level, descriptive data are examined to support fact findings on service counts. In addition, value-added assessments are incorporated at the second level to articulate outcome measures in support of the local priority setting. At the third level, longitudinal data are analyzed for those programs receiving funding during adjacent years of 2009-2011 to track improvement of sustainable accomplishments beyond the cycle of annual reporting. Altogether the renovated report is expected to strengthen its ability to communicate profound findings with various stakeholders.

Impact of First 5 Kern Services

Bedell (2010) pointed out, “First 5 [Kern] has allocated more than $100 million to 450 programs sponsored by 240 different organizations throughout Kern County” (p. 1). Despite the unprecedented threat of reserve depleting from AB 99, First 5 Kern devoted nearly $11 million this year to fund 44 programs across focus areas of *Health and Wellness*, *Parent Education and Support Services*, *Early Childcare and Education*, and *Integration of Services*. In the *Health and Wellness* area, the number of funded programs increased from **eight** in the last year to **11** this year. Five new programs were added to the *Parent Education and Support Services* area, making a total of **18** funded programs this year. Increases of the program numbers happened this year when over $200,000 funding reduction occurred in each of two focus areas. Despite

the budget shrink, First 5 Kern was able to augment approximately $1 million (i.e., $966,686, or an **above 27%** increase over the last year) to expand services in early childcare and education.

As a result, the annual outcomes gathered from the Core Data Element (CDE) survey and Family Stability Rubric (FSR) assessment demonstrate a good beginning of the new funding cycle on 10 fronts:

1. Low birth weight occurred less often in rural communities (371 children impacted);
2. More children had dental visits in less than 12 months (780 children impacted);
3. More children had annual health checkups (684 children impacted);
4. More families had medical insurance to allow all household to go to doctor (369 children impacted);
5. More mothers breastfed their children (556 children impacted);
6. More mothers started prenatal care within the first trimester (895 children impacted);
7. More parents/guardians reported child attendance of nursery school after age 3 (182 children impacted);
8. Fewer children were exposed to cigarette/cigar smoking at home (1,237 children impacted);
9. More children received all shots recommended by a doctor (799 children impacted);
10. More children had parents read to them twice or more times per week (1,125 children impacted).

Those accomplishments illustrated well-rounded progresses across focus areas of *Health and Wellness* (Points 1, 2, 3 and 4,), *Parent Education and Support Services* (Points 5, 6 and 7), and *Early Childcare and Education* (Points 8, 9 and 10) stipulated by the First 5 Kern Strategic Plan.

In March 2010, the state commission issued new guidelines to reaffirm "the support of local decision-making and the development of integrated strategies that are determined to be most appropriate for each county" (First 5 California, 2010a, p. 6). Of the 44 programs funded by First 5 Kern, 43 programs responded to the Integration of Services Questionnaire (ISQ) this year. The data analysis indicates four major accomplishments in this area:

1. **New coordination has taken place among service providers** – Thirty-six programs received First 5 Kern funding to support 25% or more of their annual budget. Prior to receiving First 5 Kern funding, none of these programs had their services coordinated by county, state or national agencies before. First 5 Kern's funding provided the "glue" money to enhance the service coordination under a common goal of supporting children ages 0 to 5 and their families in Kern County.
2. **More impact has been derived from the partnership between First 5 Kern and its service providers** – Thirty-eight partners indicated that First 5 Kern has increased their program awareness within the local community. In addition, collaboration with First 5 Kern has generated matching funds for 32 programs to acquire additional resources from other channels.

3. **Stronger partnerships have been developed with First 5 Kern funding** – Thirty-eight programs indicated no partnership change over the past year. Among the 34 programs that pursued leverage funds with their partners, half of them used First 5 Kern support to cover 75-100% of their budgets. Thus, First 5 Kern is a primary supporter for the partnership development.
4. **Broader services have been extended to reach traditionally underserved populations** – To close service gaps within local communities, twenty-one programs expanded their capacity to serve children and families with limited English proficiency, ten programs provided services to children with immigration documentation issues, and thirteen programs offered accessible services during unusual hours.

In summary, First 5 Kern has made a profound impact on development of children ages 0 to 5 and their families across the four focus areas of its Strategic Plan. First 5 Kern also empowered various service providers on service integration to extend local capacity building throughout Kern County.

Conclusion and Future Recommendation

Since its inception in 1998, First 5 Kern has evolved from a fledgling organization to an agency with strong Results-Based Accountability (RBA). Limited by space of the Executive Summary, compelling evidences are aggregated from common core instruments, such as CDE, FSR and ISQ, to expand the program coverage across multiple focus areas. An overview of the First 5 Kern operation, including an evaluation framework, is presented in Chapter 1. More detailed results about the service impact are elaborated in Chapters 2, 3 and 4 according to priorities of the local Strategic Plan. Results of this report reconfirmed First 5 Kern's commitment to improving the health and well-being of children aged 0 to 5 years, regardless of their ethnic, socioeconomic, or immigration status.[1]

Additional progresses have been reflected by the local effort on addressing three recommendations from the 2009-10 Annual Report. Those actions included (1) providing comparable data between two adjacent years to support value-added assessments beyond the annual monitoring of program performance; (2) articulating Results-Based Accountability with more explanatory and outcome variables from new curriculum-based instruments, such as the Nurturing Skills Competency Scale (NSCS), toward improvement of the assessment findings; and (3) developing a new version of ISQ to expand the information gathering on service integrations. These accomplishments were achieved at a difficult time when an attempt was made by the State Assembly to take $11.7 million from the local reserve, and detrimental adjustment was made to complete the current three-year funding cycle.

In a long run, however, further decrease of the state revenue seems inevitable as tobacco consumptions dwindle down steadily. Over the past four years, First 5 Kern's funding allocation has dropped from $12,277,016 in FY 2006-07 to $10,807,789 in FY 2010-11. To sustain the much-needed local services, **one new recommendation** is to identify and/or develop "signature programs" through a balanced consideration between *existing partners* with exemplary track records and *new partners* with strong potential to deliver groundbreaking services. This recommendation is aligned with ongoing

[1]The population coverage is required by the State Guidelines (First 5 California, 2010a).

support of the State Commission to develop "three Signature Programs (a child program, a parent program and a teacher program)" since the end of 2009.[2]

According to the state evaluation framework, "The [state] recommended approach is focused on ensuring the quality and credibility of data collected, which is in part supported by reducing the quantity of data attempted to be collected" (First 5 California, 2005, p. 4). To simplify data collection, **the second recommendation** is to collect timely feedback from service providers to avoid repeated data gatherings on time-invariant variables. This recommendation can be interpreted as a suggestion to enhance outcome tracking.

Among the currently funded partners, 43 programs provided ISQ responses. In addition, 32 programs gathered CDE data at the individual level and 18 programs administered the Family Stability Rubric (FSR) through the Outcomes Collection, Evaluation and Reporting Service (OCERS) system. Thus, the available results cannot be solely used for supporting the future funding decisions, particularly for those programs not involved in the data collection. Due to the existing program coverage, First 5 Kern needs to incorporate the evaluation results with additional background information from project fields to support the ultimate decision on future funding. To amend this void, **the third recommendation** is to invite input from First 5 Kern service providers on additional evidences that should have been gathered to represent their outcome-based contributions. Rationale behind these recommendations is elaborated in Chapter 5.

As First 5 Kern is poised to reach new heights, a new mission statement has been adopted this year to reflect a renewed emphasis on service integration. The mission revision was led by a Technical Advisory Committee (TAC) to strengthen alignment with the latest state guidelines (First 5 California, 2010a). In addition, the new mission includes a phrase of "empowering our providers". First 5 Kern works with its service providers to deliver systematic support to hard-to-reach communities. The partnership is particularly important in Kern County for its coverage of a vast region as large as the state of New Jersey. Effectiveness of these programs is demonstrated with results-based measures throughout this report.

As First 5 Kern is poised to reach new heights, a new mission statement has been adopted this year to reflect commitments of Proposition 10 stressed in the 2010 state guidelines.

[2]Source: http://www.ccfc.ca.gov/Help/program_development.asp

Chapter 1: First 5 Kern Overview

First 5 Kern was established in 1998 when voters approved Proposition 10, the California Children and Families Act. Based on its judicial statutes, the state revenue shall not replace state or local general funds, or pay for existing levels of service; it can only supplement services or fund entirely new programs. "While counties design their programs to fit their specific local needs, they must provide services in each of the following four focus areas: Family Functioning, Child Development, Child Health, [and] Systems of Care" (First 5 California, 2010b, p. 15). To track the return on state investment, First 5 Kern has developed a Strategic Plan that encompasses four focus areas, *Health and Wellness*, *Parent Education and Support Services*, *Early Childcare and Education* and *Integration of Services*. Table 1 shows a complete alignment between state and local focus areas.

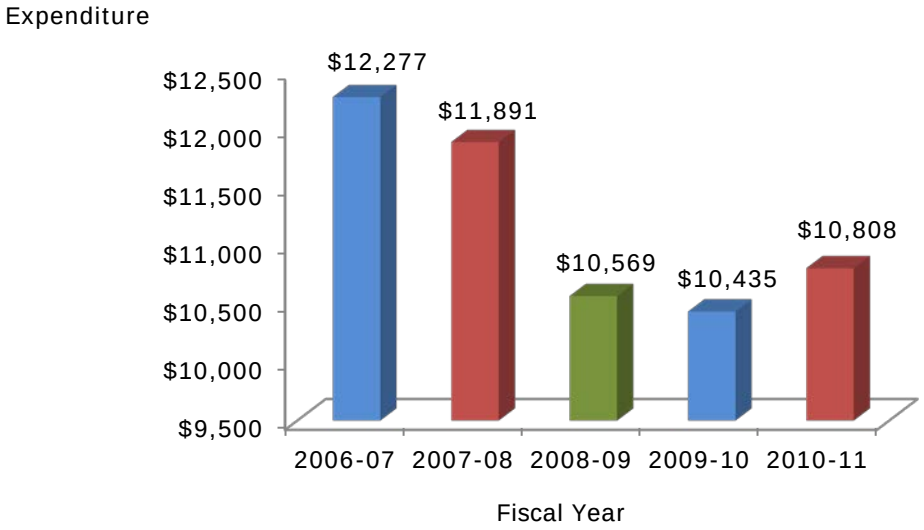
TABLE 1: ALIGNMENT OF THE STATE AND COUNTY FOCUS AREAS*

State Focus Area	First 5 Kern Focus Area	Number of Funded Programs
Family Functioning	Parent Education and Support Services	18
Child Health	Health and Wellness	11
Child Development	Early Childcare and Education	15
Systems of Care	Integration of Services	N/A

*The fourth area, *Integration of Services* or *Systems of Care*, is an integral part of every contract awarded in the first three focus areas; therefore, no separate program count has been included in this category.

Since its inception, "First 5 [Kern] has allocated more than $100 million to 450 programs sponsored by 240 different organizations throughout Kern County" (Bedell, 2010, p. 1). Fiscal year 2010-11 is the beginning of a new three-year funding cycle. In the *Health and Wellness* area, the number of funded programs increased from **eight** in the last year to **11** this year. Five new programs have been added to the *Parent Education and Support Services* area, making a total of **18** funded programs this year. Increases of the program numbers happened this year when more than a $200,000 funding reduction occurred in each of two focus areas. Despite the budget reduction, First 5 Kern was able to augment approximately $1 million (i.e., $966,686, or an **above 27%** increase over the last year) to expand services in early childcare and education. According to Lusiana (2011), "Early childhood education is a human resource development strategy" (¶. 2). To cope with the negative impact from AB 99, First 5 Kern has strengthened its support for children ages 0 to 5 and their families in Kern County (see Figure 1).

Figure 1: Total First 5 Kern Investment Over the Past 5 Years (in $1,000)



First 5 Kern Commission

Leading the Kern County Children and Families Commission is a group of professionals committed to supporting and improving early development of children from prenatal to five years of age. Appointment of the commissioners strictly follows the state regulations. Pursuant to California Health and Safety Code section 130140, "The county commission shall be appointed by the board of supervisors and shall consist of at least five but not more than nine members". Furthermore, the commission shall include one member from the county's board of supervisors and additional persons responsible for county functions such as: children's supports, public health, behavioral health, social services, and tobacco and other health substance abuse preventions and treatments. Exhibit 1 shows the commissioners appointed by the Kern County Board of Supervisors to oversee First 5 Kern operation in Fiscal Year 2010-11. Four alternate members were available to substitute the existing commissioners, if needed. In combination, the commission has ensured representation of various stakeholders, including elected officials, service providers, program administrators, community volunteers, and First 5 Kern advocates.

Vision and Mission Statements

The state commission released new *Guidelines for Implementing the California Children and Families Act* to define the concept of *vision* as "A broad, general statement of the desired future" (First 5 California, 2010a, p. 28). In the local Strategic Plan, First 5 Kern has indicated its desire to integrate various programs and services into a family-focused, culturally-appropriate, and community-based initiative to help children enter kindergarten physically, mentally, emotionally and cognitively ready to learn. The local needs are identified through public hearings to collect input from the community. The following vision statement is built on the wisdom gathering, and conforms to the new state guidelines.

Exhibit 1: First 5 Kern Commission Members FY 2010-2011

Commissioner	Affiliation
Mimi Audelo (Chairperson)	Director of Special Events, San Joaquin Community Hospital
Roland Maier (Vice-Chairperson)	Vice Principal, Lincoln Junior High School
Carrie Champness (Treasurer)	Local Business Owner
Pat Cheadle (Secretary)	Director, Kern County Department of Human Services
Karen K. Goh	Executive Director, Garden Pathways
Claudia Jonah, MD	Health Officer, Kern County Department of Public Health
Nancy Puckett	Program Coordinator, Family Resource Center - Kern River Valley School District
James Waterman, PhD	Director, Kern County Department of Mental Health
Alternate Members	
Dena Brashear	Chief Deputy Director, Kern County Department of Human Services
Deanna Cloud	Children's System of Care Administrator, Kern County Mental Health System of Care
Mike Maggard	Board of Supervisor County of Kern (3rd District)
Lucinda L. Wasson. R.N.	Director, Public Health Nursing, Kern County Department of Public Health

Vision

> All Kern County children will be born into and thrive in supportive, safe, loving homes and neighborhoods and will enter school healthy and ready to learn. (First 5 Kern, 2011, p. 2)

The vision has engaged local communities in developing and improving a mission statement for First 5 Kern. To reflect the effort on capacity building and service delivery, First 5 Kern had its original mission stated as "To strengthen efforts that nurture children ages prenatal to five and their families" (First 5 Kern, 2009, p. 2). More recently, the new state guidelines placed more emphasis on service results, rather than efforts (First 5 California, 2010a). It was clarified that "While many definitions of terms and approaches are possible (sometimes it is called "Results-Based Accountability"), all share a common focus on achieving outcomes as opposed to measuring services delivered" (First 5 California, 2010a, p. 18). The switch of focus from *effort* to *outcome* was concurred by Friedman's (2005) book entitled *Trying Hard is Not Good Enough*.

Service integration is another component included in the new mission statement. As highlighted in the state guidelines, "The Act [Proposition 10] also requires County Commissions to integrate programs and strategies into a 'consumer-oriented and easily accessible system'." Suggestions for achieving this result are woven throughout the guidelines" (First 5 California, 2010a, p. 7). Hence, development of an integrated service system is an indispensable component stipulated by the state statute.

The Technical Advisory Committee (TAC) took the lead to improve the mission statement. Mission statements from other counties were extensively reviewed by the committee members. A total of 15 professionals served on the TAC this year (see Appendix A), and a consensus has been established among the TAC members through six months of delivery and discussion. Based on the TAC recommendation, a public hearing was held to gather broad input from the community. In the end, the following mission statement has been accepted by the Kern County Children and Families Commission.

Mission

> To strengthen and support the children of Kern County prenatal to five and their families by empowering our providers through the integration of services with an emphasis on health and wellness, parent education, and early childcare and education. (First 5 Kern, 2011, p. 2)

On September 27, 2010, the commission appointed Mr. Jamie Henderson as the Executive Director to supervise First 5 Kern operations. Henderson (2010) pointed out, "A strong evaluation component assures that programs are providing direct services to children and their families according to each program's Scope of Work and the Strategic Plan. This assures the success of each program through measurable data" (p. 1). Thus, evaluation has been treated as an indispensable component this year to support the mission implementation.

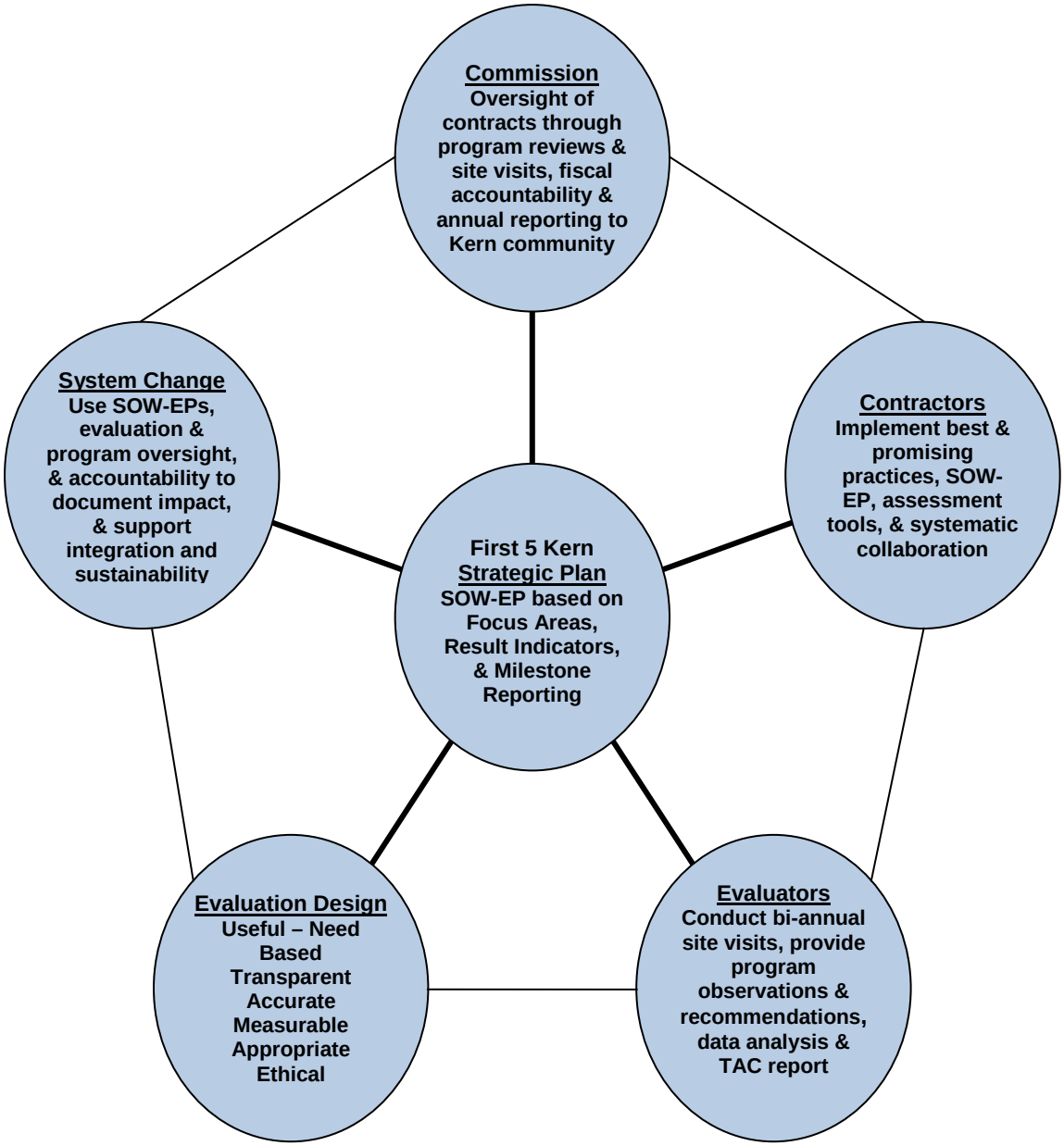
Evaluation Framework

The new state guidelines suggested inclusion of both *needs-based assessment* and *asset-based assessment* in the evaluation framework. Whereas, the *needs-based* assessment is focused on identifying and amending the local services (Roehlkepartain, 2008), the *asset-based assessment* proactively coordinates the effective partnership among external agencies as different as healthcare, law enforcement, childcare, education, and social service organizations. The local capacity building includes three components, "1) link seemingly unrelated programmatic strategies and results; 2) clearly define the 'ends' sought and the 'means' to achieve them; and 3) offer a basis for evaluating accomplishments" (First 5 Kern, 2011, p. 6). To enhance feasibility of the strategic planning, First 5 Kern has contractually required its service providers to single out result statements and measurable objectives in a unified Scope of Work-Evaluation Plan (SOW-EP) that delineates resources, data collection tools, performance and result indicators, milestones and targets at the program level.

Under the Commission's leadership, performance indicators are tracked quarterly by program and finance officers of First 5 Kern. Through ongoing site visits and program trainings, the evaluation design is developed to ensure that the data collection is need-

based, transparent, and accurate. Program observations and TAC recommendations are employed to facilitate system changes consistent with the designated priorities of the Strategic Plan. As Henderson (2010) noted, "Our Commission is dedicated to our Strategic Plan. This plan guides the work and priorities of First 5 Kern and its 44 funded programs for three years, 2010-2013" (p. 1). On the basis of the state guidelines and local priorities, the entire Evaluation Framework is depicted in Exhibit 2 to accommodate those key components.

Exhibit 2. First 5 Kern Evaluation Framework



Structure of this Report

Among the four focus areas of First 5 Kern, three of them address area-specific supports to improve child health, parent education, and school readiness. "The fourth area - Integration of Services - is focused on First 5 Kern's role in supporting systems change to increase the effectiveness and efficiency of how children and families are served" (First 5 Kern, 2011, p. 6). Accordingly, Chapter 2 is devoted to description of the local impact from area-specific services funded by First 5 Kern. Outcome measures are aggregated to present results of fact findings in *Health and Wellness*, *Parent Education and Support Services*, and *Early Childcare and Education*. Except for one program that received funding for indirect services, all 43 programs responded to an Integration of Services Questionnaire (ISQ). The ISQ data from 43 programs are analyzed in Chapter 3 to evaluate wide-reaching partnerships in *Integration of Services*.

In summary, despite the unexpected threat from AB 99, First 5 Kern devoted nearly $11 million to fund 44 programs in the first year of the new funding cycle. To promote sustainable impact, the Annual Report is expected to indicate *what works, for whom,* and *in which context*. Under the CIPP paradigm, outcomes from the previous *Product* phase set a new baseline to maintain program improvement. With the combination of formative and summative evaluations, continuous progresses exceeding a linear trend from the original baseline are called "turning the curve" (Friedman, 2005). To reflect the ongoing improvement, information from Core Data Element (CDE) surveys and Family Stability Rubric (FSR) assessments are analyzed in Chapter 4 to articulate sustainable progress beyond the annual reporting cycle. This report ends with a *Conclusions and Future Directions* chapter to address Results-Based Accountability through a "turning the curve" process.

First 5 Kern devoted nearly $11 million in FY 2010-11 to fund 44 programs to support children ages 0-5 and their families in four focus areas specified by its Strategic Plan.

Chapter 2: Impact of First 5 Kern-Funded Programs

Proposition 10 investment is unique in its local planning on the "end" results to describe service outcomes (Bodenhorn, & Kelch, 2001). After defining the outcome priorities, each county has its flexibility of local control to create practical programs that impact lives of local children ages 0 to 5 and their families. To justify the return on state funding, "The Children and Families Act of 1998 [Proposition 10] mandates the collection of data for the purpose of demonstrating results" (First 5 Kern, 2011, p. 16). In the past, program results have been quantified through statistical testing. As was indicated in an annual report two years ago,

> Many findings are described as being "statistically significant." This means that the difference between the groups being compared (typically, this is a comparison of pre-test to post-test) is not due to chance alone. Statistical significance is described using p-values, which express the likelihood that a result is due to chance. (CS&O, 2010, p. 6)

While probabilistic inference is needed to model uncertainty of the results, it is the effect size, not a p value, that measures the magnitude of program impact (Wilkinson, 1999). The American Psychological Association (2001) concurred that "For the reader to fully understand the importance of your findings, it is almost always necessary to include some index of effect size or strength of relationship in your Results section" (p. 25). Without incorporating the effect size measures, trivial results of little practical importance could be claimed significant through statistical testing (Kaufman, 1998). Hence, researchers stressed importance of effect size reporting to avoid "mistaking statistical significance for practical significance" (Rosenthal, Rosnow, & Rubin 2000, p. 4).

Because practical significance can be compared across similar programs (see Kirk 1996; McLean & Ernest 1998; Thompson 1998), effect size plays an important role in meta-analysis to summarize empirical findings (Ellis, 2010). In this chapter, effect sizes are employed to describe impact of First 5 Kern funding at the program level. Findings across the programs are grouped into subsections of *Health and Wellness*, *Parent Education and Support Services*, and *Early Childcare and Education* according to the focus area designation. Whenever pertinent, standardized effect sizes are aggregated across comparable programs within a focus area. Since the fourth focus area, *Integration of Services*, is shared by all First 5 Kern-funded programs, it will be addressed in Chapter 3 using additional data from the Integration of Services Questionnaire.

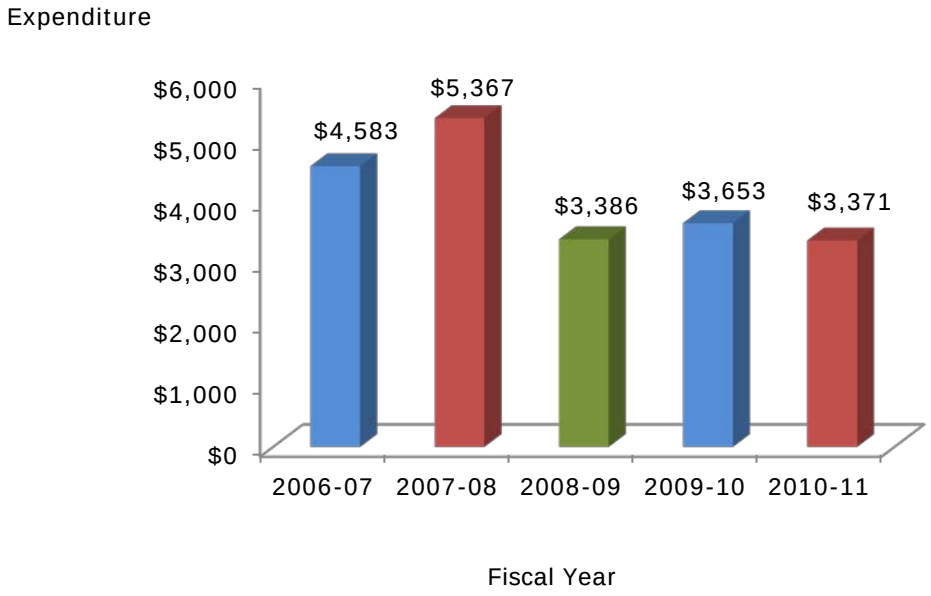
Focus Area 1: Health and Wellness

Among 11 programs funded by First 5 Kern in this area, indicators have been gathered at the child, family, and program levels to document cost-effectiveness of program operation during the current economic recession. It was stated in AB 99 that

> California is presently experiencing a severe fiscal crisis, which has resulted in funding shortfalls for many services at the state and local levels. Health and human services programs that serve children are among the most seriously affected by this lack of funding (California Assembly Committee on Budget, p. 1).

The funding shortfalls in *Health and Wellness* are reflected in the trend of First 5 Kern investment in Figure 2.

Figure 2: Trend of Investment in Health and Wellness (in $1,000)

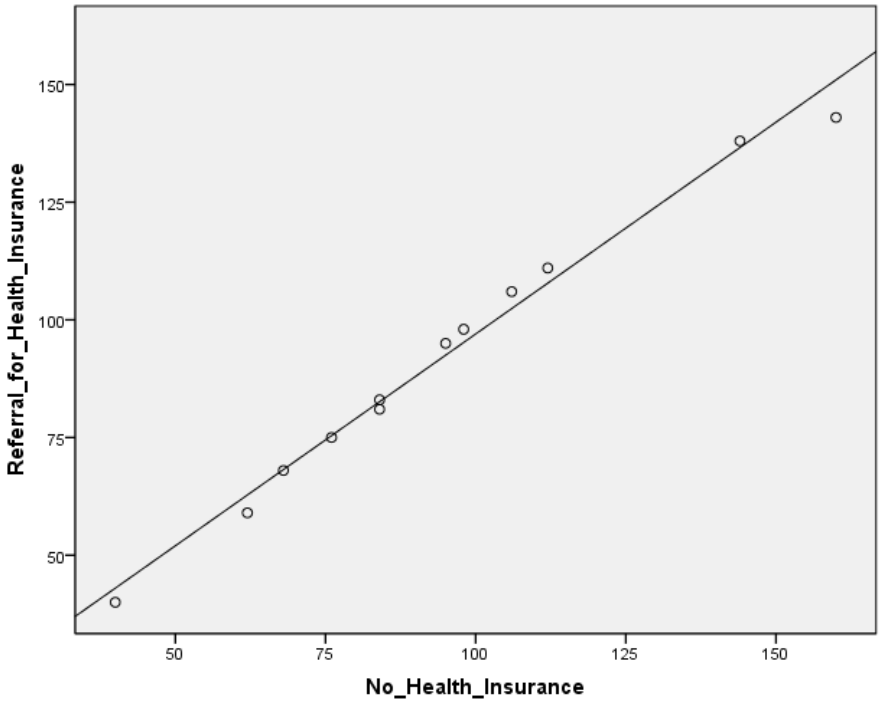


Despite the funding decrease from last year, First 5 Kern increased the number of sponsored programs from eight in the last funding cycle to 11 this year. In addition, it leveraged $13,708 from Kaiser Permanente to fund a Care Coordinator position for Kern County Department of Public Health. This move has substantially enhanced the existing Medically Vulnerable Infant Care Coordination Project that organizes bi-weekly meetings to identify local child needs and bridge service gaps through professional referrals across a well-established health network.

Coordinating Referral Needs in the Local Context

Besides the special attention for medically vulnerable infants, broader referrals are needed to access various services for children ages 0 to 5. To expand the support across local communities, a program named 2-1-1 Kern County received funding from First 5 Kern to offer referral advices using a centralized social service database. A total of 21,046 consulting services occurred this year in 60 inquiry categories. Among them, 23 categories addressed the basic needs of 18,429 callers. Pertinent to the *Health and Wellness* area were responses to 1,129 callers in need of health insurance in Kern County. These phone calls led 923 callers to helpful referrals, and 807 children eventually enrolled in one of the insurance programs. The referrals and insurance enrollments have been tracked on a monthly basis along with the number of phone calls. Figure 3 showed a strong linear relationship between the number of phone calls and the number of referrals. The result was statistically significant with an effect size r above 0.99. Since getting referrals was an expectation of those phone calls, the strong relationship indicated effectiveness of the 2-1-1 program in helping various children across the Kern County context.

Figure 3: Effect Size (r) Plot for Health Insurance Referrals



Expanding Service Access for Children from Traditionally Under-Served Families

First 5 Kern has used the Outcomes Collection, Evaluation and Reporting Service (OCERS) as its data management system up to June 30, 2011. Table 2 included distributions of child demographics at the end of last fiscal year. While the child coverage was approximately gender-balanced, the majority of service recipients were Hispanic children with Spanish as their primary language. With the baseline entry for FY 2010-11, First 5 Kern has expanded service access for children from traditionally under-served families. In partnership with Kern County Department of Public Health, First 5 Kern funded a Successful Application Stipend (SAS) program this year to provide application assistance for health insurance enrollment. Benefit of health insurance is partially reflected by child access to regular and preventive healthcare, which reduces cost from emergency room visits (Lasker, 1997). "Avoiding the use of expensive emergency room care" has been identified as an important measure to save the healthcare system from bankruptcy (Chappell, 2009).

The new state guidelines cautioned that "it is important to determine whether all parts of the county are being served" (First 5 California, 2010a, p. 78). Kern County was ranked the third-largest county by area in the contiguous United States. In FY 2010-11, the SAS program has extended the enrollment coverage for 3,237 children ages 0 to 5 at 20 locations to overcome the language and transportation barriers. A total of 2,059 (or 63.73%) children were newly enrolled, while 1,178 (or 36.27%) children belonged to a renewal category. Distributions of the enrollment were 36.55% in *Healthy Families*, 2.04% in *Healthy Kids*, and 61.41% in *Medi-Cal*. The enrollment count was evenly distributed across ages 0 to 5 in each of the three programs.

TABLE 2: COMBINED INITIAL ENTRY DATA FROM THE ORIGINAL AND REVISED OCERS.NET SURVEYS (PRE- AND POST-MIGRATION) (TOTAL *N* = 17,745)

Child Demographics	Percent	N
Gender		
Female	49.3	8,749
Male	50.7	8,990
Ethnicity		
American Indian or Alaskan Native	0.4	79
Asian or Pacific Islander	1.2	207
Black or African American	5.6	998
Hispanic or Latino	70.8	12,558
White	16.0	2,847
More than one ethnicity	5.1	910
Other	0.7	130
Primary Language		
English	47.0	8,349
Spanish	51.7	9,182
Other	1.0	156

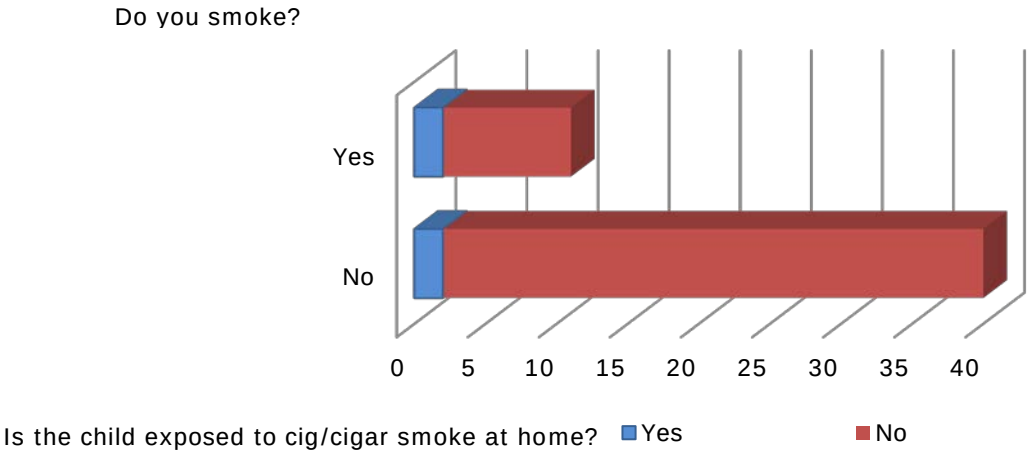
Note: Results in Table 2 included responses to comparable questions across the original pre-migration survey and the revised survey implemented post-migration into OCERS.net through June 30, 2010.

Compounded by statewide ethnic diversity, "The task in reaching out to California's diverse children and their families is daunting" (Bodenhorn & Kelch, 2001, p. 151). In particular, the *Healthy Kids* program covered those children ineligible for Medi-Cal or Healthy Families. The Children's Health Initiative of Kern County (CHIKC) coordinated the transfer of enrollment information to the Health Net of California, a health plan serving the *Healthy Kids* program. A total of 487 children benefited from ongoing enrollment of health insurance provided by CHIKC. The Hispanic ethnic group counted for 463 children (or 95.07%). In addition, 2,183 children were classified as new enrollees through CHIKC with 91% in the Hispanic group. The service was delivered across the entire county with a balanced geographic distribution across 24 Census Designated Places (CDPs). As a result, 99% of Kern County residents have available application assistance within 10 miles of their community.

Expansion of the insurance coverage further depends on two conditions: (1) application assistance to facilitate insurance enrollment, and (2) availability of the insurance plans to meet the local needs. In FY 2010-11, the CHIKC enrollment figures indicated that 80% of the enrollees fit a plan requiring *no monthly premium* or *a minimum premium of $5*. Although First 5 Kern's funding supported a total of five insurance options, those with higher premiums seemed less relevant to most local children and their families. "Coupled with continued expansions in children's health insurance coverage, targeted policy interventions are needed to ensure the availability of healthcare services for children in rural areas" (Devoe, Krois, & Stenger, 2009, p. 1). On the basis of the enrollment figures, insurance plans with low premiums seemed to benefit the majority of local children in Kern County.

With a clear vision to improve child health, First 5 Kern funded programs to close service gaps for ethnic minority groups. For example, *Kern County Department of Public Health - Black Infant Health (BIH) Program* received funding from First 5 Kern to reduce infant mortality rate and improve health indicators among African American communities. More specifically, it was projected in a milestone statement that "Mothers will be provided information/education on the importance of smoking cessation". This effort has been clearly justified by descriptive data from BIH. As indicated in Figure 4, children are much less likely to have exposure to smoke when parents quit smoking at home.

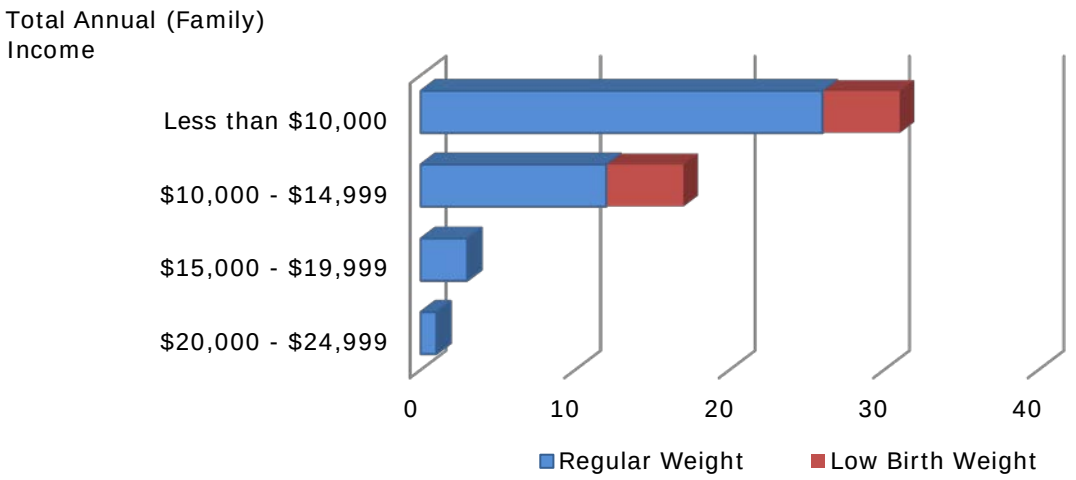
Figure 4: Smoke Exposure in the Black Infant Health Program



In addition, low birth weight is defined at a level of 2,500 grams or below, and "Quitting smoking before pregnancy may significantly reduce the risk of low birth weight in the infant" (Lu, Bragonier, Silver, & Bemis-Hey, 2000, p. 9). The state statistics indicated that the African American community had the highest rate (i.e., 12%) of low birth weight across all ethnic groups in 2009. In Kern County, this rate was higher than any other counties, and reached 13.9%.[3] Thus, low birth weight becomes a milestone indicator to describe child conditions at the program entry. As shown in Figure 5, low birth weight in the BIH program has been confined among families with an annual income under $15,000.

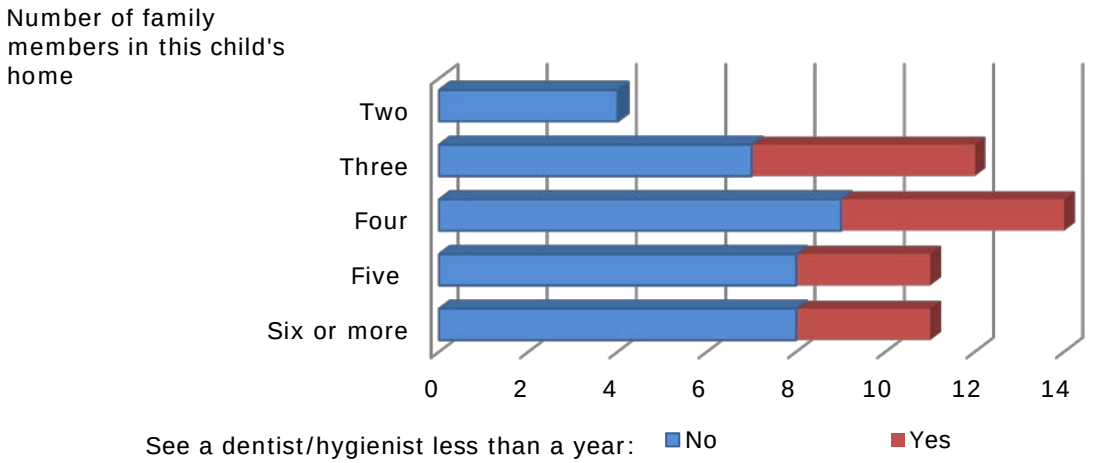
[3]Source: http://www.kidsdata.org/data/topic/table/low_birthweight-race.aspx

Figure 5: Relation Between Low Birth Weight and Family Income



Studies further indicated that low income was more likely to occur in single-parent families than two-parent families (Dingfelder, 2005; Lerman, 2002). In its first year of funding, the BIH program gathered descriptive data to document the number of family members at home. The number would be two (i.e., one parent and one child) when a child was accompanied by a single parent. Figure 6 showed a lack of regular dental checking for those children in single parent homes (see the top bar). In contrast, dental checking occurred for children from other family backgrounds.

Figure 6: Lack of Regular Dental Checking in Single Parent Families



In summary, both referrals and application assistance have been provided by First 5 Kern-funded programs this year. Those services granted child access to healthcare throughout Kern County. In addition, First 5 Kern's special contribution hinged on its indispensable support for traditionally under-served populations. The BIH results on the service needs were concurred by a general service count from the 2-1-1 Kern County program – Out of 21,046 consulting services across Kern County, over half of the phone calls (or 10,771 counts) were in the *Food Banks* and *Food Stamps* categories.

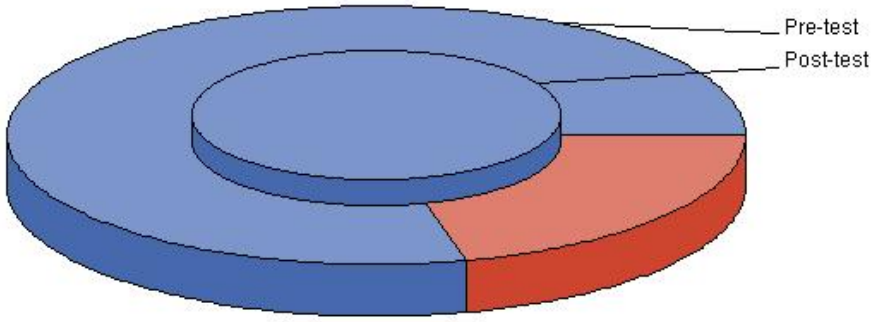
Enhancing Mental Health of Children Through Counseling Processes

To serve children with special needs, First 5 Kern extended its support to solve mental health issues involving the youngest children. To measure the impact of counseling, the *Henrietta Weill Memorial Child Guidance Clinic – Early Intervention Program (EIP)* employed program-specific instruments, such as the Comprehensive Need Assessment (CNA), Eyberg Child Assessment (ECA), and Incredible Years Parenting Scale (IYPS), in its ongoing data collection. A pre-test and post-test design was implemented to assess the impact of three treatment approaches, *in-home parent education*, *family therapy*, and *child group therapy*.

The IYPS results from the *in-home parent education* group showed significant improvement of parenting skills on two aspects:

(1) Parents were less likely to spank, slap, grab, or hit a child when she/he misbehaved [$t(8)=2.83$, $p<.05$]. Those parenting behaviors indicated inappropriate reactions. As shown in Figure 7, parents never or rarely took those corporal punishment measures against child behavior problems in the post-test (see the blue pie in the post-test result).

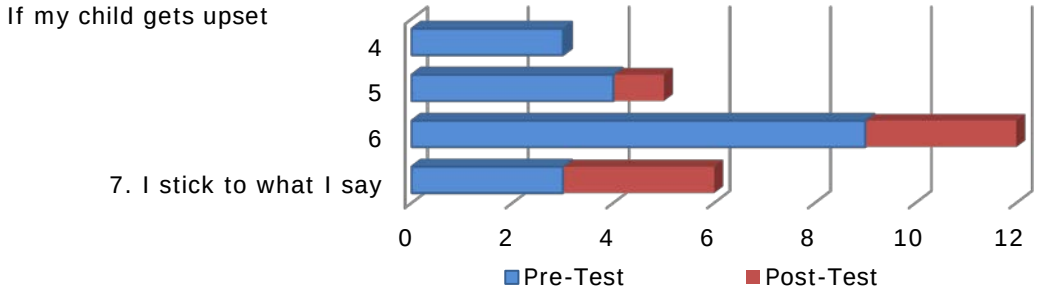
Figure 7: Inappropriate Reaction to Child Behavioral Problems



Blue: Never or rarely, Red: Otherwise

(2) Parents were more likely to stick to what they said despite children's emotional rejection [$t(8)=2.53$, $p<.05$]. Improvement of the persistency was illustrated by an increase of the red bar portion at bottom of Figure 8.

Figure 8: Persistency of Parent Reaction to Child Emotional Reject

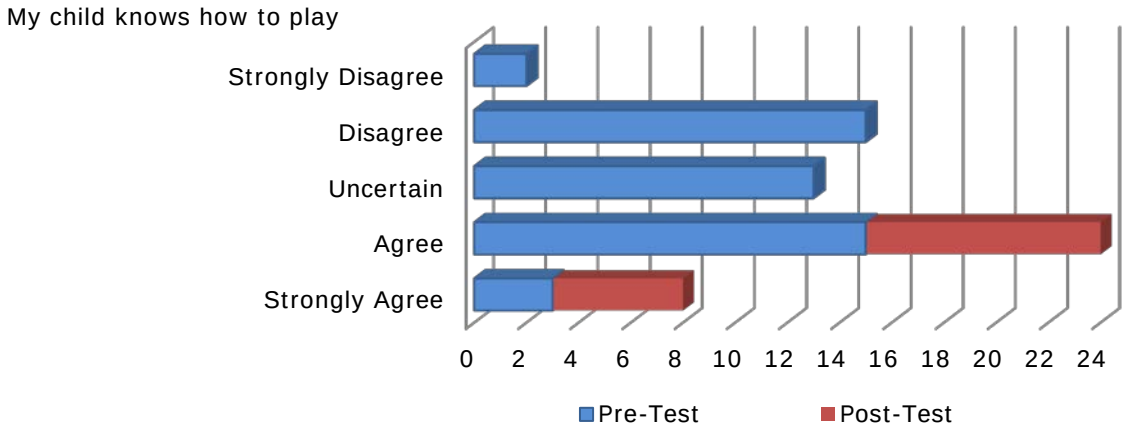


The effect size indices, as represented by Cohen's d values, were 1.3 on the *corporal punishment* reaction and 1.8 on *emotional rejection*. According to Cohen (1969), an effect size of 0.8 is "grossly perceptible and therefore large". The IYPS results demonstrated a much larger effect size from *in-home parent education* in protecting children with mental health issues in Kern County.

The successful counseling process was also reflected by the CNA outcomes from the *family therapy* treatment. Child progresses primarily appeared in two aspects:

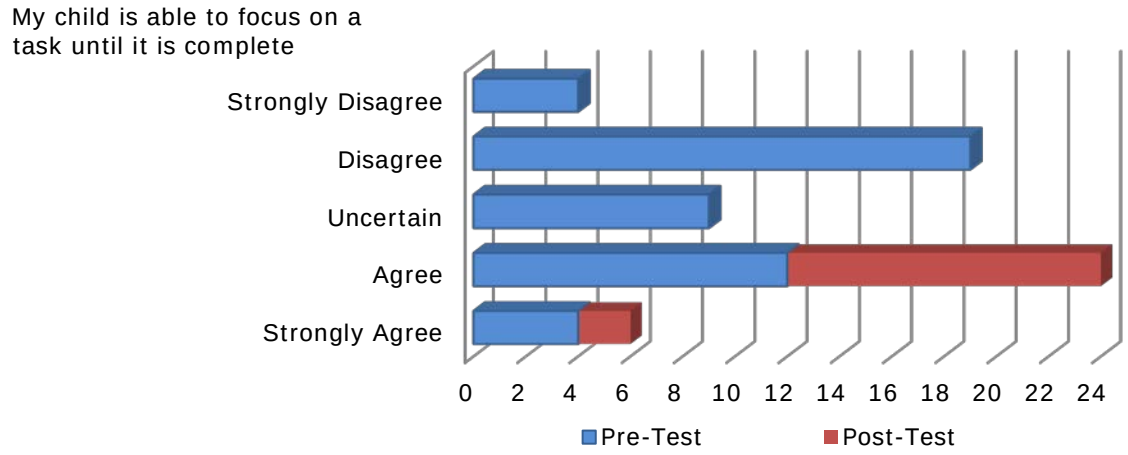
(1) All parents *strongly agreed* or *agreed* that children knew how to play with their peers appropriately in the post-test (see Figure 9). The progress was statistically significant [$t(10)=4.54$, $p<.05$] with an effect size of 2.9.

Figure 9: Appropriate Play Among Children



(2) Children were more likely to maintain their task focus in the post-test (Figure 10). The progress was statistically significant [$t(10)=2.80$, $p<.05$], and the effect size was 1.8.

Figure 10: Task Focus Until Completion

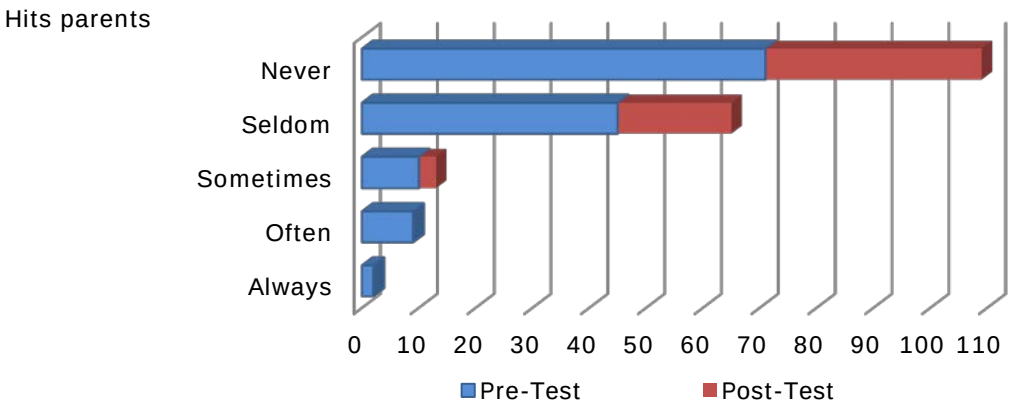


In both aspect, effect sizes, as represented by Cohen's d values, were much larger than 0.8. The results suggested practical impact of the counseling treatments on child progress.

Through the *group therapy* treatment, children with special needs have changed disrespectful behaviors against their parents and peers. In addition, they were able to avoid distractions from the surrounding environment. Results from the Eyberg Child Behavior Inventory (ECBI) showed significant improvements in three aspects:

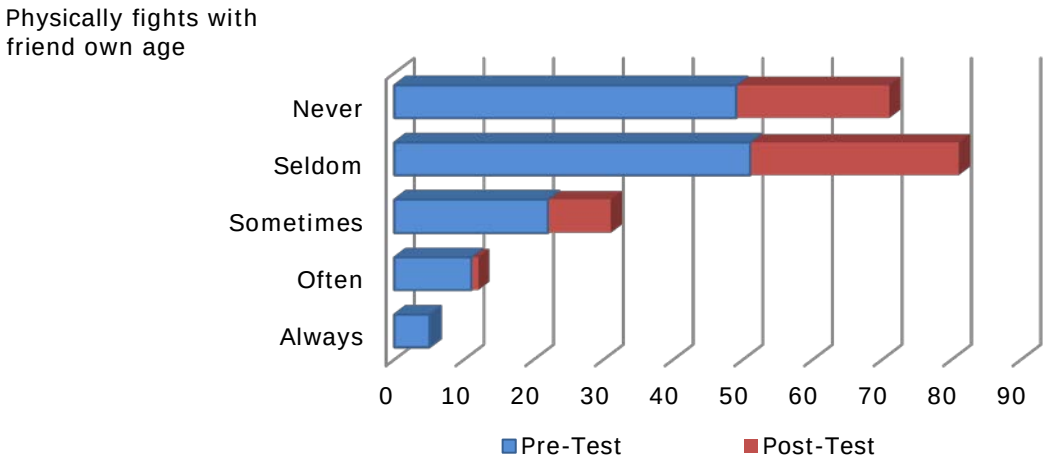
(1) Children were less likely to hit their parents in the post-test observations (see Figure 11). The change was statistically significant [$t(58)=2.40$, $p<.05$] with an effect size of 0.63.

Figure 11: Parental Respect



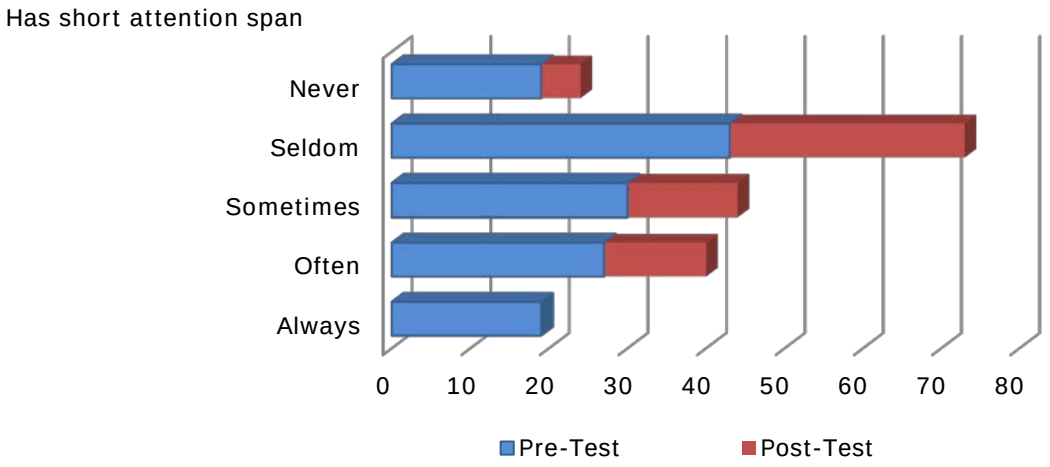
(2) Children were less likely to fight with friends of their own age in the post-test (see Figure 12). The progress was statistically significant [$t(59)=2.31$, $p<.05$], and the effect size was 0.60.

Figure 12: Peer Respect



(3) Children were less likely to have a short attention span in the post-test (see Figure 13). The progress was statistically significant [t(59)=2.72, p<.05] with an effect size of 0.71.

Figure 13: Attention Span



According to Cohen (1969), an effect size of 0.5 is described as "medium" and is "large enough to be visible to the naked eye" (p. 23). Effect sizes from the *group therapy* treatment were larger than Cohen's d value threshold of 0.5. Thus, practical impact has been made from the *group therapy* approach on child mental health.

In Figures 7-13, post-tests seemed to have fewer observations. The issue hinged on whether the sample attrition occurred at random so that the results were not skewed by missing observations. Triangulation of the findings from multiple data sources is an effective way to reconfirm the reported findings. More specifically, parental belief in corporal punishment was concurrently assessed by both IYPS (see Figure 7) and Construct C (Strong Parental Belief in the Use of Corporal Punishment) of the Adult-Adolescent Parenting Inventory-2 (AAPI-2) at the *Henrietta Weill Memorial Child Guidance Clinic- Early Intervention Program (EIP)*. The AAPI-2 outcome concurred the significant improvement on Construct C [t(25)=5.02, p<.05] with an effect size 2.0.

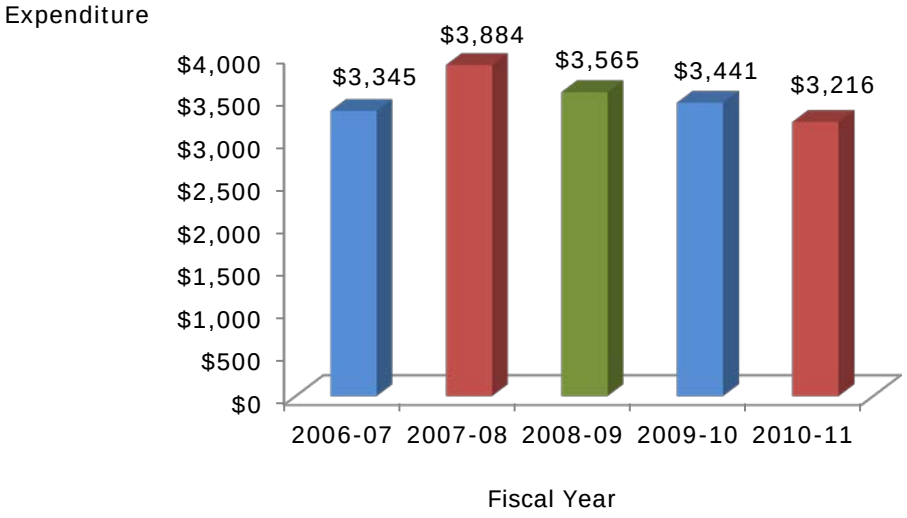
In summary, one of the priorities of First 5 Kern is to ensure that all children will have an early start toward good health. Built on the entry baseline from last year, First 5 Kern expanded service access for children at the program input phase. In addition, counseling processes have been incorporated for children with special needs to improve mental health conditions beyond the coverage of medical and dental care. Effect sizes, as represented by *Pearson's r* and *Cohen's d* indices, have been included to assess practical impact of First 5 Kern services in the *Health and Wellness* area. The result descriptions were grounded on the Context, Input, Process, and Product (CIPP) paradigm to articulate program-specific instruments, such as the Comprehensive Need Assessment (CNA), the Eyberg Child Assessment (ECA), and the Incredible Years Parenting Scale (IYPS), as well as qualitative milestone information and aggregation frequency counts from 2-1-1 Kern County, BIH, CHIKC, and SAS programs. The results showed that First 5 Kern has filled out service gaps and enhanced its support for traditionally underserved ethnic groups this year.

Focus Area 2: Parent Education and Support Services

From 2000 to 2010, Kern County grew by 177,986 residents, a 27 percent jump, largely resulted from increases in the Latino population. The population growth was sustained by a high birth rate because families of first-generation Hispanics tended to have more children than average families (Wenner & Barrientos, 2011). The demographic change is likely to continue in Kern County, and more resources are needed in *Parent Education and Support Services* to meet the needs of population growth.

During the economic recession, however, *doing more with less* is a typical option to enhance program effectiveness. Although funding in this area has reached a record-low level (see Figure 14), First 5 Kern was able to increase the number of funded programs from **13** in the last year to **18** this year. All programs provided direct services to children ages 0 to 5, and the Nurse Family Partnership Program also served first time mothers. These services were delivered through a network of private and public service providers that included eight resource centers, six school-based programs, and four county-wide supporting agencies.

Figure 14: Trend of Investment in Parent Education and Support Services (in $1,000)

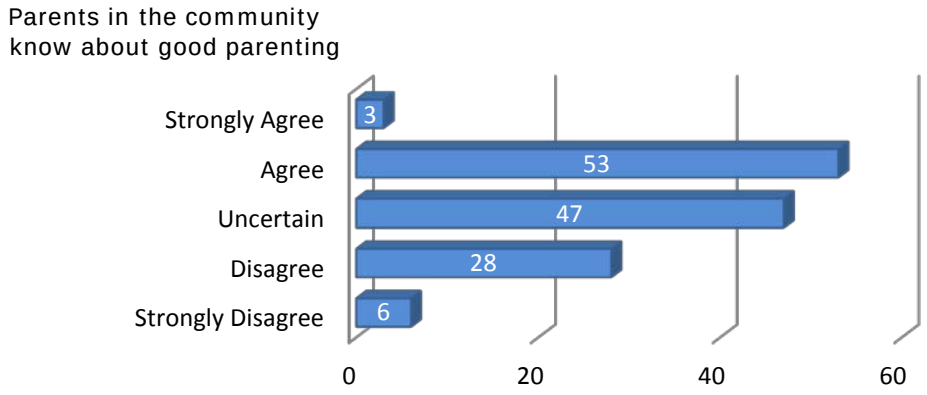


Since parent education is inseparable from child health and early development, several instruments have been used to collect data across these focus areas. Comparable results in *Early Childcare and Education* will be presented in the next section to incorporate child-level findings from the Ages and Stages Questionnaire-3 (ASQ-3), Child Assessment Summer Bridge (CASB), and the Desired Results Developmental Profile 2010 (DRDP-2010). Results in this section are derived from the Adult-Adolescent Parenting Inventory-2 (AAPI-2), Nurturing Skills Competency Scale (NSCS), and School Readiness Articulation Survey (SRAS) for programs in *Parent Education and Support Services*. Program-specific measures, such as Student Behavior Assessment, Substance Abuse Assessment, Anger Management Assessment, and Be Choosey Be Healthy, are analyzed to assess program effectiveness. As in the previous section, the report structure is built on the Context, Input, Process, and Product paradigm.

Lack of Parent Education in the Local Context

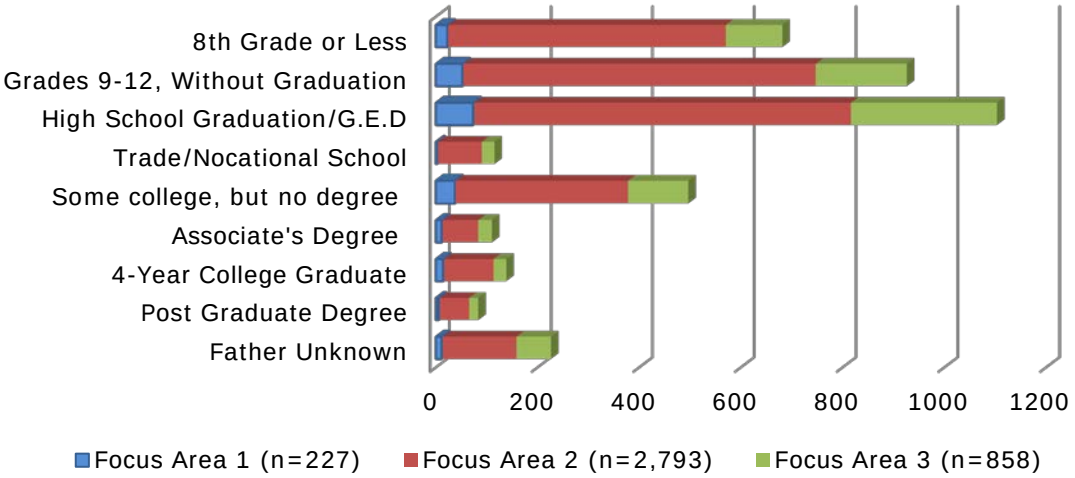
Needs for improving parent education are clearly reflected by results from the School Readiness Articulation Survey (SRAS). As shown in Figure 15, less than one quarter of the teachers and school administrators *strongly agreed* or *agreed* that parents in the community knew about good parenting.

Figure 15: Parental Knowledge about Good Parenting



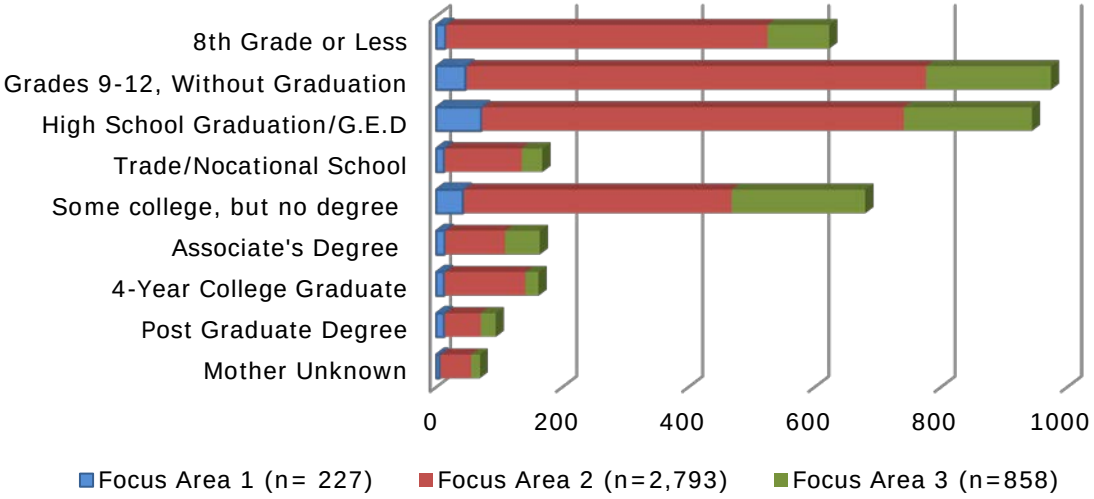
The same group of educators also identified minimal parent education as a top challenge for families in their community. While the SRAS findings were confined among 11 school readiness programs, the issue has been reconfirmed by more general results on the level of parent education from the Core Data Element (CDE) survey in Figures 16 and 17. Based on the data from 3,878 families, the majority of fathers and mothers had their education *at or below* the minimum level of high school completion required by the law of compulsory education.

Figure 16: Highest Level of Education Father Completed



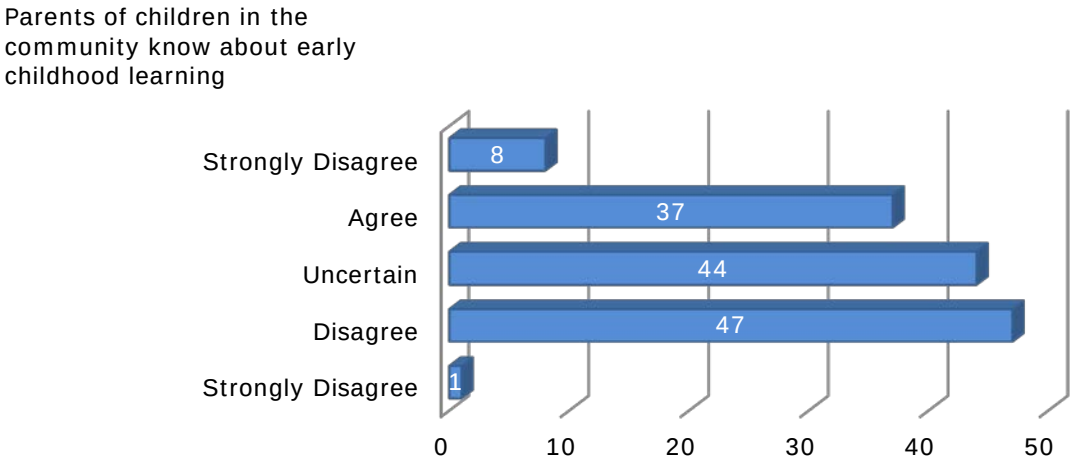
Consequently, Kern County has been ranked among the lowest regions in adult education across the United States (Brookings Institution, 2010). At the county seat, Zumbrun (2008) concurred that Bakersfield was ranked as one of the least educated metropolitan areas across the nation.

Figure 17: Highest Level of Education Mother Completed



The lack of parent education had a direct impact on child-rearing practices. As shown in Figure 18, less than one third of the SRAS respondents believed that parents of children in this community knew about early childhood learning.

Figure 18: Parental Knowledge about Early Childhood Learning

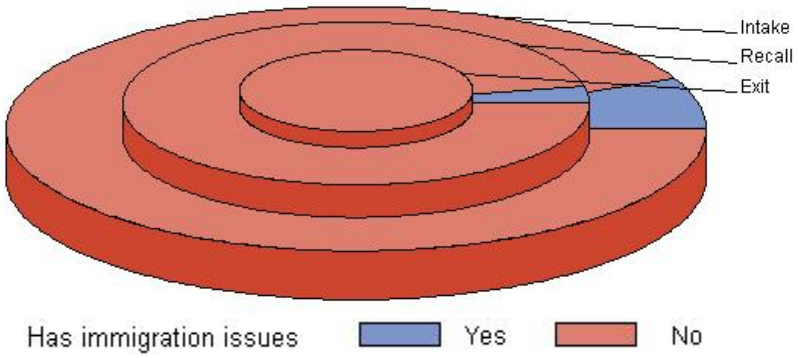


Based on the local context, First 5 Kern has designated one of its focus areas on *Parent Education and Support Services*. "Although a wide range of individuals and institutions impact the health and well-being of young children, the role of parents is paramount" (First 5 California, 2010a, p. 4). With enhancement of parenting skills, children will eventually benefit from the improved childcare. Thus, as an indicator of Parent Education and Support Services, child performance has been tracked to reflect program effectiveness in this focus area.

Outcome Tracking Since the Phase of Input

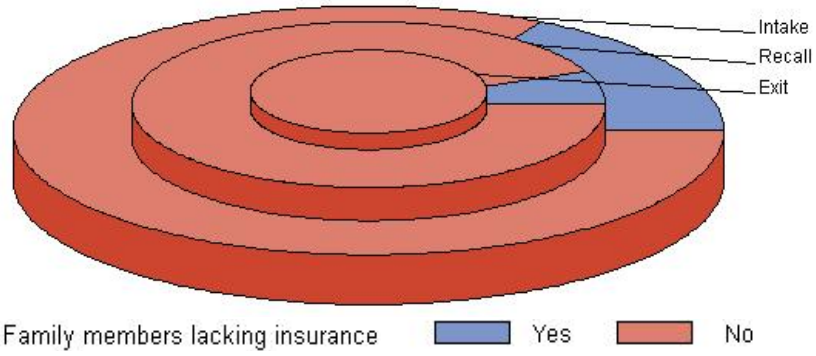
First 5 Kern funded *Kern County Superintendent of Schools - Richardson Special Needs Collaborative* (RSNC) to serve children with special needs through the Kern County Superintendent of Schools. At the input phase, needs were derived from service areas of immigration, insurance, immunization, physical examination, dental care, and vision protection. The RSNC program provided those needs-based services through case management, referrals, and parent education classes. Based on the tracking of data counts (N=205), the proportion of children with immigration barriers dropped from *6.8% at intake* to *3.3% at recall*[4], and eventually, the issue was completely resolved at the exit phase (Figure 19).

Figure 19: Trend of Resolving Immigration Barriers



Related to the immigration barrier was health insurance coverage. Figure 20 showed that the population with unmet insurance needs dwindled down from 17.0% at *intake* to 6.6% at *recall*. All children were covered with health insurance at exit.

Figure 20: Trend of Expanding Insurance Coverage



The trend of improvement have been depicted in Table 3 to describe improvement in immunization, physical exam, dental care, and vision services at intake, recall, and exit.

[4]Recall is defined as a post-test administration and will be referenced as such throughout the remainder of the document.

TABLE 3: PERCENT OF CHILDREN WITH UNMET MEDICAL NEEDS AT INTAKE, RECALL AND EXIT

Category	Intake	Recall	Exit
Immunization	5.0	0.0	0.0
Physical Exam	3.4	0.0	0.0
Dental Care	6.8	0.0	0.0
Vision	5.1	0.0	0.0

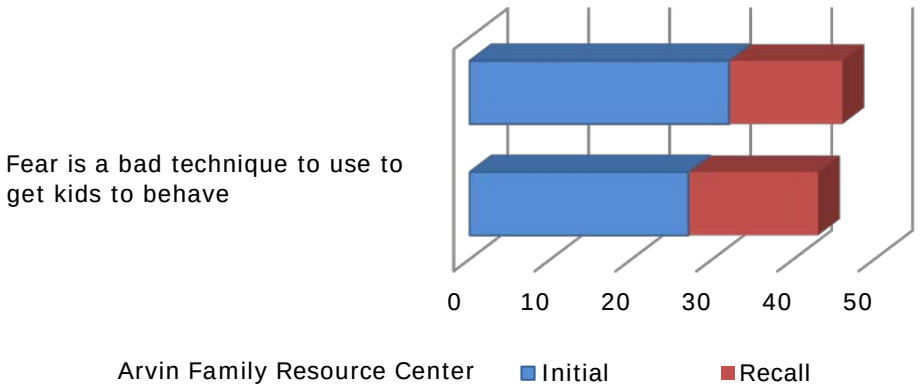
The fact that no children were left with unmet needs at recall (see Table 3) suggested timely support of First 5 Kern in addressing these issues identified from the input phase.

Process of Parenting Skill Development

Parenting skill development may take a much longer process in different areas, including correction of misconceptions, establishment of self-concept, and improvement of behavior management. Those compelling outcomes were assessed by the Nurturing Skills Competency Scale (NSCS) under a pre-test (initial) and post-test (recall) design.

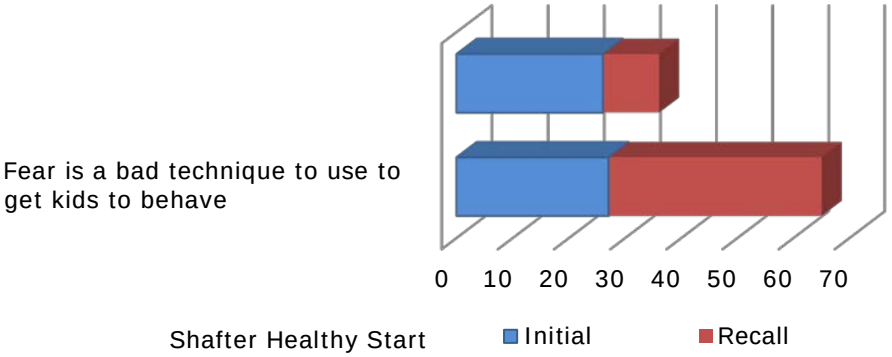
(1) Conceptual Change - First 5 Kern sponsored parenting classes and case management services at Arvin Family Resource Center and Shafter Healthy Start. Parents were asked whether "fear" was a bad technique to get children to behave. Initially, more Arvin parents did not think it as a bad option. In the recall assessment, the majority abandoned the coercive technique (see longer red bar in Figure 21).

Figure 21: Change of Parent Beliefs on Child Fearing



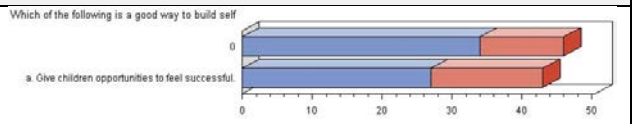
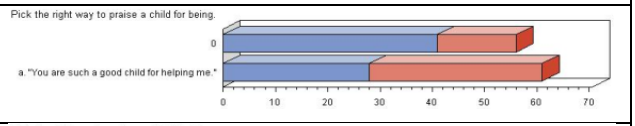
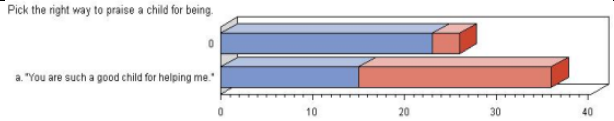
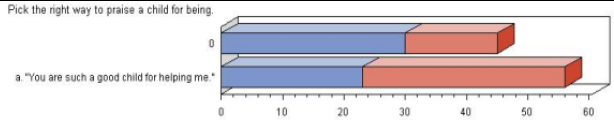
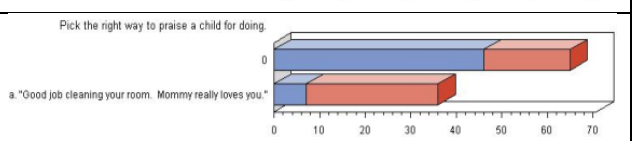
Likewise, Shafter's results did not show differences in parent belief in pre-test (see blue bars in Figure 22). More parents realized the coercive approach as a bad technique for child education in the recall assessment (see red bars in Figure 22).

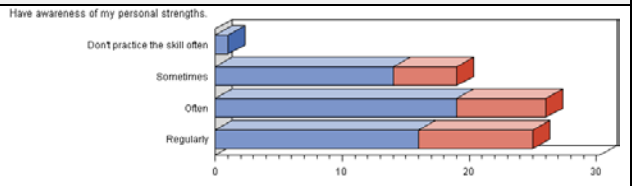
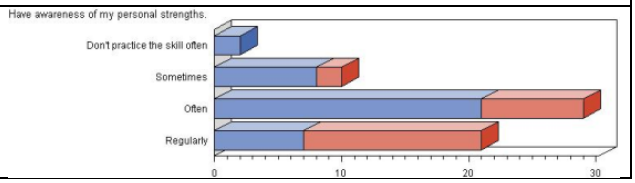
Figure 22: Fear is a Bad Technique for Child Education



(2) Self-Concept Development – To facilitate child self-concept development, the NSCS data indicated parent support for positive reinforcements, including *praising children for being helpful, letting children feel successful, praising them for doing a good job*, and *being aware of personal strengths*. In Table 4, blue bars represent results of initial assessment and red bars indicate outcomes from recall assessment. The percent of parents in support of these positive approaches is represented by the bottom bar of each response distribution. The percent column includes the proportion of desired response in initial and recall assessments, respectively. The results of improvement at program sites Arvin, Greenfield, Kern River Valley (KRV), Shafter, and Taft are highlighted in Table 4.

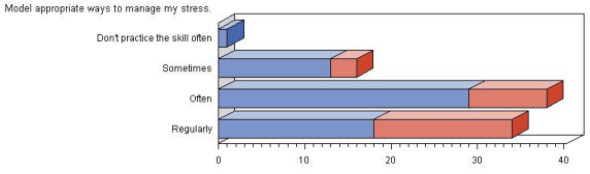
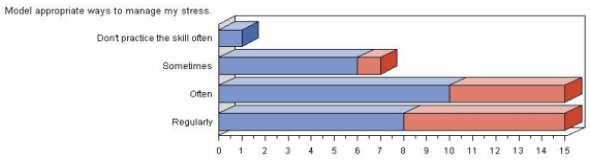
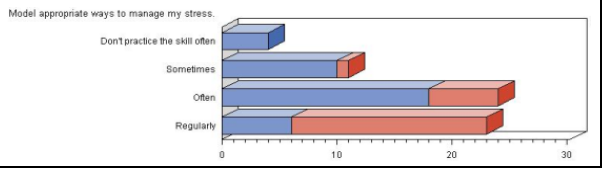
TABLE 4: PERCENT OF PARENTS SUPPORTING APPROACHES OF SELF-CONCEPT DEVELOPMENT

Approach	Program Site	Time	Percent	Response Distribution
Let child feel successful	Arvin	initial	44	
		recall	57	
Praise child for being helpful	Greenfield	initial	41	
		recall	69	
	Taft	initial	39	
		recall	88	
	Shafter	initial	43	
		recall	69	
Praise child for good job	Shafter	initial	13	
		recall	60	

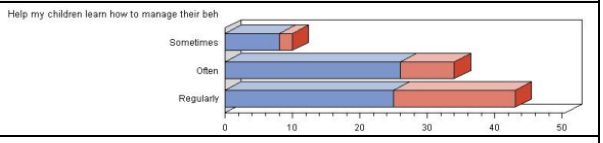
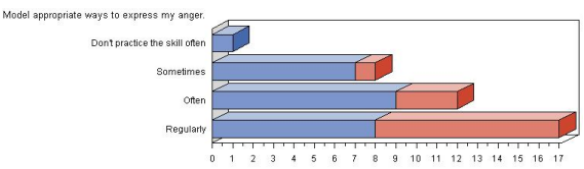
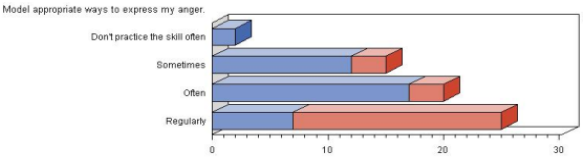
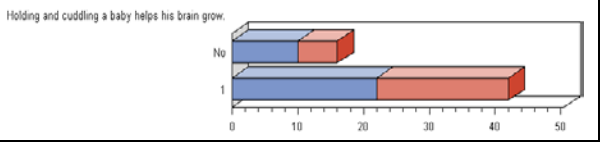
Approach (continued)	Program Site	Time	Percent	Response Distribution
Be aware of my personal strengths	KRV	initial	32	
		recall	43	
	Taft	initial	18	
		recall	58	

(3) Improvement in Behavior Management – Through the support services sponsored by First 5 Kern, parents had opportunities to learn appropriate ways of expressing anger, managing stress, and facilitating child development processes. The behavior management training has led to improvement of parenting skills between initial (blue bar) and recall (red bar) assessments in Table 5. The bottom bar of each response distribution represents the number of parents regularly using those appropriate techniques. The proportion of response in that category has been computed against the total responses in initial and recall assessments, respectively. Based on the change of mode[5] location between blue and red bars, First 5 Kern-sponsored programs have resulted in consistent improvement of behavior management for parents. Findings from program sites Arvin, Buttonwillow, Mojave, and Taft are presented in Table 5.

TABLE 5: PROPORTION OF PARENTS HAVING APPROPRIATE WAYS OF BEHAVIOR MANAGEMENT

Approach	Program Site	Time	Percent	Response Distribution
Manage my Stress	Arvin	initial	30	
		recall	57	
	Mojave	initial	32	
		recall	54	
	Taft	initial	16	
		recall	71	

[5]Mode is identified by the category that has the highest frequency count.

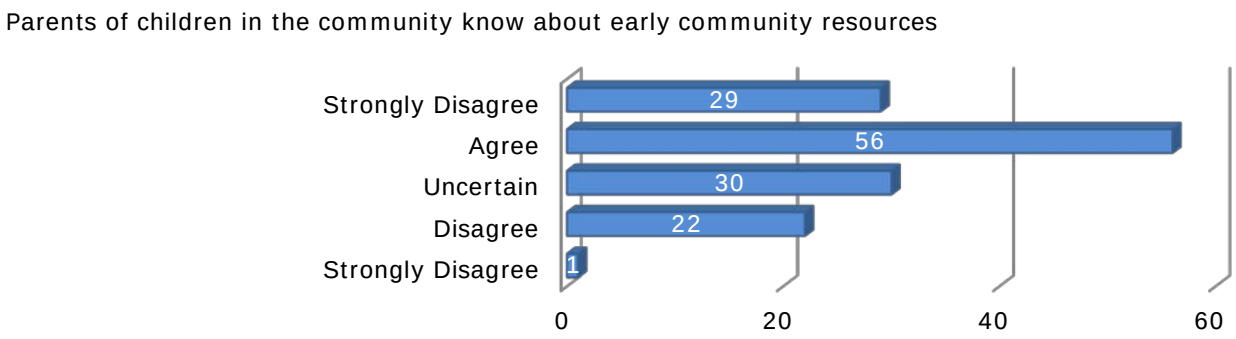
Approach (continued)	Program Site	Time	Percent	Response Distribution
Manage child Behavior	Arvin	initial	42	
		recall	64	
Express my Anger	Mojave	initial	32	
		recall	69	
	Taft	initial	18	
		recall	75	
Hold/ cuddle Baby	Buttonwillow	initial	68	
		recall	77	

Aggregated Findings in the Product Phase

While specific measures at the item level were useful in identifying what worked in which programs, the NSCS assessment also provided aggregated results to indicate *parent knowledge* and *utilization of the curriculum-based nurturing parenting skills* at intake (pre-test) and six months thereafter (post-test). A total of 13 programs administered the NSCS assessment in *Parent Education and Support Services*, and the aggregated results indicated significant improvement of parent knowledge [t(360)=4.34, p<.0001] and utilization of the nurturing parenting skills [t(419)=7.20, p<.0001]. The effect size has reached 0.7 in utilization of the nurturing parenting skills, indicating a *medium to large* practical impacts in the local setting.

Parent support is built on awareness of local resources. In the result from School Readiness Articulation Survey (SRAS), over 61% of the school professionals reported that "Parents in the community know about community resources". Thus, the NSCS findings concurred with the SRAS results in Figure 23.

Figure 23: Parental Knowledge about Community Resources



To assess effectiveness of a court-mandated parent education program, Indian Wells Valley Family Resource Center (IWV FRC) identified compelling outcomes on improvement of parenting skills and child rearing attitudes, as reflected by five constructs that stipulate specific interactions between children and parents –

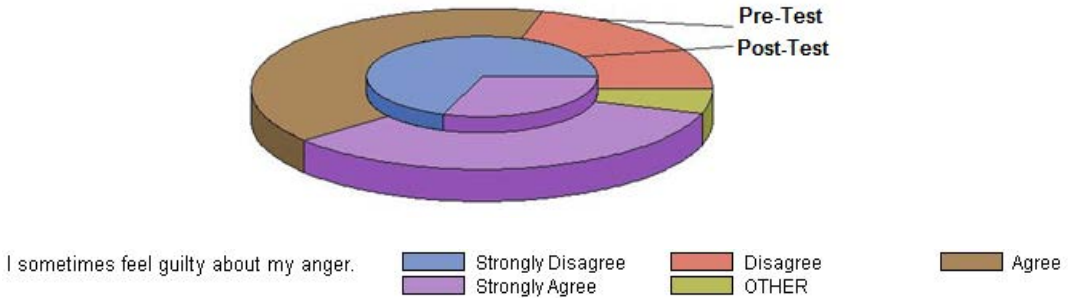
Construct A: Inappropriate Expectations of Children;
Construct B: Parental Lack of Empathy towards Children's Needs;
Construct C: Strong Parental Belief in the Use of Corporal Punishment;
Construct D: Reversing Parent-Child Family Roles;
Construct E: Oppressing Children's Power and Independence.

The IWV FRC program offered court-mandated parent education services to improve parenting skills and enhance parental education on child health and developmental milestones. The Adult-Adolescent Parenting Inventory-2 (AAPI-2) was used to gather data on Constructs A-E. A total of 12 parents participated in the pre-test and post-test assessments. Despite the relatively small sample size, statistical testing showed significant enhancements of Constructs A-D at α=.01. However, the gain score for Construct E was too small to demonstrate a significant difference.

Interpretation of these findings was grounded on child characteristics in the local context. At the youngest ages, children's power and independence (Construct E) were yet to be fully developed. But Constructs A-D have already played an important role in parent-child interactions. Thus, preponderance of the evidence suggested profound contributions of the IWV FRC program in enhancing *family functioning* through parent education.

Based on milestone requirements of *Bakersfield Adult School (BAS) Health Literacy Program*, program-specific measures have been used to assess the service effectiveness. The AAPI-2 results showed significant improvement of parenting skills across Constructs A-E. The corresponding effect sizes further indicated strong program impact on *Construct B: Parental Lack of Empathy towards Children's Needs* (Cohen's d=2.06) and *Construct C: Strong Parental Belief in the Use of Corporal Punishment* (Cohen's d=1.18). Supporting the AAPI-2 results was an outcome measure from BAS' anger management class attended by 46 parents. Under a pre-test and post-test setting, all respondents *strongly agreed* or *agreed* to a statement about anger control, i.e., "I sometimes feel guilty about my anger" in the post-test (see the post-test pie in Figure 24).

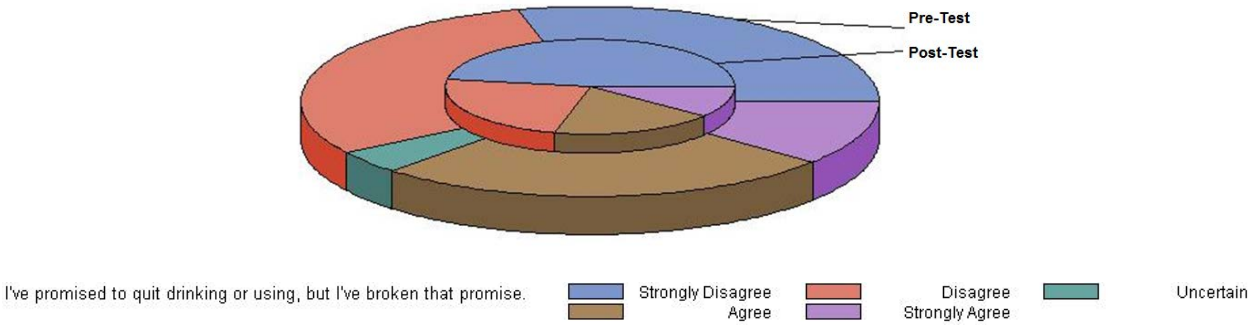
Figure 24: Need of Anger Management Perceived by Parents



In addition, BAS received First 5 Kern funding to offer a health literacy curriculum for parents. The following statements were included in a parent survey to document service outcomes: (1) Canned fruit/vegetables had the same nutritional value as fresh fruit/vegetables, (2) Exercising for 10 minutes had a positive impact on health and mood, and (3) Hand washing should last for at least 15 seconds. Those opinions toward those statements reflected three domains of a "Be Choosey Be Healthy" instrument: (1) eating healthy, (2) being active and moving, and (3) health prevention tips. Initially 27% of the 135 parents supported the value of canned fruit in *Statement (1)*. The proportion dropped to 23% in the post-test. Meanwhile, the percent of supporters for *Statement (2)* increased from 88% to 97%. *Statement (3)* received support from 84% of the parents in the pre-test. In the post-test, 94% of the parents supported that statement. Those positive changes consistently indicated local differences made by the BAS program.

To enhance child protection, another goal of parent education was to control substance abuse. Thirty-eight parents received education against substance abuse under a pre-test and post-test setting. Parents were asked to indicate their agreement to a statement that "I've promised to quit drinking or using, but I've broken that promise". Figure 25 showed an increase of the "strongly disagreed" (blue) and "disagreed" (red) responses in post-test.

Figure 25: Improvement of Substance Abuse Condition Through Parent Education



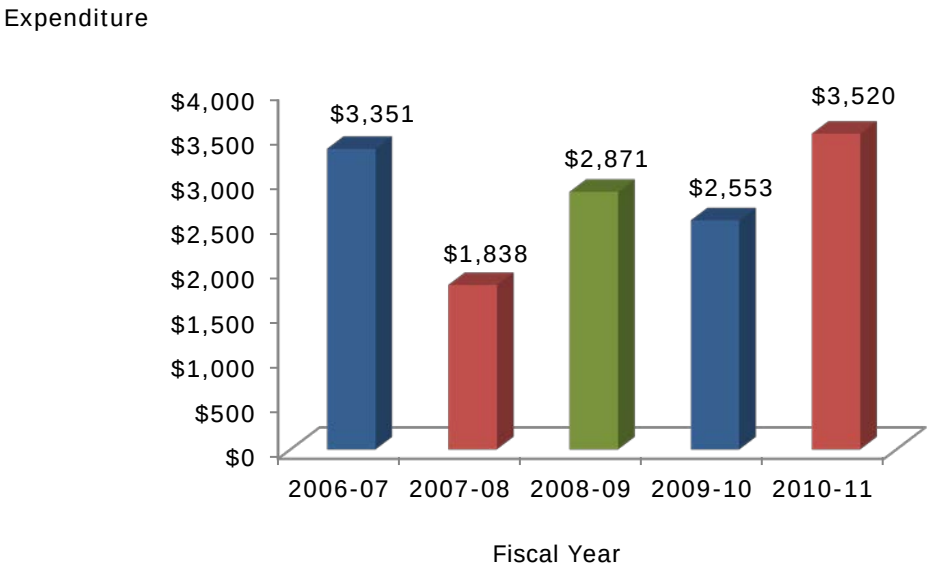
The *Greater Bakersfield Legal Assistance, Inc. (GBLA)'s Domestic Violence Reduction Project* provided legal protection and case management services to a total of 183 children. At initial entry, 82% of the children had exposure to problems of substance abuse from their family members and caregivers. The rate dropped to 56% at the 3rd month and 16% at the 6th month of the service. By the 9th month the rate already reached 0%. Like the BAS program, the consistent trend of improvement illustrated elimination of the substance abuse factor in those programs this year.

In summary, "Although a consensus exists about the significant role that parents play in a child's development, there exists neither a singular 'one size fits all' approach to parent education that has been promulgated statewide, nor any major local initiatives" (Zepeda & Morales, 2001, p. 5). Results presented in this section indicated practical impact in developing various parenting skills. These service outcomes were aligned with a priority of First 5 Kern to make all parents and caregivers "knowledgeable about early childhood development, effective parenting and community services" (First 5 Kern, 2011, p. 5).

Focus Area 3: Early Childcare and Education

Improvement of early childcare and education is not only originated from the vision statement of First 5 Kern, but also demanded by the local population growth. Although the payments that *cigarette* manufacturers made to the states are *dwindling* down as people *smoke* less, the proportion of live births in Kern County remains relatively high, which has channeled resources to even out the drop of state funding for First 5 Kern. The funding stability allowed First 5 Kern to realize its vision of helping all children enter school healthy and ready to learn. In FY 2010-11, First 5 Kern augmented $966,686 (or an **above 27%** increase over the last year) in *Early Childcare and Education*. This was shown in Figure 26 as the highest annual investment in this focus area over the past five years.

Figure 26: Trend of Investment in Early Childcare and Education (in $1,000)



The fund allocation also reflected the need of supporting child growth at ages 0 to 5. According to the Carnegie Corporation's (1994) *Task Force on Meeting the Needs of Young Children*, brain development has been much more vulnerable to environmental influence than was suspected. Thus, parent education outcomes, as measured by the Adult-Adolescent Parenting Inventory-2 (AAPI-2) and Nurturing Skills Competency Scale (NSCS), were incorporated to examine effectiveness of First 5 Kern-funded programs. Impact on school readiness was assessed using additional data from the School Readiness Articulation Survey (SRAS) and the Child Assessment Summer Bridge (CASB). In this section, the school-based results have been articulated with individual-level findings from the Ages and Stages Questionnaire-3 (ASQ-3) and the Desired Results Developmental Profile 2010 (DRDP-2010) to triangulate those child growth indicators in Kern County.

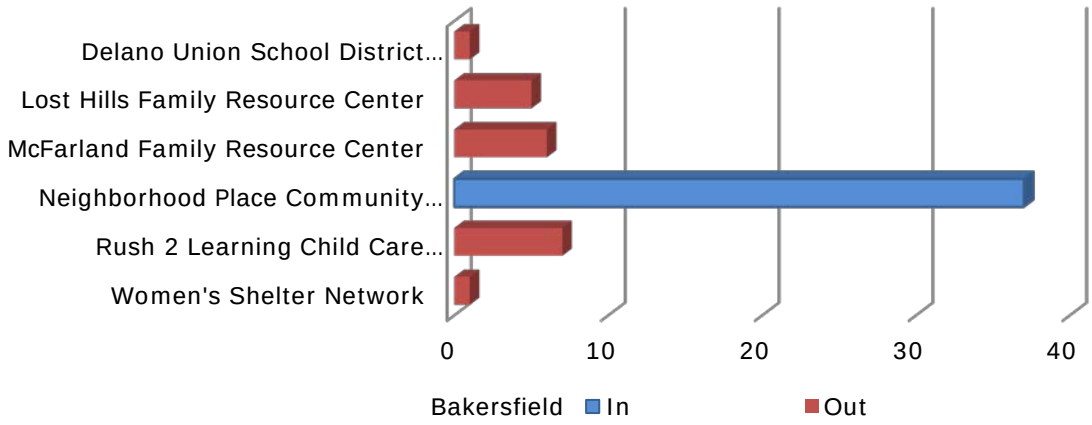
Balanced Services in the Regional Context

According to the 2010 Census data, Kern County had 839,631 residents, and 504,900 of them live in the Metro Bakersfield area.[6] Thus, less than 50% of the population spreads over rural communities across a region larger than the states of Massachusetts or New Jersey. As Henderson (2011) pointed out, "The programs serve not only Bakersfield but also countywide as well" (p. 1). Because children represent the future of Kern County, quality and accessibility of childcare are important for a long-term human resource development in this region.

To balance the local service needs, First 5 Kern faced two major challenges: (1) improve its service quality for the population majority in the greater Bakersfield area, and (2) expand its services for traditionally underserved rural communities across the valley floor. Unlike Focus Area 1 that designated healthcare access through insurance coverage and service referrals, parent education and childcare primarily depended on local investment on direct services within each community.

As a screening indicator of child development, results of the ASQ-3 assessment are examined in this section at 36th month. As was indicated in Proposition 10, "Experiences that fill the child's first three years have a direct and substantial impact not only on brain development but on subsequent intellectual, social, emotional, and physical growth" [Section 2(c)]. Figure 27 showed a list of First 5 Kern-funded programs with ASQ-3 data collection at 36th month in the third focus area.

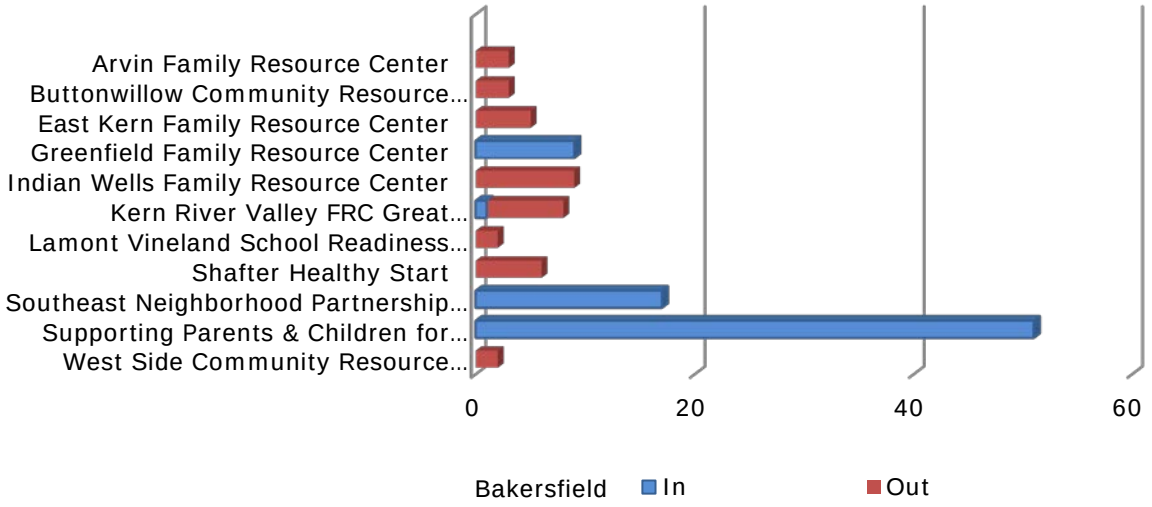
Figure 27: Results of ASQ-3 Assessment at 36th Month in Focus Area 3



Inseparable from *Early Childcare and Education* was parent education to support childhood development. Thus, First 5 Kern (2011) set a priority on "Parent education targeting child development, parenting skills and parent/family stability" (p. 5). The ASQ-3 data were concurrently collected from 11 programs in the *Parent Education and Support Services* area. Figure 28 showed the geographic distribution of First 5 Kern-funded programs in parent education.

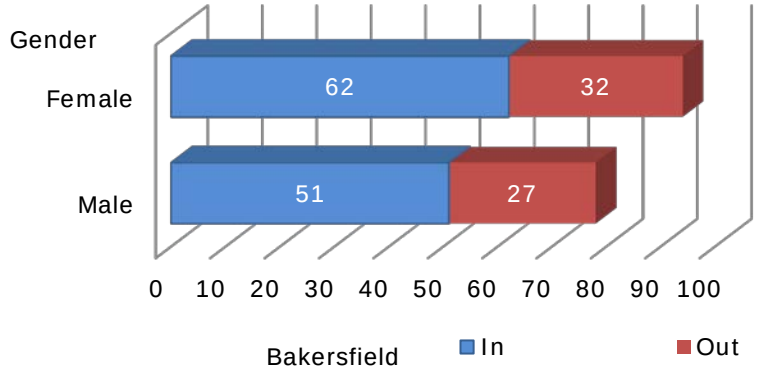
[6]Source: http://bakersfieldcity.mobi/city_facts.xhtml

Figure 28: Results of ASQ-3 Assessment at 36th Month in Focus Area 2



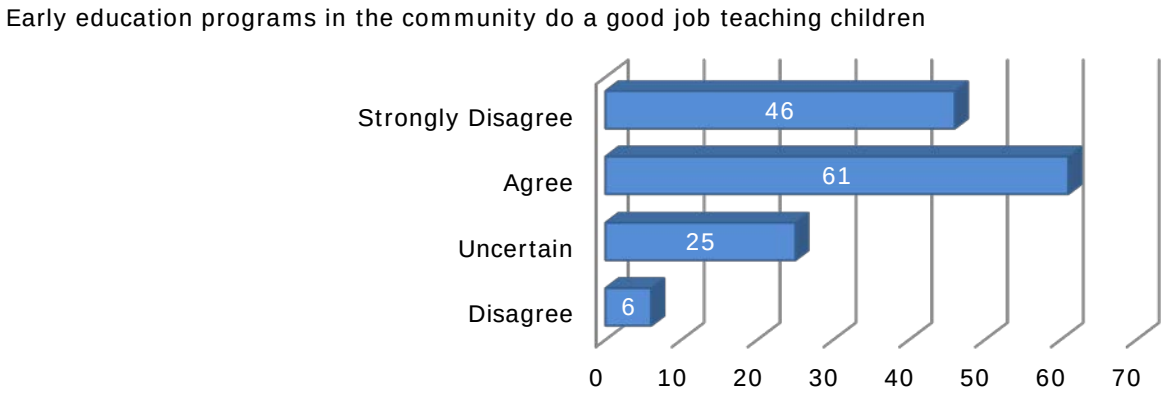
Figures 27 and 28 indicated that programs within Metro Bakersfield served more children (see blue bars), while rural communities had more programs of smaller size. "With First 5 Kern funding, greater Bakersfield and Kern County's rural and mountain communities have local access to services that would otherwise be unavailable" (Henderson, 2011, p. 1). Figure 29 further indicated involvement of more females in the ASQ-3 data collection. However, the regional coverage remains balanced for communities *in and out of* Bakersfield across the gender categorization.

Figure 29: Gender and Location of the ASQ-3 Data Collection at 36th Month



In summary, First 5 Kern has committed its support for all children ages 0 to 5, regardless of their geographic locations. With nearly 40% of the population living outside of the county seat, it took considerable effort to balance the service needs. The SRAS result in Figure 30 concurred effectiveness of the service delivery by those community-based programs in the local setting. One hundred thirty-eight school professionals responded to the SRAS questionnaire, and over three quarters of the responses (77.54%) *strongly agreed* or *agreed* that "Early education programs in the community do a good job [in] teaching children" (Figure 30).

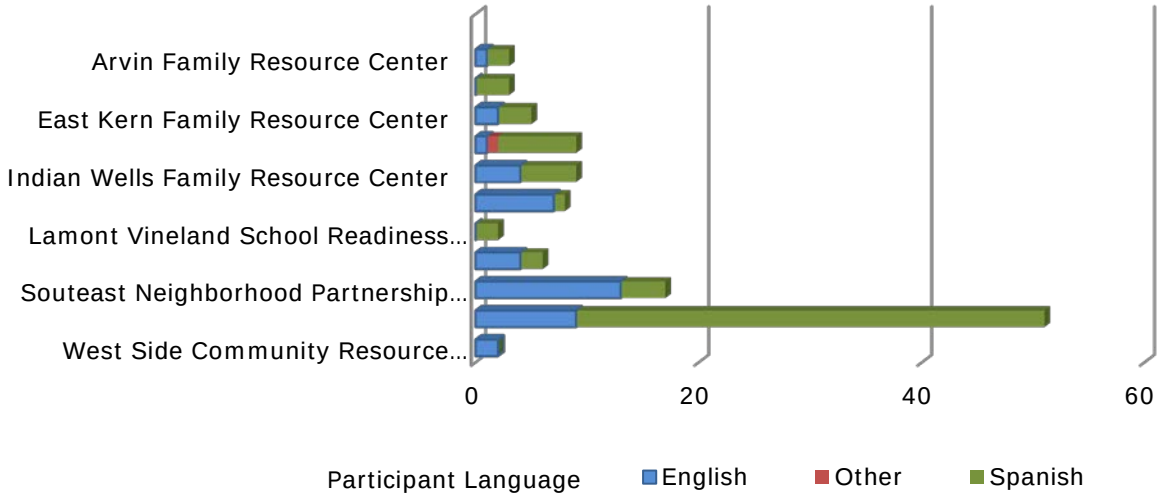
Figure 30: Early Education Programs Do a Good Job



Characteristics of Children Before Regular Schooling

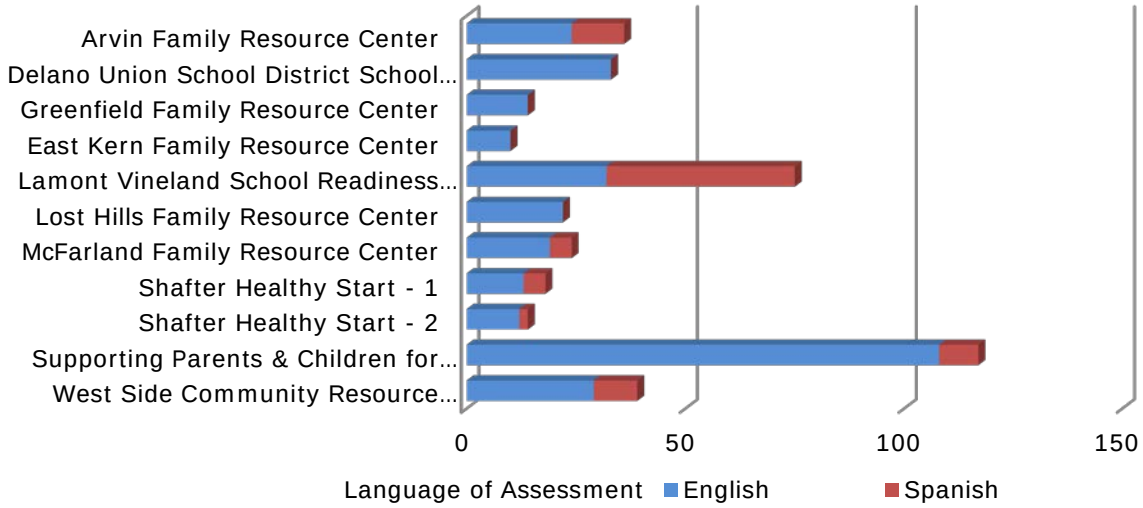
Early education is supported by First 5 Kern through both center/home-based services and school-based Summer Bridge (SB) programs. While local resource centers maintain a year-round capacity, SB is a statewide initiative to smooth child transition into kindergarten during summer seasons. Altogether those services help children's school preparation, such as avoiding tardiness, following rules, and gaining preschool experiences. Because of the linkage between child development and parent education, the Child Assessment Summer Bridge (CASB) data have been gathered from programs in Focus Areas 2 and 3. Figure 31 showed that a total of 402 children participated in the CASB data collection during the 2011 summer weeks.

Figure 31: Language Variation among Programs in Focus Area 2



In comparison to ASQ-3 results from the 36th month assessment (Figure 31), more participants in the Summer Bridge programs spoke English at ages 4 and 5 (e.g., the BCSD bar in Figure 32). Overcoming language barrier seemed to be part of the process toward establishment of school readiness.

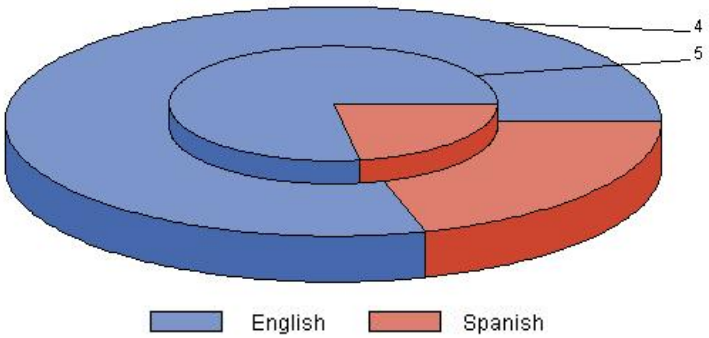
Figure 32: Language Variation among Children in Summer Bridge Programs*



_____
*Note: Shafter Healthy Start 1 and Shafter Healthy Start 2 represent the two Summer Bridge sessions Shafter Healthy Start held in summer 2011 and will be referenced as such throughout the remainder of the document. The Buttonwillow Summer Bridge program is excluded because of different data gatherings in Communication, Self-help and Social/Emotional skill domains.

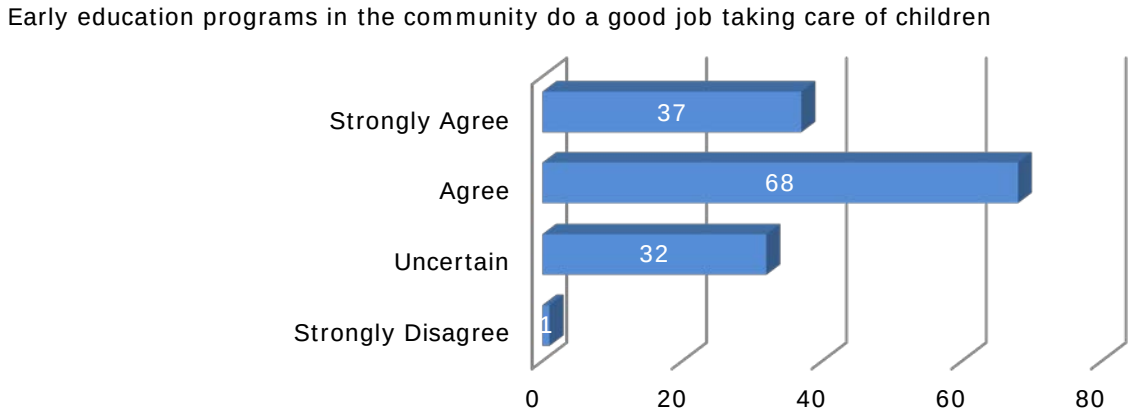
Depending on the community locations, four of the Summer Bridge programs served English only children, and seven other programs accommodated children in both English and Spanish (see Figure 32). Consistency of the service commitment was demonstrated by the identical language combination of local population between ages 4 and 5 in the Summer Bridge programs (Figure 33).

Figure 33: Invariant Language Combinations across Ages 4 and 5



Besides gathering demographic data from children at the program input phase, aggregated results have been collected from the School Readiness Articulation Survey (SRAS). Over three quarters (76.09%) of the respondents *strongly agreed* or *agreed* that "Early education programs in the community do a good job [in] taking care of children" in the SRAS result (Figure 34).

Figure 34: Early Education Programs Take Care of Children

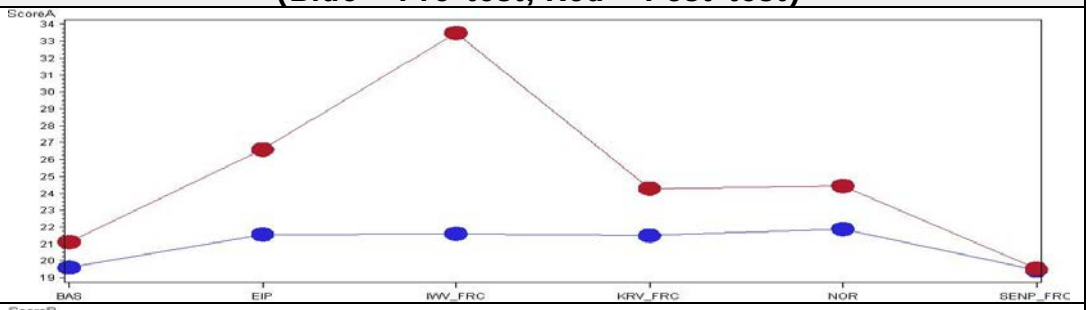
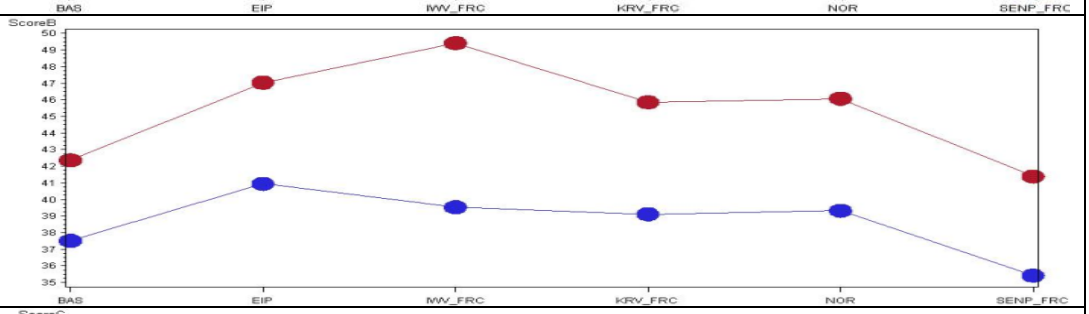
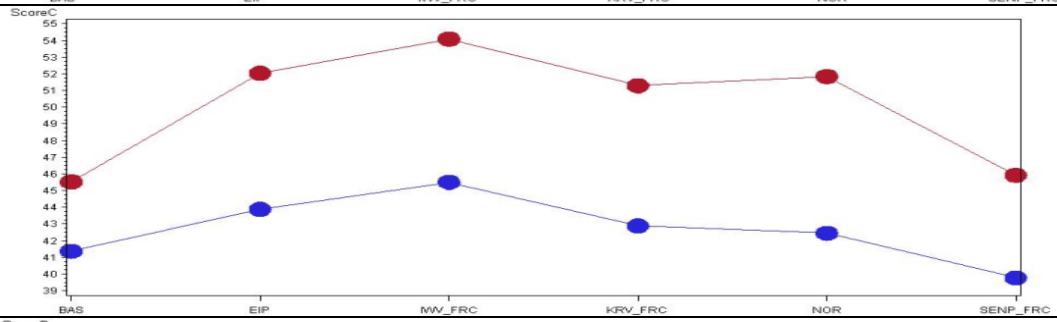
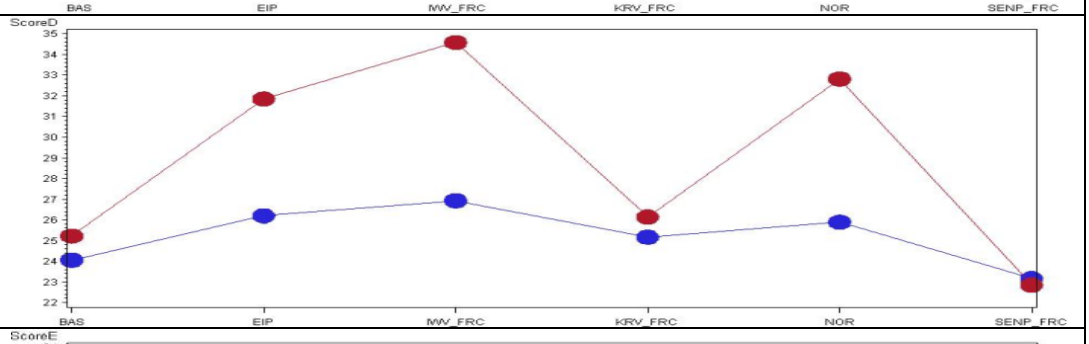
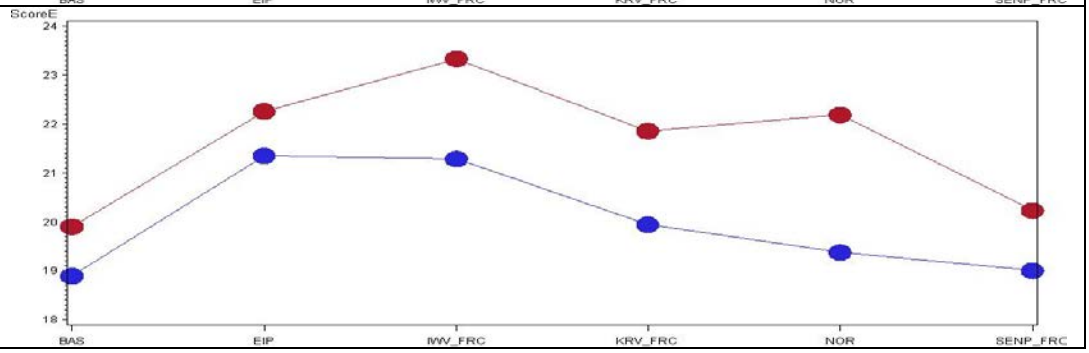


Improvement of Parent Support for Child Growth

Through First 5 Kern funding, Neighborhood Place Community Learning Center (NOR) offered parent education classes. Effectiveness of the center-based services was comparable to the Early Intervention Program (EIP) in Focus Area 1 and four other programs[7] in Focus Area 2 (see Table 6). The Adult-Adolescent Parenting Inventory-2 (AAPI-2) was employed to compare pre-test and post-test differences in five constructs (i.e., Constructs A – Inappropriate Expectations of Children, B – Lack of Empathy toward Children's Needs, C – Strong Belief in the Use of Corporal Punishment, D – Reversing of Parent-Child Roles, and E – Oppressing of Children's Power and Independence).

[7]Other programs involved in the comparison were funded at Bakersfield Adult School (BAS), Indian Wells Valley Family Resource Center (IWV_FRC), Kern River Valley Family Resource Center (KRV_FRC), and Southeast Neighborhood Partnership Family Resource Center (SENP_FRC).

TABLE 6: IMPROVEMENT OF CONSTRUCT-BASED SKILLS ACROSS PROGRAMS

Construct	Improvement Between Pre- and Post-AAPI-2 Assessment (Blue – Pre-test, Red – Post-test)
A	
B	
C	
D	
E	

NOR data had the least sample attribution between pre-test and post-tests. More stable results were obtained to indicate significant improvement of parenting skills in all five constructs (Table 7).

TABLE 7: STATISTICAL TESTING ON IMPROVEMENT OF PARENTAL CONSTRUCT AT NOR

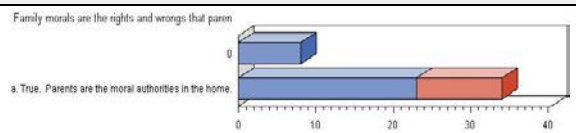
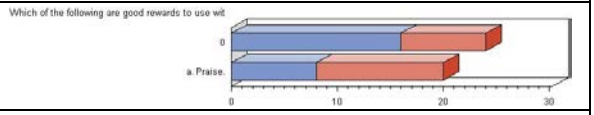
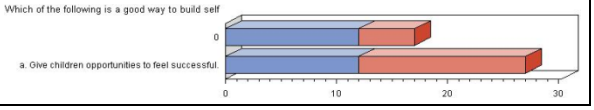
Construct	df	t	p	Effect Size
A	42	3.33	.0018	1.03
B	42	7.07	.0001	2.18
C	42	6.96	.0001	2.15
D	42	8.34	.0001	2.57
E	42	3.47	.0012	1.07

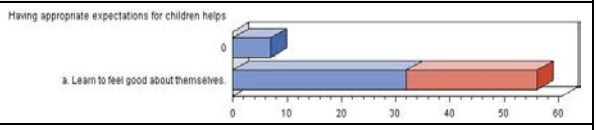
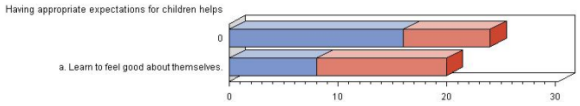
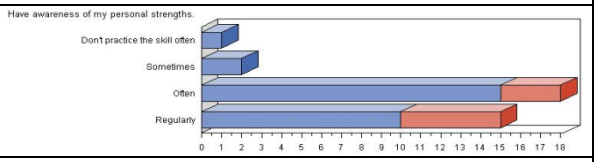
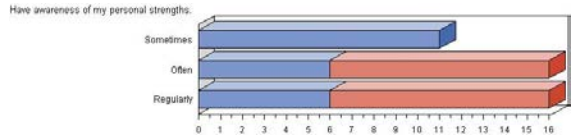
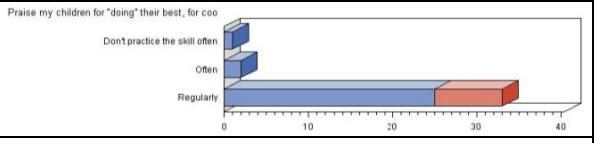
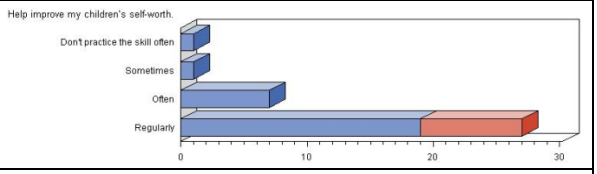
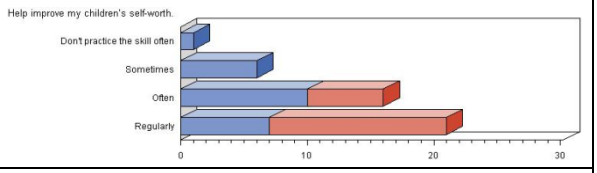
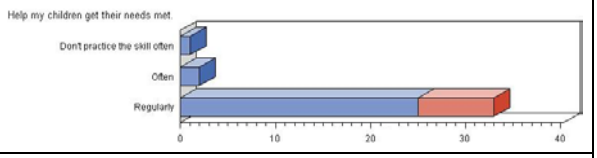
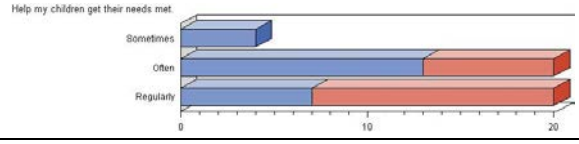
Effect sizes in Table 7 were much larger than the 0.8 threshold of strong impact (Cohen, 1969), suggesting practical differences the NOR program made through its parent education process.

In addition, parent education outcomes were assessed using the Nurturing Skills Competency Scale (NSCS). The NSCS results showed a significant improvement of parenting knowledge from the First 5 Kern-funded Lost Hills Family Resource Center [t(10)=3.91, p=.0029] with an effect size 2.47. Significant improvements were also found from McFarland Family Resource Center [t(20)=5.61, p<.0001] and the Turning Point of Central California, Inc. - Mother Infant Program [t(23)=3.65, p=.0013] in utilization of nurturing parenting skills with corresponding effect sizes of 2.51 and 1.52, both indicating a strong practical impact in those communities.

To describe the progress, NSCS responses have been tabulated to contrast the results between pre-test and post-test. Red bars in Table 8 represented post-test outcomes, and blue bars indicated the results from pre-test. The bottom bar of each response distribution represented the desired outcome of using each approach appropriately and on a regular basis. The initial percent was computed by a proportion of the desired outcome in blue color. The proportion of desired outcomes in red was indicated as a percent for the recall category. Table 8 showed an increase of the desired outcome on several parenting approaches at multiple locations.

TABLE 8: PERCENT OF PARENTS SUPPORTING APPROACHES OF EARLY EDUCATION

Approach	Program Site	Time	Percent	Response Distribution
Set moral authority	Blanton	initial	74	
		recall	100	
Praise to reward child	Lost Hills	initial	33	
		recall	60	
Let child feel successful	Lost Hills	initial	50	
		recall	75	

Approach (continued)	Program Site	Time	Percent	Response Distribution
Set appropriate expectation	Turning Point	initial	82	
		recall	100	
	Lost Hills	initial	33	
		recall	60	
Be aware of my personal strengths	Special Start	initial	36	
		recall	63	
	Lost Hills	initial	26	
		recall	50	
Praise for doing best	Special Start	initial	89	
		recall	100	
Improve child self-worth	Special Start	initial	68	
		recall	100	
	Lost Hills	initial	29	
		recall	70	
Help child get needs met	Special Start	initial	89	
		recall	100	
	Lost Hills	initial	29	
		recall	65	

Value-Added Assessment of Child Development Outcomes

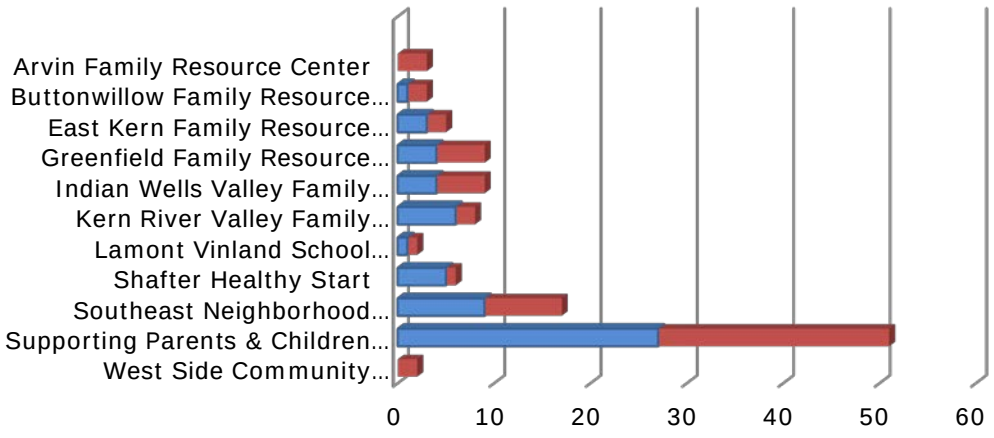
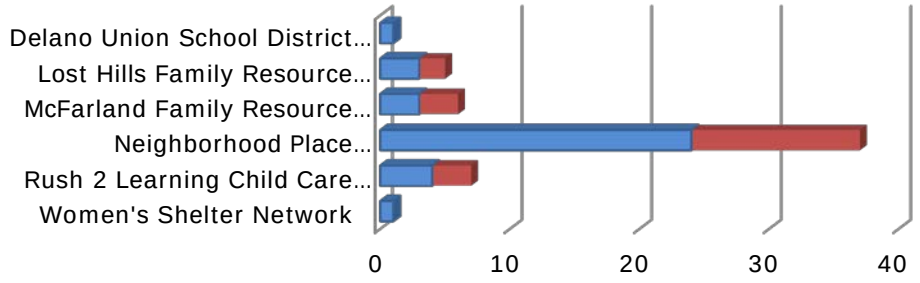
A newborn's brain weighs about 25 percent of adult brain. But by age 3, it has grown dramatically by producing billions of cells and hundreds of trillions of connections, or synapses, between these cells. The first three years of life represent a period of incredible child development in multiple fronts. To assess the well-established baseline at 36th month, the ASQ-3 instrument is employed to document early childhood development in five domains, *gross motor*, *fine motor*, *communication*, *personal social*, and *problem solving*.

As indicated by Allen (2004), "Value-added assessment generally involves comparing two measurements that establish baseline and final performance" (p. 9). The ASQ-3 data at 48th month are analyzed to examine annual progress against the baseline. Complement to the general ASQ-3 results are more program-specific findings from the Desired Results Developmental Profile 2010 (DRDP-2010) and the Child Assessment Summer Bridge (CASB) under a pre-test and post-test setting.

(1) The ASQ-3 Results

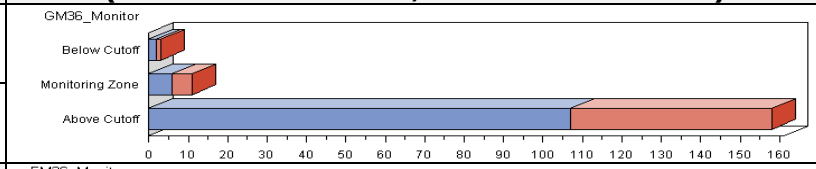
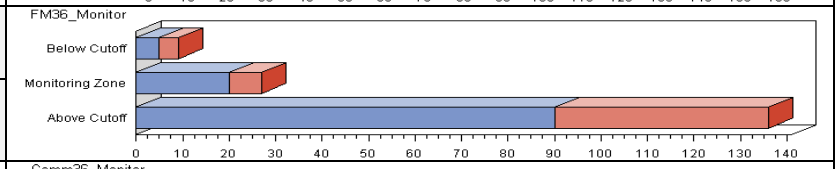
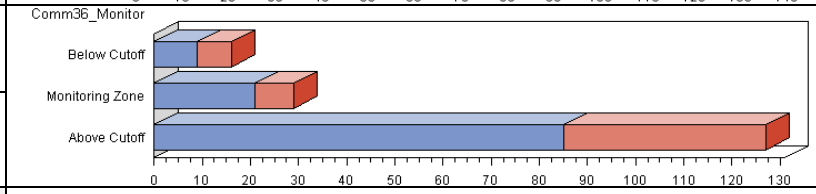
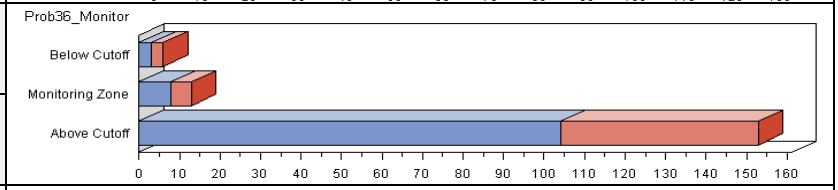
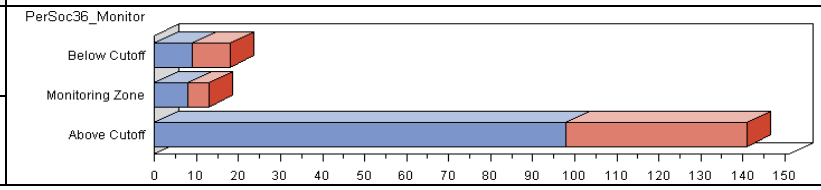
The ASQ-3 data collection covers multiple programs in Focus Areas 2 and 3 (Table 9). Except for three small programs, all other programs include both male and female children.

TABLE 9: SAMPLES SIZES OF ASQ-3 ASSESSMENT AT THE 36TH MONTH

Focus Area	Sample Size Comparison at the Program Level (Blue=Female, Red=Male)
2	
3	

As a screening instrument, "[ASQ-3] Scores beneath the cutoff points indicate a need for further assessment" (Chan & Thyne, 2011, p. 42). The middle ground around the cutoff line is called monitoring zone. Thus, comparisons are made in Table 10 according to child performance related to the cutoff lines in the domains of Gross Motor (GM), Fine Motor (GM), Communication (COMM), Problem Solving (PROB), and Personal Social (PerSoc) at the 36th month assessments.

TABLE 10: PERCENT OF CHILDREN PERFORMING ABOVE THE CUTOFF LINE AT 36TH MONTH

Domain	Percent	Distribution Pattern (Blue: Focus Area 2, Red: Focus Area 3)*
GM	93 (Focus Area 2) 90 (Focus Area 3)	
FM	78 (Focus Area 2) 78 (Focus Area 3)	
COMM	74 (Focus Area 2) 71 (Focus Area 3)	
PROB	90 (Focus Area 2) 83 (Focus Area 3)	
PerSoc	85 (Focus Area 2) 73 (Focus Area 2)	

*The ratio of the bottom bar over the total bar is presented in the percent column for each color. In the percent cells, the first number is the blue bar percent and the second number is the red bar percent.

Blue-colored bars in Table 10 represent results from Focus Area 2 and red-colored bars represent outcomes of Focus Area 3. In comparison to the results in *Focus Area 3: Early Childcare and Education*, outcomes from *Focus Area 2: Parent Education and Support Services* seemed to indicate more contributions to child development, particularly at 36th month with no Summer Bridge programs available for those children.

Besides the quality consideration, programs funded by First 5 Kern have expanded their effort to reach traditionally underserved communities in rural areas. Table 11 showed that more children outside of Bakersfield reached a level above the cutoff line in each ASQ-3 domain at 48th month (see the longer red bar from the 48th month results in the category of "above cutoff").

(2) Delano School Readiness – DRDP-2010 Results

Delano Union School District - Delano School Readiness received First 5 Kern funding to integrate various services into a family-focused, culturally-appropriate, community-based, and multi-disciplinary system. The program employed the Desired Results Developmental Profile-2010 (DRDP-2010) instrument as an outcome measurement tool. The findings were reflected on different domains of child development, including Self and Social Development (SSD), Language and Literacy Development (LLD), English Language Development (ELD), Cognitive Development (COG), Mathematics Development (Math), Motor and Perceptual Development (MPD). Those results were essential to kindergarten readiness.

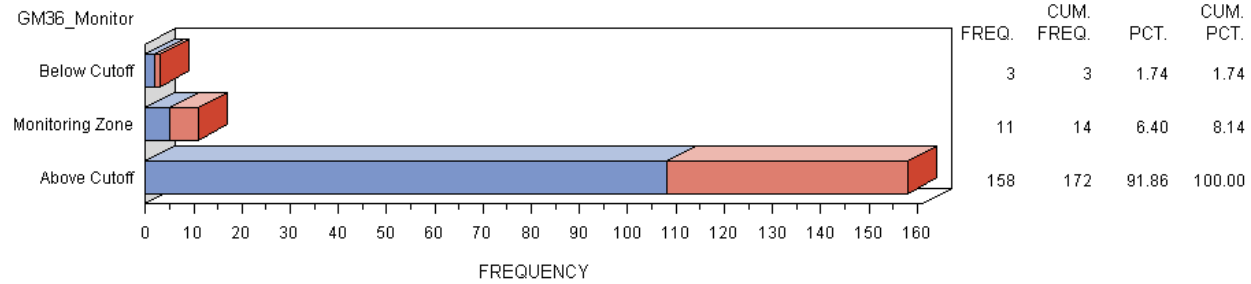
The DRDP-2010 scale includes five levels, ranging from "Not yet at the first level" to "Exploring", "Developing", "Building", and "Integrating". The baseline data were gathered at beginning of this year from 29 children. The data showed a unimodal distribution for both pre- and post-tests. In the SSD, LLD, and COG domains, the baseline modes were found at an "Exploring" level. The "Developing" level corresponded to the mode in the Math and MPD domains. The ELD domain had its mode located at the "Building" level.

In the post-test results, the mode exceeded the "Exploring" level in all domains. More specifically, modes moved one rank higher on the corresponding domain ranks for SSD, LLD, COG, Math, and MPD in the post-test. ELD was the only domain that had the mode remained at the "Building" rank. But the percent of children reaching the highest rank in the ELD domain has increased from 8% in the pre-test to 38% in the post-test. Through center-based activities, home visitation, case management, parent education, and referral services, the Delano Initiative demonstrated consistent improvements of child development on all six fronts of SSD, LLD, ELD, COG, Math, and MPD.

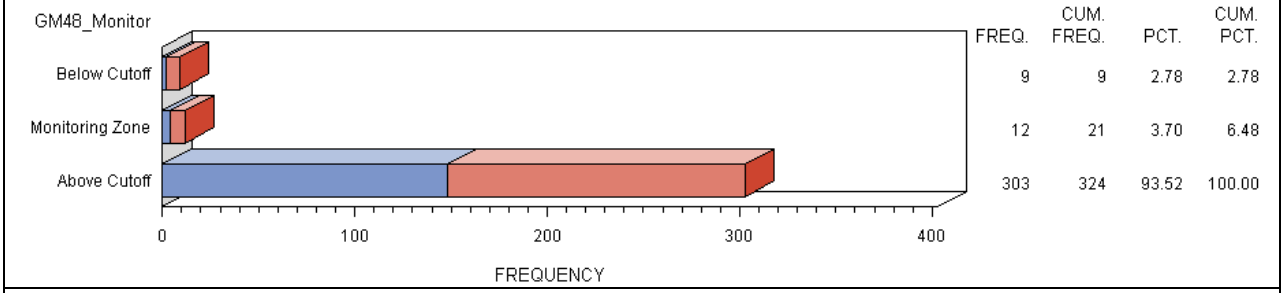
TABLE 11: PATTERN COMPARISON OF ASQ-3 ASSESSMENT RESULTS BETWEEN 36TH AND 48TH MONTHS

Pattern of Distribution (Blue: in Bakersfield, Red: outside Bakersfield)

GM

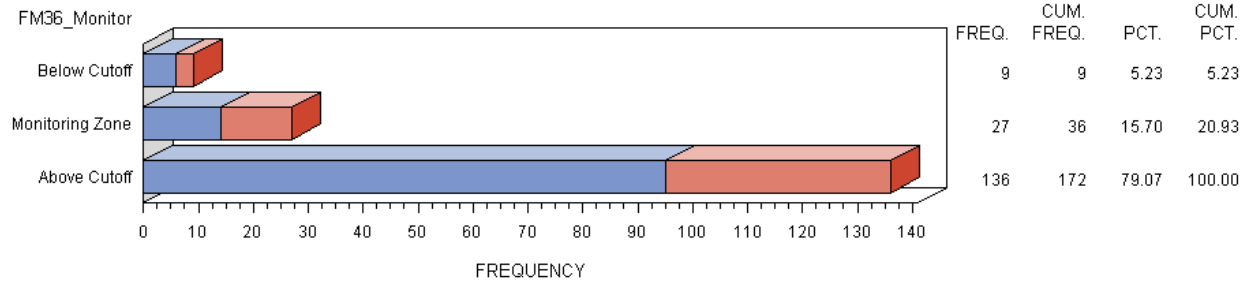


	FREQ.	CUM. FREQ.	PCT.	CUM. PCT.
Below Cutoff	3	3	1.74	1.74
Monitoring Zone	11	14	6.40	8.14
Above Cutoff	158	172	91.86	100.00

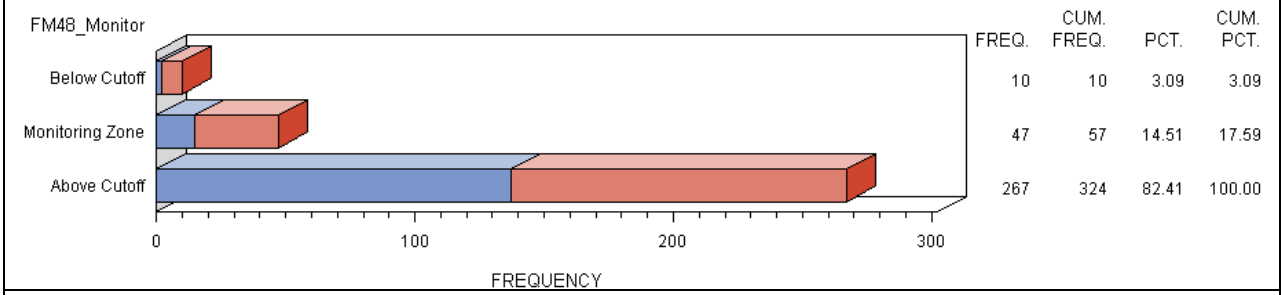


	FREQ.	CUM. FREQ.	PCT.	CUM. PCT.
Below Cutoff	9	9	2.78	2.78
Monitoring Zone	12	21	3.70	6.48
Above Cutoff	303	324	93.52	100.00

FM

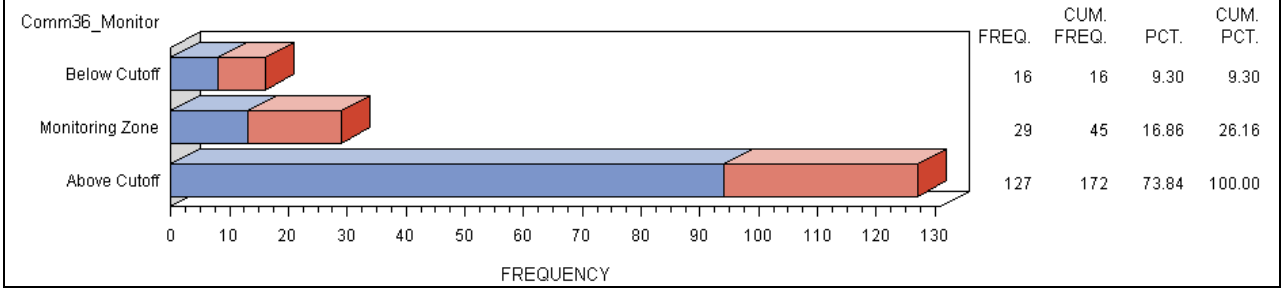


	FREQ.	CUM. FREQ.	PCT.	CUM. PCT.
Below Cutoff	9	9	5.23	5.23
Monitoring Zone	27	36	15.70	20.93
Above Cutoff	136	172	79.07	100.00



	FREQ.	CUM. FREQ.	PCT.	CUM. PCT.
Below Cutoff	10	10	3.09	3.09
Monitoring Zone	47	57	14.51	17.59
Above Cutoff	267	324	82.41	100.00

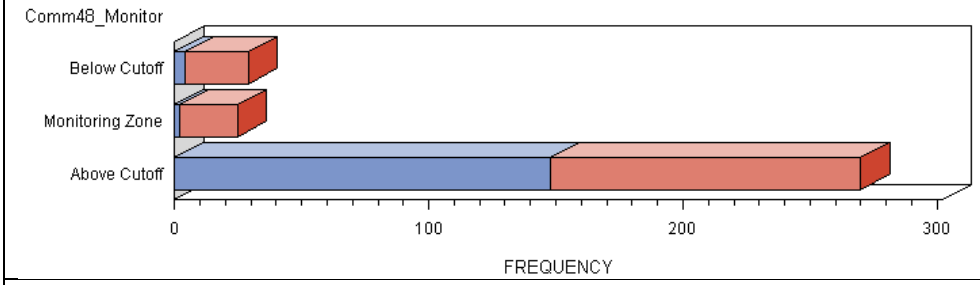
COMM



	FREQ.	CUM. FREQ.	PCT.	CUM. PCT.
Below Cutoff	16	16	9.30	9.30
Monitoring Zone	29	45	16.86	26.16
Above Cutoff	127	172	73.84	100.00

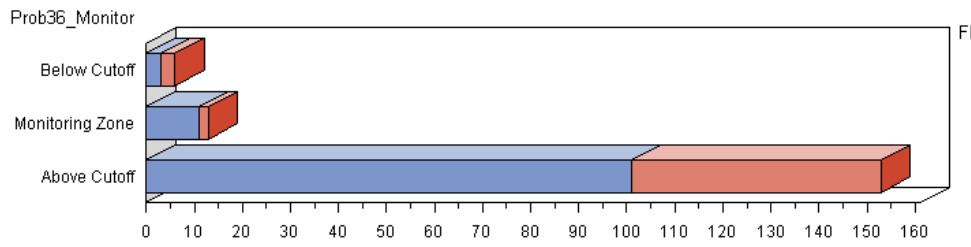
Pattern of Distribution (Blue: in Bakersfield, Red: outside Bakersfield) (continued)

COMM

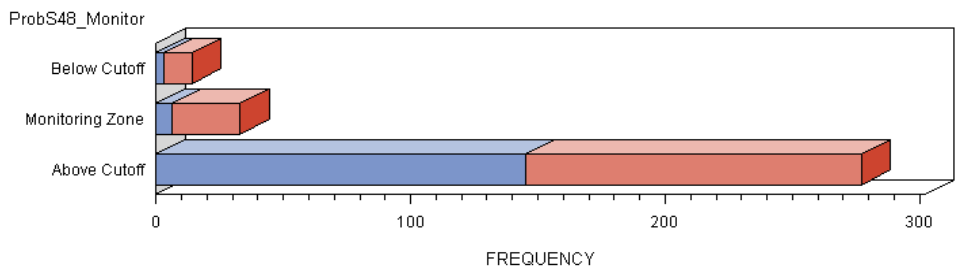


	FREQ.	CUM. FREQ.	PCT.	CUM. PCT.
Below Cutoff	29	29	8.95	8.95
Monitoring Zone	25	54	7.72	16.67
Above Cutoff	270	324	83.33	100.00

PROB

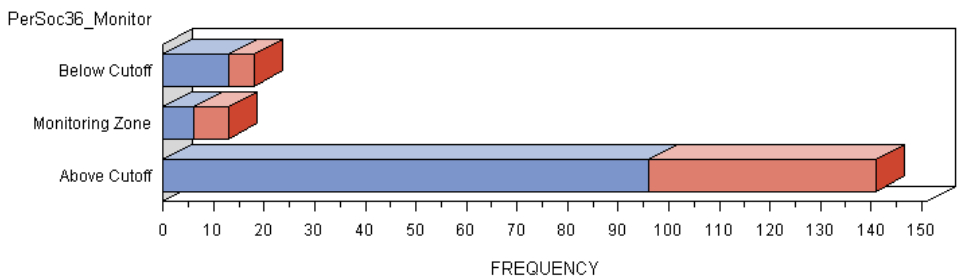


	FREQ.	CUM. FREQ.	PCT.	CUM. PCT.
Below Cutoff	6	6	3.49	3.49
Monitoring Zone	13	19	7.56	11.05
Above Cutoff	153	172	88.95	100.00

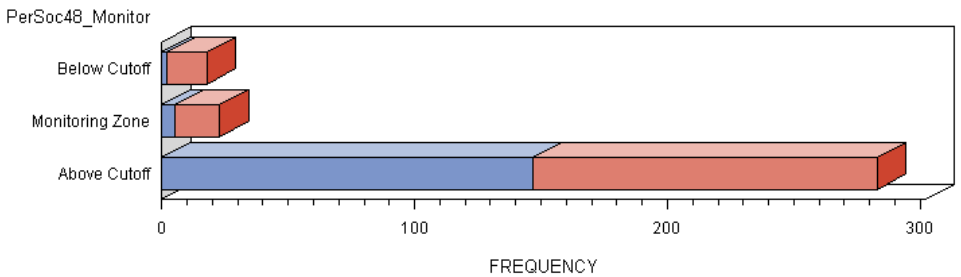


	FREQ.	CUM. FREQ.	PCT.	CUM. PCT.
Below Cutoff	14	14	4.32	4.32
Monitoring Zone	33	47	10.19	14.51
Above Cutoff	277	324	85.49	100.00

PerSoc



	FREQ.	CUM. FREQ.	PCT.	CUM. PCT.
Below Cutoff	18	18	10.47	10.47
Monitoring Zone	13	31	7.56	18.02
Above Cutoff	141	172	81.98	100.00

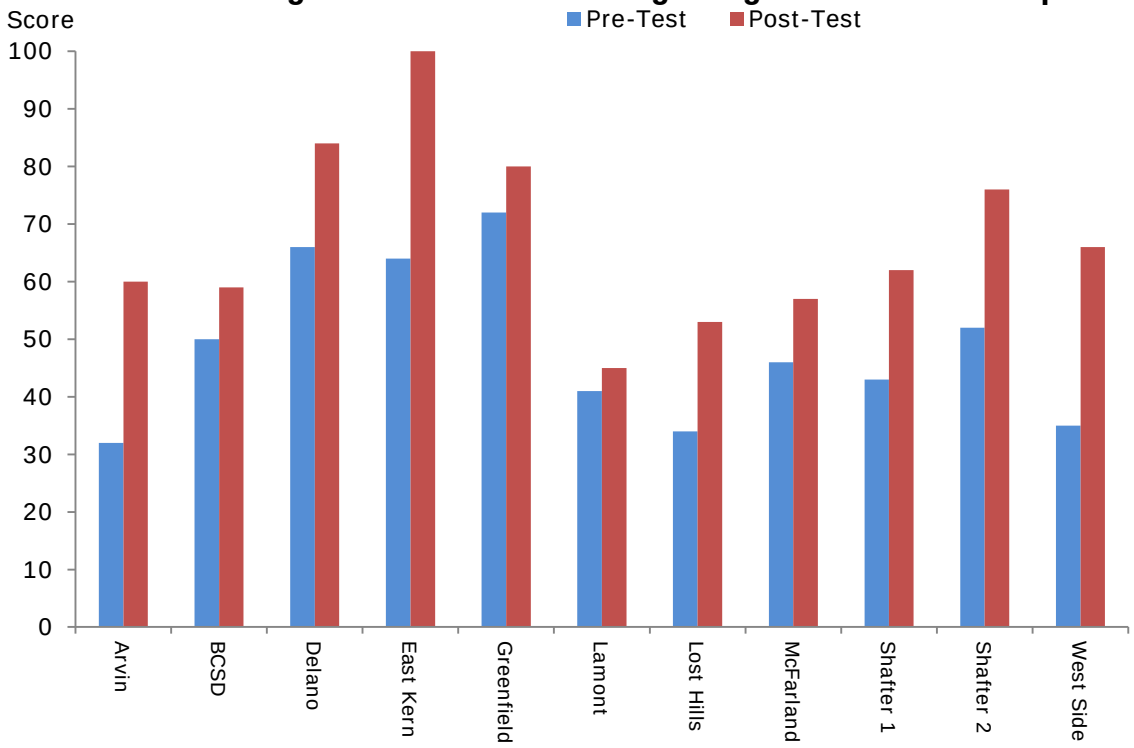


	FREQ.	CUM. FREQ.	PCT.	CUM. PCT.
Below Cutoff	18	18	5.56	5.56
Monitoring Zone	23	41	7.10	12.65
Above Cutoff	283	324	87.35	100.00

(3) Summer Bridge Findings

While the ASQ-3 and DRDP-2010 assessments provided general indicators of child growth, the Child Assessment Summer Bridge (CASB) was confined to children ages 4-5 with a clear focus on kindergarten readiness. On the dimension of cognitive development, Figure 35 showed steady progresses among the participating children between pre-test and post-test.

Figure 35: Summer Bridge Cognitive Score Comparison



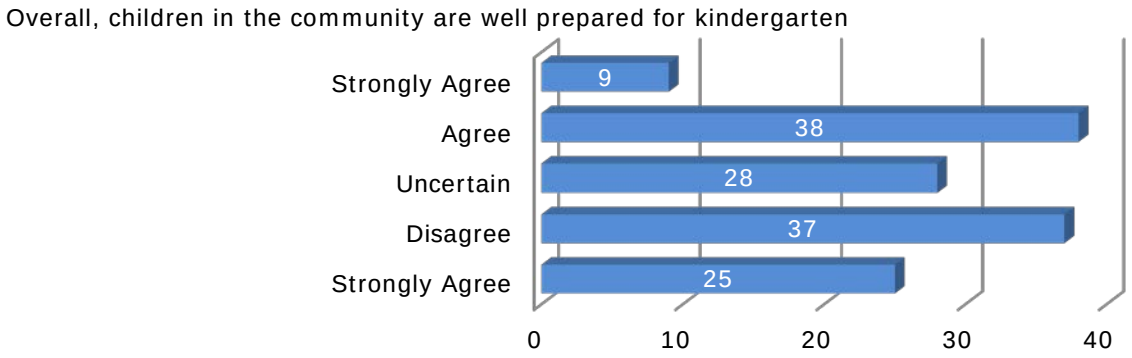
Effect sizes and statistical testing results are included in Table 12. Based on the small p values, Summer Bridge has significantly impacted participating children in the cognitive domain. The effect size values are in a strong range, indicating practical impact contributed by those programs.

TABLE 12: SUMMER BRIDGE IMPACT IN THE COGNITIVE DOMAIN

Program Site	df	t	p	Effect Size
Arvin	31	11.07	.0001	4.20
BCSD	101	7.48	.0001	1.49
Delano	29	8.50	.0001	3.16
Greenfield	13	8.69	.0001	4.82
Lamont	74	4.05	.0001	0.94
Lost Hills	21	6.83	.0001	2.98
Mojave	5	10.01	.0002	8.95
McFarland	22	7.72	.0001	3.29
Shafter1	15	5.68	.0001	2.93
Shafter2	13	6.39	.0001	3.54
Taft	37	18.50	.0001	6.08

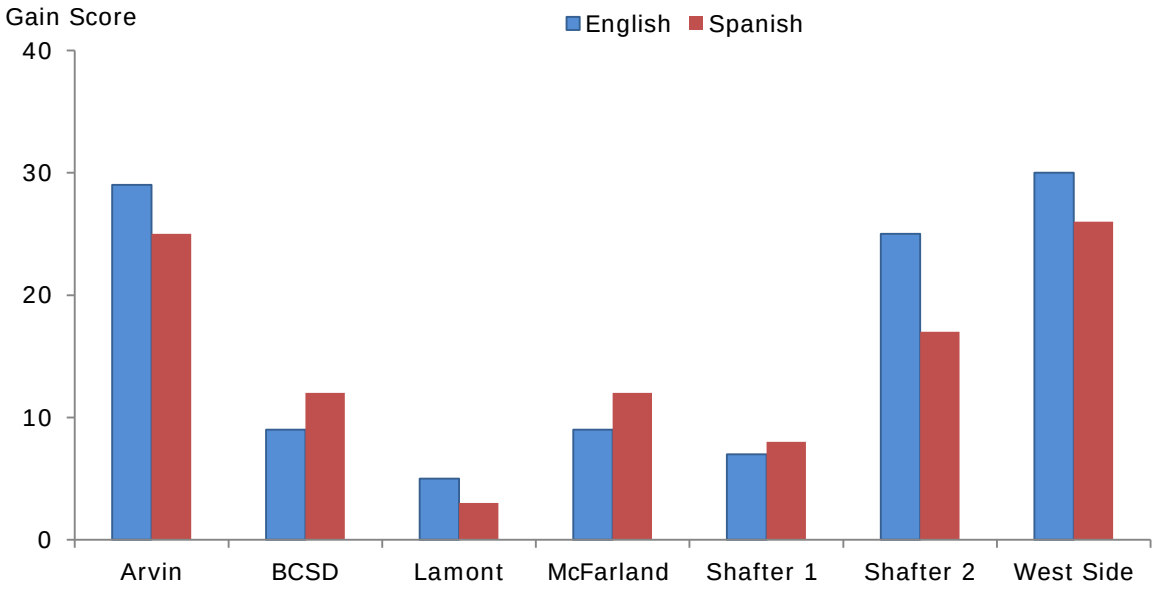
The progress toward school readiness has addressed a broad need of Kern County. According to results of the School Readiness Articulation Survey (Figure 36), less than 35% of school professionals *strongly agreed* or *agreed* that "Overall, children in the community are well prepared for kindergarten". Since Summer Bridge programs have made significant impact, expansion of those effective programs can help fill out the gaps in child preparation for kindergarten. Following the leadership of the state commission, First 5 Kern has been recognized as an unequivocal voice for children 0 to 5 to ensure greater equity in their readiness for school.

Figure 36: Child Preparedness fo Kindergarten



The general needs were reflected on child development outcomes on other dimensions. For instance, progresses in the cognitive domain varied between English- and Spanish-speaking children. To ensure a fair comparison, Figure 38 included those programs using both languages to compare the improvement of cognitive scores. Program differences were reflected by the fact that some programs had higher gain scores for English-speaking children (e.g., Arvin, Lamont, Shafter2, & Taft) while others seemed to benefit Spanish-speaking children more (see BCSD, McFarland, & Shafter1 in Figure 37).

Figure 37: Gain Score Differences in the Cognitive Domain



Statistical testing confirmed the result variation on the *communication, fine motor, self-help*, and *social emotional* domains. While English-speaking children seemed to have made more progress in the *cognitive* domain, Spanish-speaking children appeared to benefit more from the *self-help* and *social emotional* domains (see Table 13). Meanwhile, the gap between English- and Spanish-speaking groups was insignificant in gain scores from the *communication* and *fine motor* domains.

TABLE 13: GAIN SCORE VARIATION ACROSS DOMAINS OF THE *CHILD ASSESSMENT SUMMER BRIDGE*

Domain	df	Mean 1*	Mean 2*	t	p
Cognitive	334	15.14	10.83	2.36	.0188
Communication	335	1.10	1.38	-.99	.3207
Fine Motor	335	2.21	2.88	-1.91	.0564
Self-Help	336	.59	1.25	-3.28	.0011
Social Emotional	335	1.53	2.16	-2.15	.0370

*Mean 1 stands for the aggregated average gain score for English-speaking children; Mean 2 represents the aggregated average gain score for Spanish-speaking children.

In summary, the Child Assessment Summer Bridge (CASB) is unique in its inclusion of a cognitive dimension to stress importance of school readiness. The other four dimensions are closely aligned with the ASQ-3 domains. In particular, communication and fine motor are included in both assessments. The *self-help* and *social emotional* domains of CASB are closely related to the *problem solving* and *personal social* domains of ASQ-3, respectively. The CASB data analyses indicated significant improvement between pre-test and post-test across all Summer Bridge programs (see Figure 36). Using the meta-analysis methodology, the average effect size from Table 12 has reached 3.85, suggesting a strong practical impact on child cognitive development.

Highlight of the Area-Specific Findings

Sub-sections of this chapter are aligned with Focus Areas 1, 2, and 3 to cover all programs funded by First 5 Kern during FY 2010-2011. While receiving the state funding, the state commission cautioned that "Urgency to provide information on the return citizens are getting for the First 5 investment" (First 5 California, 2005, p. 12). To justify *what works, for whom,* and *in which context*, the CIPP platform has been employed in each focus area to articulate compelling findings on *program effectiveness* and *population impact*.

As Sormano and Neville-Morgan (2009) pointed out, "Data is more compelling when aggregated" (p. 18). Following the model of Results-Based Accountability (RBA), this chapter concludes with highlights of area-specific accomplishment on seven fronts:

1. Expand health service access for children from traditionally under-served populations

Multiple approaches have been taken to overcome language and distance barriers. Those approaches included a free consulting line, specialized support programs, and collaborative projects within local communities. As a result, over 800 families enrolled in health insurance after 2-1-1 calls. The Successful Application Stipend (SAS) program

offered bilingual services to extend the enrollment coverage to 3,237 children ages 0 to 5 across 20 locations. The Children's Health Initiative of Kern County (CHIKC) provided ongoing health insurance enrollments for 487 children, including those ineligible for Medi-Cal or Healthy Families programs. In addition, 2,183 children were classified as new enrollees through CHIKC with 91% in the Hispanic group. First 5 Kern also funded other community-based programs to incorporate health insurance application assistance in their milestone statement at 15 locations.

2. Enhance child protection from smoke exposure and substance abuse

Although over 21% of the parents or guardians reported smoking, the Black Infant Health Program funded by First 5 Kern has successfully reduced smoke exposure for children, and more than 92% of the children in that program had no exposure to smoke at home. In addition, a total of 183 children received legal protection and case management services from GBLA's Domestic Violence Reduction Project with substance abuse issues resolved within nine months. In combination, those two programs impacted over 230 children in poverty or requiring legal protection services.

3. Improve parenting skills through parent education

Through First 5 Kern-sponsored programs, more participants took a position against corporal punishments while acquiring effective nurturing skills. The education approach worked for small (N=9 or 11) or large (N=59 or 60) groups of parent support project (see Figures 7-12).

4. Strengthen positive reinforcement on child development

Parenting skill improvement has helped more children to focus on their tasks longer, get along with others, meet health needs, manage stress, and develop positive self-concept.

5. Develop a Results-Based Accountability (RBA) system to monitor quality of early childcare and education

The ASQ-3 data were representative of the local population density in Bakersfield, and extended sufficient coverage of rural communities throughout Kern County. In the end, the gap of child development has been narrowed between Bakersfield and rural communities according to changes of the ASQ-3 scores from 36^{th} to 48^{th} months.

6. Promote parent role in parenting construct development

Parents were given opportunities to enrich and utilize their knowledge according to five latent constructs identified by the AAPI-2 and NSCS assessments. An average effect size of 1.8 was obtained from the NOR program. Even larger effect sizes were observed from services at Lost Hills and McFarland. Based on the related literature, effect sizes larger than 0.8 are considered as indication of strong impact on the parenting construct development.

7. Enrich opportunity for children to improve school readiness

First 5 Kern-funded programs have significantly enhanced cognitive development of 336 children in both English- and Spanish-speaking settings. Across 11 Summer Bridge sessions, meta-analysis revealed a large effect size to reflect practical significance of the gain scores between pre-test and post-test (see Table 12). To support well-rounded child development, language barriers were alleviated in the *communication* and *fine motor* domains because no significant differences were found in child gain scores between English- and Spanish-speaking groups.

In conclusion, the state guidelines require county commissions to gather two levels of data for local annual reporting: (1) descriptive data, and (2) outcome data. Points 1-3 of the highlight section are grounded on descriptive data to meet the purpose of fact-finding. Points 4-7 involve evaluation of performance outcomes at either *child* or *parent* levels. Beyond the area-specific results, service integrations among First 5 Kern-funded programs are analyzed in Chapter 3 to address the fourth focus area of the Strategic Plan. Relationships identified from the Core Data Element (CDE) survey and Family Stability Rubric (FSR) assessment are synthesized in Chapter 4 to support the process of "turning the curve" toward improvement of the far-reaching and sustainable outcomes.

Chapter 3: Effectiveness of Service Integration

According to the new state guidelines, "each County Commission is required to describe how programs, services and projects relating to early childhood development will be integrated into a consumer-oriented and easily accessible system" (First 5 California, 2010a, p. 17). In this report, results of early childhood development were analyzed in Chapter 2 to assess effectiveness of programs, services, and projects derived from First 5 Kern funding. Chapter 3 is devoted to synthesizing outcomes of service integration across programs to facilitate "the creation of a seamless system of integrated and comprehensive programs and services" [Proposition 10, Section 2(m)].

Following the Context, Input, Process, and Product (CIPP) paradigm, local needs are identified in this chapter to enhance service collaboration in Kern County. Child background has been incorporated in strategic planning to ensure service access at the input phase. Effort of capacity building is described to sustain the process of consumer-oriented support. Results are highlighted at end of this chapter to summarize benefits of service integration in the product phase.

Service Integration in the Local Context

Service integration was promoted by the legislative statutes. As was stated in the California Health and Safety Code, "It is the intent of this act [Proposition 10] to facilitate the creation and implementation of an integrated, comprehensive, and collaborative system of information and services to enhance optimal early childhood development and to ensure that children are ready to enter school" (Section 130100). Thus, programs funded by First 5 Kern are expected to extend mutual support through establishment of service network and collaboration.

In this fiscal year, First 5 Kern contributed $23,591.40 to support 14 community events, and distributed four issues of its local newsletter to keep all stakeholders informed. The community engagement has won support from many stakeholders, including the Kern County Taxpayers Association that did not endorse Proposition 10 when it was on the ballot more than a decade ago (Lin, 2011). Following First 5 Kern's leadership, outreach efforts have been made by multiple service providers to enhance service integrations in the local context (Table 14).

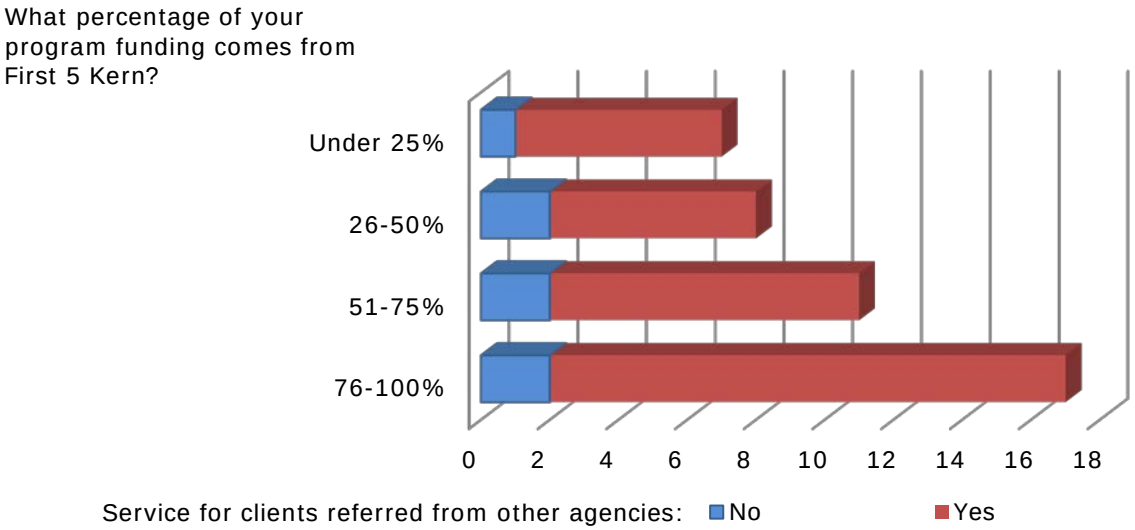
Beyond these accomplishments at the *commission* and *program* levels, First 5 Kern has made concerted efforts to promote information exchange among local stakeholders. For instance, First 5 Kern held an open house event on September 28, 2010 for community members and program staff to learn what services were available and how families could access those services or make referrals (Mayer, 2010). All 44 programs funded by First 5 Kern were showcased at the event to enhance their visibility among stakeholders. More importantly, this opportunity encouraged collaboration among agencies with complementary services.

TABLE 14: OUTREACH EFFORT TO STRENGTHEN INTEGRATED SERVICES AMONG PROGRAMS

Outreach Activities	Number of Programs
Establish an MOU with partners	13
Develop brochure	35
Develop/disseminate annual reports	9
Develop poster	10
Make press release	13
Participate in collaborative meetings	39
Participate in community gatherings	24
Participate in health fair	25
Publish educational book	7
Publish newsletter	14
Seek funding opportunities with partner agencies	34
Sustain partnerships for more than one year	38

To facilitate the information gathering, a total of 43 programs responded to an Integration of Services Questionnaire (ISQ), and 2-1-1 Kern County has been set to offer referral services throughout Kern County. Figure 38 indicated that a majority of the First 5 Kern partners offered services to clients referred from other agencies. The number of service providers increased along with the level of funding from First 5 Kern (see the length of red bars).

Figure 38: Referrals to Enhance Service Accessibility in the Local Context



Shortly after releasing the Statewide Evaluation Framework (First 5 California, 2005), First 5 Kern set a subcommittee within its Technical Advisory Committee to spearhead the effort on service integration. Based on the First 5 Kern (2005) record, the Subcommittee is looking at how integration of services can help advance efforts by First 5 Kern, other county agencies, and organizations and bring together programs and services targeting the same families such as the Family Resource Centers, Children's Health Initiative, School Readiness Initiative and Preschool for All. (p. 2)

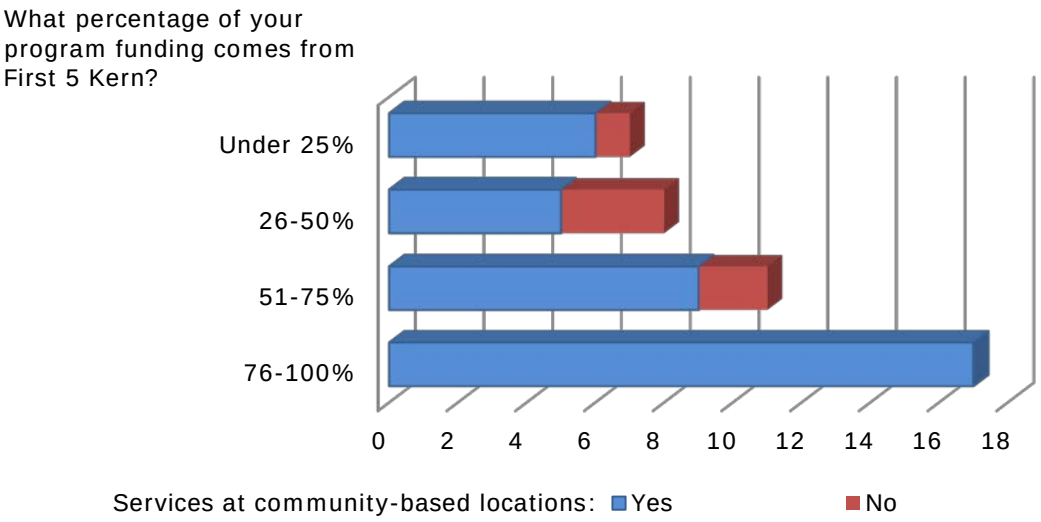
To strengthen the service coordination, First 5 Kern worked with commissions of sister counties to address challenges in the local context. The integrated effort has led to identification of three priorities across the Central Valley beginning this fiscal year:

1. Coordinating use of developmental screenings;
2. Creating a public awareness campaign to promote the care for and well-being of young children;
3. Conducting regional staff meetings at a central location to share best practices in a cost-efficient manner.

As a result, developmental screening became more consistent to facilitate transfer of children across different counties. The public campaign has increased community awareness of critical needs in child care and development. The commission networking further enriched First 5 Kern's expertise in staff training. Those efforts were closely aligned with three local strategies to: (1) increase media attention on the importance of early childhood development; (2) participate in various community events; and (3) link with other organizations serving children and families (First 5 Kern, 2010a).

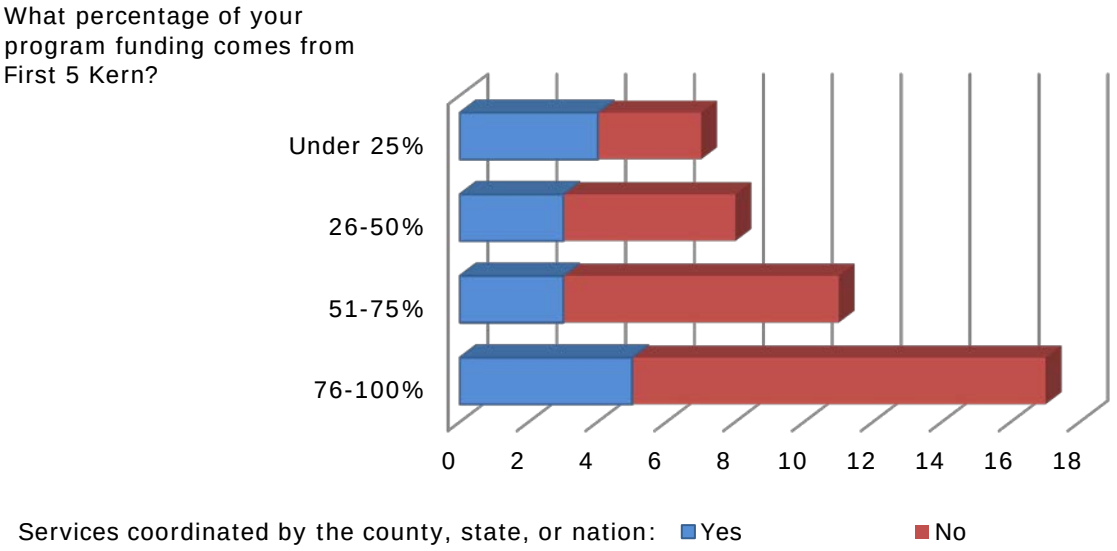
To extend its service coverage over the entire county, First 5 Kern has enhanced program accessibility through integration of supports at community-based locations. Figure 39 showed that a majority of the funded programs offered community-based services. For those programs receiving 76-100% of their funding from First 5 Kern, services were always available at community-based locations (see the bottom bar of Figure 39).

Figure 39: Community-Based Service Across Funding Levels



Besides First 5 Kern, other federal and state agencies also funded programs to help traditionally underserved communities. But few of them made similar impact on service integration in the local setting. For those programs receiving more than a quarter of their funding from First 5 Kern, the majority were not coordinated by the county, state, or nation (see red bars in Figure 40). Hence, First 5 Kern filled out an important void of service integration in local communities.

Figure 40: Proportion of Coordinated Services Across Funding Levels



In partnership with other agencies, First 5 Kern worked with service providers to establish *sustainable systems of care*. Figure 40 showed that First 5 Kern funding comprised 76-100% of the annual budget for 17 programs. The remaining 26 programs received additional support from other sources. Thus, efforts on service integration were not only demanded by the community, but also needed by most service providers to recruit supports from multiple agencies.

In summary, child development needs support from multiple fronts. Most service providers concurrently receive funding from multiple sources. Thus, service integration is needed at both *program* and *individual* levels to justify accountability of First 5 Kern funding. As part of the outreach effort, First 5 Kern has strengthened collaboration with its sister commissions. In addition, First 5 Kern led its partners to expand support at community-based locations. Built on the agency networking, referrals have been provided through 2-1-1 Kern County to expand capacity of service integration in the local context.

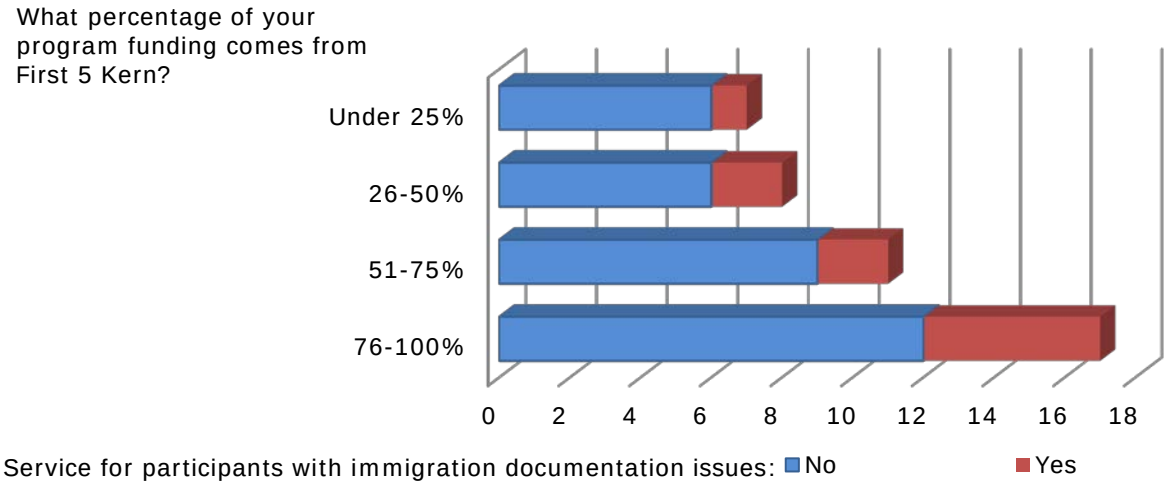
Barriers of Access at Program Entry

County commissions have been urged to pay "particular attention to traditionally undercounted populations such as ethnic/cultural minorities and immigrants" (First 5 California, 2010a, p. 13). Children of immigrants were more likely to come from families with a low-income status (Chaudry & Fortuny, 2010). They had to face linguistic and cultural challenges and seek accurate information about program services (Guendelman, Angulo, Wier, & Oman, 2005; Ku, 2007). California offered some benefits to undocumented immigrant children that would not be available under federal law, but budget constraints have undermined the program sustainability.

In a broad context, the United States is becoming increasingly diverse due to continuing immigration with 11.5% of current residents being foreign-born. The impact of these demographic changes is being felt more rapidly in the early childhood population than in any other group (Sareen, Russ, Visencio, & Halfon, 2004). As

required by the State Guidelines, First 5 Kern is quick at adapting to the population change due to immigration. Figure 41 indicated that children with issues of immigration documentation were served by local programs receiving different levels of funding from First 5 Kern. It was the highest funding category that showed more programs accommodating children with immigration documentation issues. In comparison to many programs funded by federal and/or state agencies, Proposition 10 imposed "no restrictions [for service access] based on immigration status" (First 5 California, 2010a, p. 23).

Figure 41: Support of Children with Immigration Documentation Issues

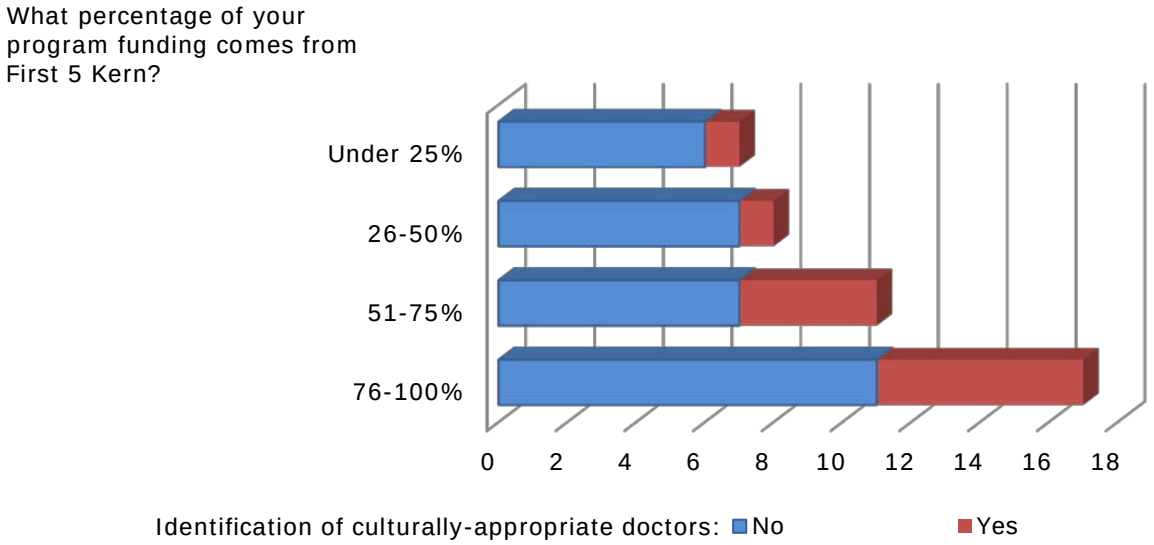


To break additional barriers in the existing service system, First 5 Kern's funding was channeled through specific focus areas. In the *Health and Wellness* area, Children's Health Initiative of Kern County (CHI) enrolled children ineligible for Medi-Cal or Healthy Families. Meanwhile, Cousineau, Stevens, and Pickering (2007) observed, "The CHIs face major financial sustainability challenges over the next few years and will require state investments to maintain the benefits accruing to children" (p. 2). First 5 Kern's support played an important role in sustaining the existing services for children with eligibility issues outside the CHI coverage.

Still, "Lack of awareness about cultural differences can make it difficult to achieve optimal outcomes for children and families" (First 5 California, 2010a, p. 22). Figure 42 indicated that First 5 Kern has funded programs to overcome cultural barriers. As shown by the red bar sizes, identification of culturally-appropriate doctors has been supported by programs at all funding levels. The number of programs increased along with the level of First 5 Kern funding, coinciding the longest red bar at the maximum funding level (see Figure 42). The results confirmed positive relationships between culturally-appropriate services and First 5 Kern's support.

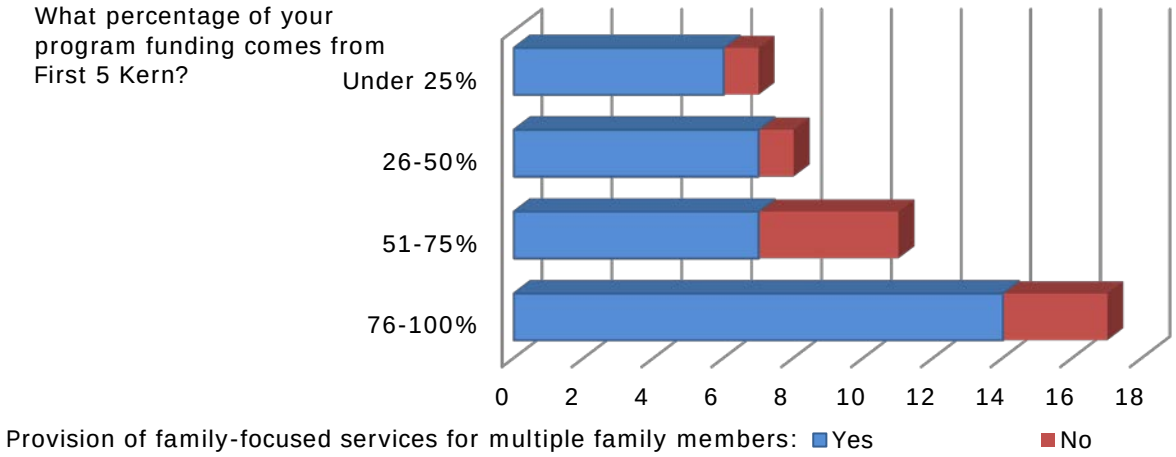
First 5 Kern played an indispensable role in sustaining the existing services for children with eligibility issues to access other programs funded by federal government grants.

Figure 42: Availability of Culturally-Appropriate Doctors Across Funding Levels



Family functioning is another focus area stipulated by the state commission. In the local Strategic Plan, it was incorporated into *Focus Area 2: Parent Education and Support Services*. Figure 43 showed an increase of program support across the funding levels with provision of family-focused services for multiple family members (see blue bars). Across all the funding levels, a majority of the programs provided family-focused services. The strongest support came from programs that had 76-100% of their annual budget from First 5 Kern funding.

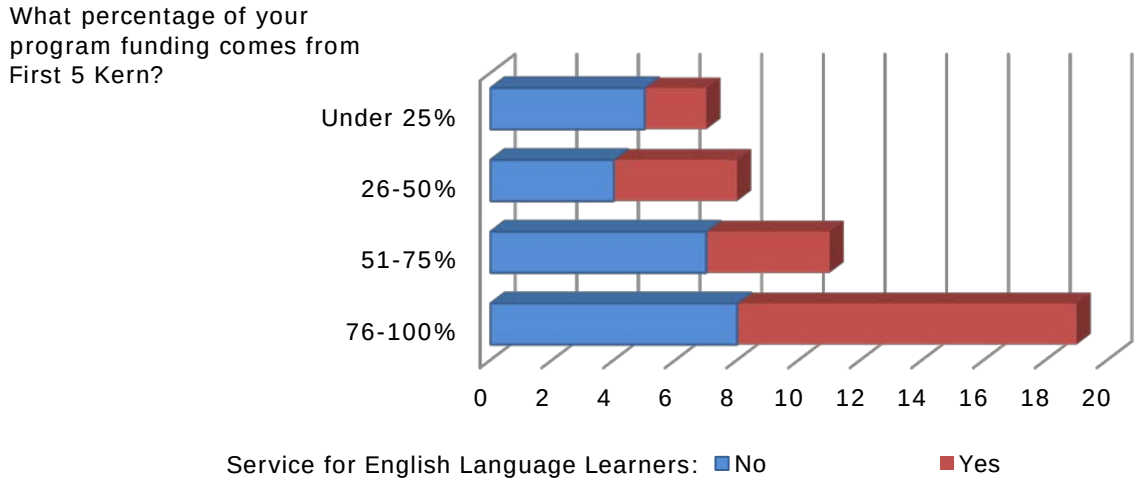
Figure 43: Family-focused Services Across Funding Levels



Most programs provided family-focused services. The strongest support came from programs funded at the 76-100% level.

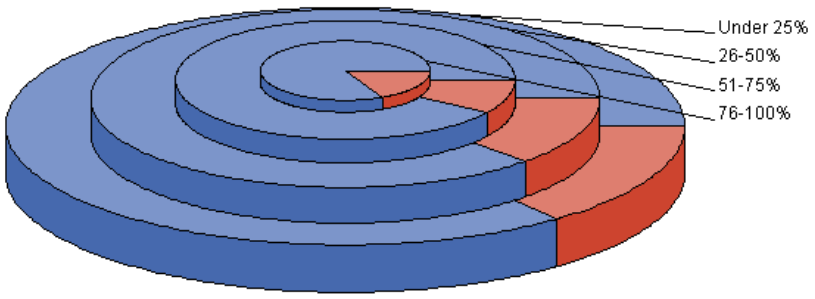
Early Childcare and Education is the third focus area of First 5 Kern. The new state guidelines emphasized importance of "Encouraging cultural competence" in local services (First 5 California, 2010a, p. 18). Peck (2011) pointed out, "Culture shapes our view of the world. And language is the most representative element in any culture" (p. 1). To optimize culturally- appropriate services for local children, First 5 Kern funded programs at different levels to serve English Language Learners (ELL) (Figure 44). The strongest ELL support came from those programs that used Proposition 10 funding to cover *76-100%* of their annual budgets (see the bottom bar of Figure 44).

Figure 44: Services for English Language Learners Across Funding Levels



The Integration Services Questionnaire (ISQ) was employed to assess First 5 Kern impact this fiscal year. The ISQ results showed that translation services were offered by a majority of the programs across all funding levels (see blue portion of the pie graph in Figure 45).

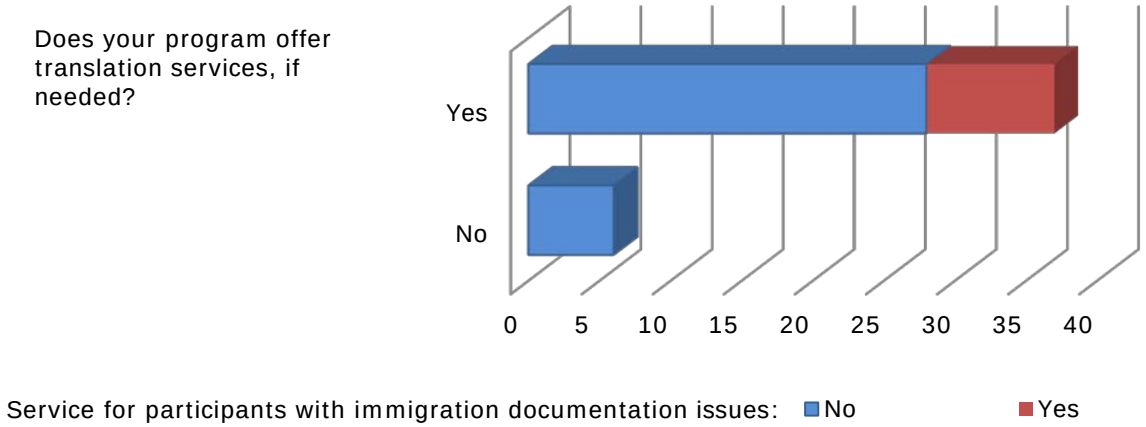
Figure 45: Translation Services Across Different Funding Levels



Translation services offered: Blue – Yes, Red – No

In particular, translation services were needed by immigrants with documentation issues. Thus, culturally-appropriate support might include translation services for this special group. Figure 46 showed that all children from that group were served by First 5 Kern-funded programs that offered translation services (see the red bar only in the "yes" category).

Figure 46: Translation Services for Children with Immigration Documentation Issues



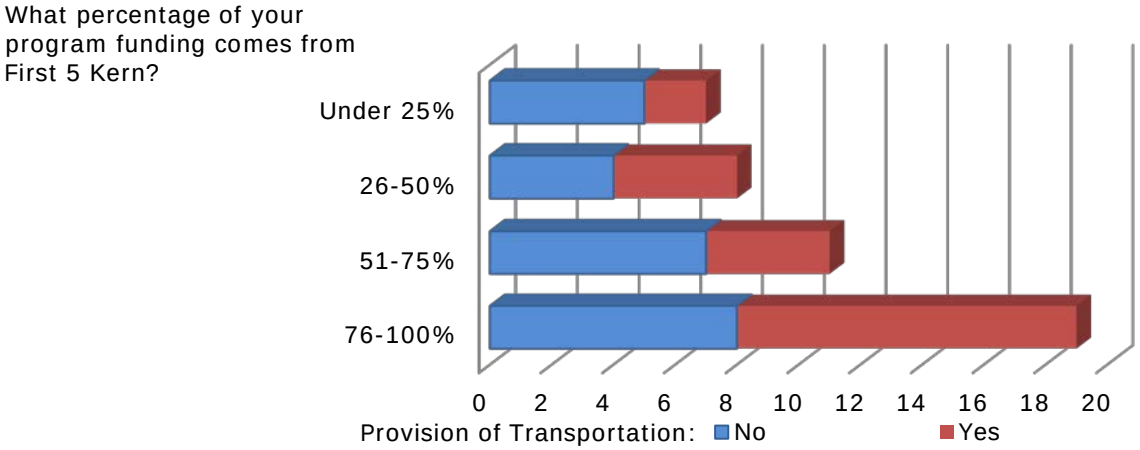
In summary, Proposition 10 has changed the landscape of California by involving various partners to strengthen services for the youngest children and their families (Bodenhorn, & Kelch, 2001). Unlike other government-funded projects, Proposition 10 was unique in *at least* two fronts: (1) It promoted inclusive approaches to serving all children prenatal to five years of age in California, regardless of their immigration status; (2) It attached a strong value to service integration. It was the well-coordinated projects that expanded service access for children with various barriers at the program input phase. Meanwhile, barriers have been lifted through service integration so that local partners can seek additional support from other agencies.

Process of Capacity Building to Sustain Service Integration

According to Proposition 10, "There is a compelling need in California to create and implement a comprehensive, collaborative, and integrated system of information and services to promote, support, and optimize early childhood development from the prenatal stage to five years of age" [Section 2(a)]. To ensure a good start, trained Public Health Nurses (PHNs) of Nurse Family Partnership Program (NFPP) received support from First 5 Kern to visit first-time mothers during their pregnancy. The services covered multiple fronts, including child health, parent education, and early childcare. The process also incorporated consulting services on smoke cessation, breastfeeding, and health nutrition that were critical to controlling low birth weight. PHNs continued to travel across the county and monitor the process to ensure that all children had up-to-date immunizations.

Of the 160,000 square miles in California, Kern County spreads over 8,161 square miles. Figure 47 showed provision of transportation services as part of the capacity building effort. Besides site-based programs, First 5 Kern funded mobile services, such as Kern County Children's Dental Health Network and Children's Mobile Immunization Program, to support children and families in hard-to-reach communities. Since transportation did not represent the core of direct services funded by First 5 Kern, partnership with other agencies was crucial to extending this support. Figure 47 indicated that transportation provision was available in more programs at the 51-75% funding level. Apparently, additional resources have been contributed by other agencies through service integration to augment First 5 Kern funding.

Figure 47: Availability of Transportation Services Across Funding Levels



Built on an assumption that the whole could be greater than the sum of its parts, First 5 Kern funded collaborative projects to enhance local capacity building. Table 15 indicated the number of consumer-oriented programs for children and families under special conditions, including issues related to limited English proficiency, immigration documentation, special type of service need, and service access outside of business hours.

TABLE 15: NUMBER OF PROGRAMS WITH SPECIAL CONSUMER-ORIENTED SERVICES

Consumer-Oriented Service Coverage	Program Number
Childcare services	25
Children and families with limited English proficiency	21
Children and families with special types of service needs	18
Children with immigration documentation issues	10
Clients referred from other agencies	36
Health insurance coverage	18
Multiple members through family-focused services	34
Service access outside of business hours	13
Survey of community needs	25
Translation services	37
Transportation services	25

Although 15 programs were funded in *Focus Area 3: Early Childcare and Education*, twenty-five programs offered childcare services this year (see Table 15). Similarly, eleven programs were funded in *Focus Area 1: Health and Wellness*, but eighteen programs joined their effort in extending health insurance coverage for children. Through the effort of service integration, many programs have expanded their services beyond the original focus area delimitation. The extra help became indispensable because “Children with special needs and their families often experience challenges in receiving the level and type of care appropriate to meet their needs” (First 5 California, 2010a, p. 24).

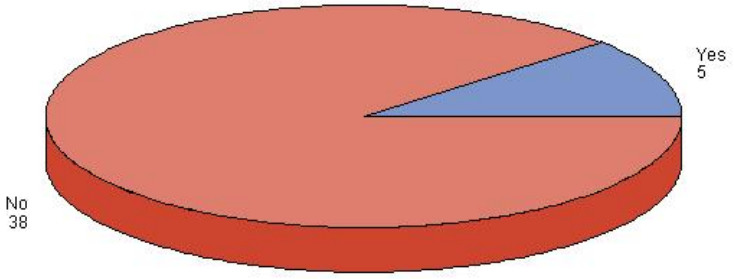
In summary, First 5 Kern not only dedicated new resources to strengthening quality of specific services, but also leveraged support to develop service networking across focus areas. "Dollars spent now on well-coordinated programs that enable children to begin school healthy, ready and able to learn, and emotionally well-developed will save billions of dollars in remedial programs, treatment services, social services, and our criminal justice system" [Proposition, 10, Section 2(h)]. Thus, First 5 Kern services are cost-effective in the long run.

Through service integration, programs extend mutual support across focus areas to meet various needs beyond their boundaries.

Outcomes of Service Integration in the Product Phase

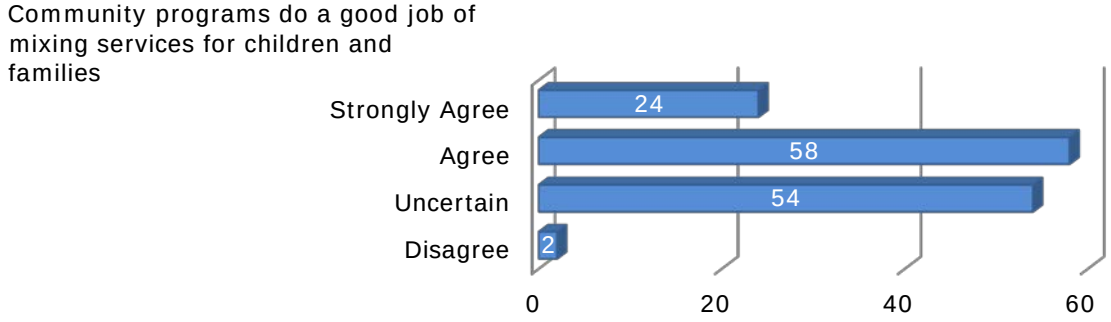
Proposition 10 did not mandate a large number of projects for service integration in each county. Instead, "Each county commission evaluates its programs to determine impact on the population the county serves" (First 5 California, 2010b, p. 44). In Kern County, the existing partnerships demonstrated a high level of sustainability. Figure 50 showed no change of the partnership in 38 programs over the past year.

Figure 50: Partnership Change over the Past Year



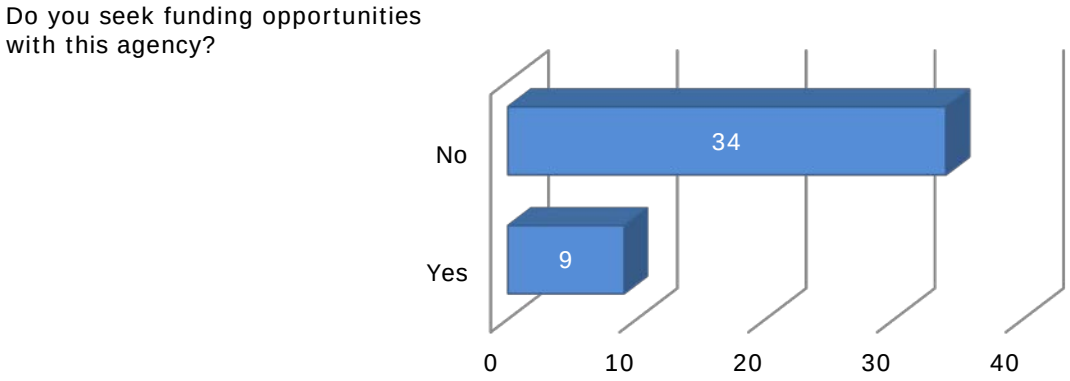
Effectiveness of the existing partnerships has been concurred by results from the School Readiness Articulation Survey (SRAS). One hundred and thirty-eight school professionals responded to the SRAS questionnaire. Majority of them *strongly agreed* or *agreed* that community programs did a good job of mixing services for children and families (Figure 51).

Figure 51: Effectiveness of Integration Services



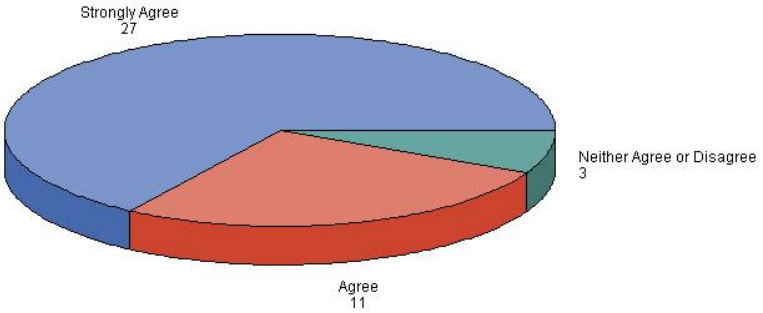
Service integration supported collaboration on additional funding applications in the local context. As Henderson (2010) pointed out, "There is always a need for services for families, but the needs are exacerbated when state budgets require cuts that impact our county's residents" (p. 1). Thus, the joint effort has expanded funding opportunities for collaborative programs. Figure 52 showed that 34 programs have sought funding opportunities with their partners according to the ISQ responses.

Figure 52: Seeking Opportunities of Funding with Partner Agencies



Triangulation of the results between SRAS and ISQ sources further revealed mutual benefits from the partnership building. While children and families benefited from service integrations (Figure 51), thirty-eight programs reported that their collaboration with First 5 Kern has increased program awareness within local community (Figure 53).

Figure 53: Increase of Program Visibility Through Local Partnerships



In summary, assessment data reported in this chapter primarily came from two sources: (1) School Readiness Articulation Survey (SRAS) and (2) Integration Service Questionnaire (ISQ). While the local capacity building was designed to "link seemingly unrelated programmatic strategies and results" (First 5 Kern, 2010a, p. 6), service improvement was articulated across different subsections under the CIPP paradigm. The first section of this chapter delineated First 5 Kern's leadership on program coordination to strengthen service integration in the local context. The second section was devoted to addressing challenges of service access at the stage of program entry. Process of service delivery, including overcoming transportation barriers, were described in the third section. Outcomes of service integration were captured by mutual benefits for local children, families, and service providers in the product phase.

Service integration not only benefited children and families, but also increased program awareness within local communities.

The SRAS data reported in this chapter were aggregated across Kern County from 138 school professionals, and the majority respondents reconfirmed a good job of mixing services for children and families (see Figure 51). Additional ISQ data were gathered from 43 existing programs. As was indicated by the new state guidelines,

> While County Commissions may consider the merits of establishing new partnerships and linkages, they are not required to develop new service collaboratives in response to the Act [Proposition 10]. Many counties already have existing collaboratives, networks or partnerships that could form the basis for linking and integrating the programs and services identified in the Act. (First 5 California, 2010a, p. 19)

The local partnerships have revealed four aspects of specific accomplishment:

1. New coordination has taken place among service providers – Thirty-six programs received First 5 Kern funding that accounted for 25% or more of their annual budget. None of them had their services coordinated by county, state, or national agencies before. First 5 Kern's funding provided the "glue" money to enhance the service coordination under a common goal of supporting children ages 0 to 5 and their families in Kern County.
2. More impact has been derived from the partnership between First 5 Kern and its service providers – Thirty-eight partners indicated that First 5 Kern has increased their program awareness within the local community. In addition, the collaboration with First 5 Kern has generated sufficient matching fund for 32 programs to acquire additional resources from other channels.
3. Stronger partnerships have been developed with First 5 Kern funding – Thirty-eight programs indicated no partnership change over the past year. Among the 34 programs that pursued leverage funds with their partners, half of them used First 5 Kern support to cover 75-100% of their budgets.
4. Broader services have been extended to reach traditionally underserved populations – To close service gaps within local communities, twenty-one programs expanded their capacity to serve children and families with limited English proficiency, ten programs provided services to children with immigration documentation issues, and thirteen programs offered accessible services outside of business hours.

Altogether First 5 Kern has made good investments in strengthening community-based programs this year. Henderson (2010) acknowledged, "These exceptional services are funded by First 5 Kern and delivered through our funded contractors, who are committed to the integration of services through a family-focused, culturally-appropriated and community-based approach" (p. 1). The Commission's leadership has empowered various service providers on service integration to expand local capacity building throughout Kern County.

Chapter 4: Turning the Curve

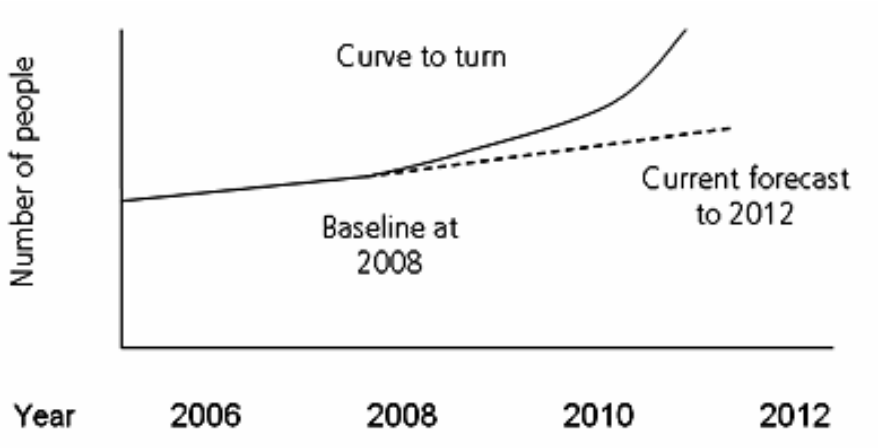
Like other county commissions across California, First 5 Kern (2011) has made it clear on adopting a Results-Based Accountability (RBA) model in its Strategic Plan:

> To accomplish the Commission's vision and mission, a Results-Based Accountability [RBA] framework was employed to facilitate turning the curve on those result indicators that most accurately represent the developmental needs of Kern County's children ages prenatal through five and their families. (p. 6).

Shortly after approval of Proposition 10 by California voters, Mark Friedman conducted a series of trainings on the RBA model for First 5 commissions. The materials were gathered in a monograph entitled "Results accountability for Proposition 10 Commissions: A planning guide for improving the well-being of young children and their families" (Friedman, 2000). At the core of his RBA model, *turning the curve* was coined as a key phrase to justify accountability of state funding.

Friedman (2005) employed the model to "define success as **turning the curve** away from the baseline or beating the baseline" (p. 58). For illustration, the number of people benefited from local services was plotted as an outcome measure, and the results were tracked across multiple years to document the trend of improvement (see Figure 54).

Figure 54: Demonstration of the *Turning the Curve* Effect



Adopted from http://www.yhsccommissioning.org.uk/docs/MarkFriedmanFlyer.pdf

On the basis of the theme of *turning the curve*, a recommendation was made in the last annual report "to extend the current longitudinal data gathering beyond the annual monitoring of First 5 Kern performance" (CS&O, 2011, p. 60). The outcome tracking was supported by First 5 Kern's effort on instrument standardization since 2009. In this report, Chapters 2 and 3 covered specific program results in each of the four focus areas. This chapter includes aggregated findings from the CDE and FSR data to examine improvement of First 5 Kern services between two adjacent years (i.e., FY 2009-2011).

As the annual revenue dwindles down steadily for less tobacco consumption, *turning the curve* is the only feasible way to sustain First 5 Kern services. Per guidance of the state commission, "Evaluation should be conducted in such a way that it provides direct feedback to the County Commission and to the community as a whole" (First 5 California, 2010a, p. 17). In this chapter, articulation of the results portrays an overall picture of ongoing progress across focus areas of *Health and Wellness*, *Parent Education and Support Services*, and *Early Childcare and Education*.

Support of Child Health and Wellness

Sustainability of First 5 Kern support depends on the local population needs. Table 16 is composed from the 2009 child data to represent population distribution in Kern County.

TABLE 16: KERN COUNTY CHILD COUNT ACROSS AGES

Age	Total	Count by Yearly Gap
0-2	48,307	24,153
3-5	43,465	14,488
6-10	65,820	13,164

Source: http://www.kidsdata.org/data/topic/table/child-population-age.aspx

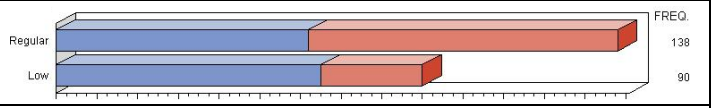
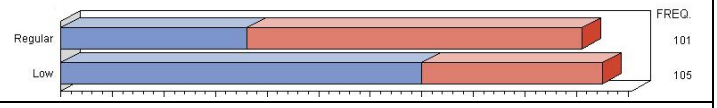
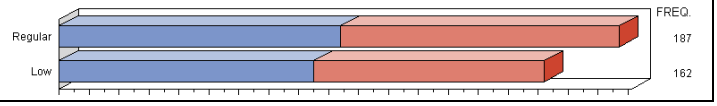
Because more children have been identified at the youngest age, demand of First 5 Kern service is still on the rise to support the effort of *turning the curve* in the local context.

Because more children have been identified at the youngest age, demand of First 5 Kern service is still on the rise in local communities.

Meanwhile, First 5 Kern faced unprecedented challenges to improve child health conditions at its program entry. For these newborns, the rate of low birth weight (LBW) was higher in Kern County than in any other counties across the state. While the average LBW rate was 6.8% across California, Kern County's rate has reached 7.4%.[8] Due to the enhancement of accessibility, First 5 Kern served more children from traditionally underserved populations. Following the state LBW definition, 12.5% of the children served by First 5 Kern were reported at or below 2,500 grams in FY 2009-10 (CS&O, 2011, p. 19). Table 17 showed an even higher LBW rate at rural sites. Despite the challenge, First 5 Kern's support has resulted in a drop of the LBW rate at each site, which impacted a total of 371 children in FY 2010-11. *Turning the curve* on this front has a long-lasting impact because "Low-birthweight babies are at increased risk for serious health problems" (March of Dimes, 2008, p. 1).

[8]Source: http://www.kidsdata.org/data/topic/table/low_birthweight.aspx

TABLE 17: PERCENT OF CHILDREN WITH LOW BIRTH WEIGHT

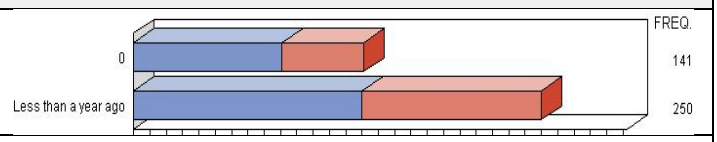
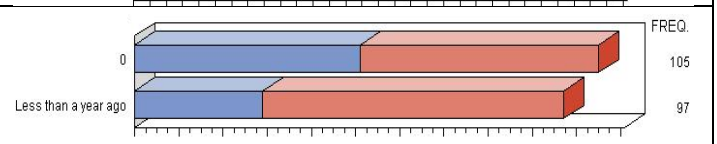
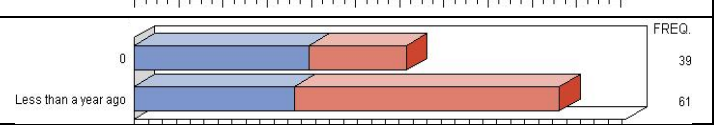
Program Site	Year	Percent	Pattern*
Delano	2009-10	51	
	2010-11	25	
Shafter	2009-10	66	
	2010-11	35	
Taft	2009-10	48	
	2010-11	45	

*Blue color for FY 2009-10, and red color for FY2010-11

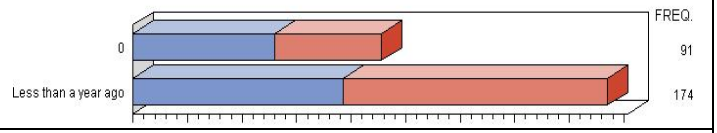
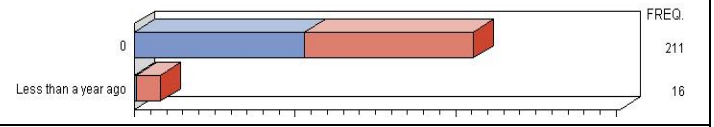
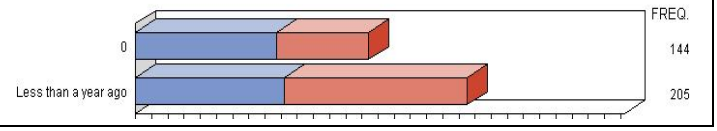
Kern County has the highest rate of low birth weight in California. The population that received First 5 Kern services showed an even higher rate than the county average rate. Thus, First 5 Kern addressed the needs of traditionally underserved population in hard-to-reach communities.

In addition, First 5 Kern's effort on expanding insurance coverage has been described extensively in Chapter 2. Children with dental insurance were more likely to receive preventive care, such as regular tooth cleanings with a dental hygienist and early identification of dental problems. The American Academy of Pediatric Dentistry recommended children to get a dental check-up before their first birthday.[9] Benefit of insurance coverage was reflected by the number of children with dental visits in less than 12 months. Table 18 showed an increase in the percent of children receiving timely dental care in FY 2010-11. The improvement this year has impacted 780 children at six program sites.

TABLE 18: PERCENT OF CHILDREN WITH DENTAL VISITS IN LESS THAN 12 MONTHS

Program Site	Year	Percent	Pattern*
Greenfield	2009-10	61	
	2010-11	69	
Mojave	2009-10	36	
	2010-11	56	
Henrietta Weill	2009-10	48	
	2010-11	73	

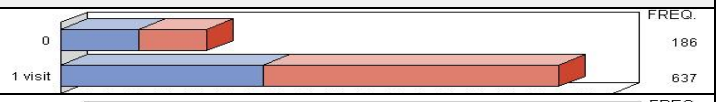
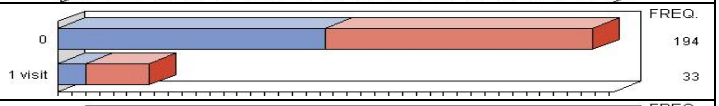
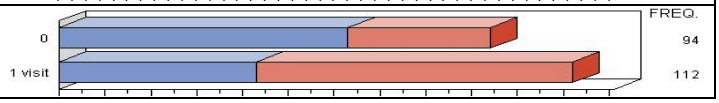
[9]Source: www.aapd.org/pediatricinformation/faq.asp

Program Site (continued)	Year	Percent	Pattern*
McFarland	2009-10	60	
	2010-11	71	
MVIP	2009-10	1	
	2010-11	13	
Taft	2009-10	51	
	2010-11	66	

*Blue color for FY 2009-10, and red color for FY2010-11

On the healthcare front, without First 5 Kern's support for insurance coverage, children would be less likely to receive routine preventive checkups. A 2010 survey of California parents found that most children were in good or excellent physical health (93%) and have good/excellent health care (90%). However, children from low-income households were more likely to be in poor/fair health and receive poor/fair health care.[10] By the time they sought care, the problem often became more serious for emergency treatment (Galbraith, Wong, Kim, & Newacheck, 2005). Through the persistent support from First 5 Kern, children were more likely to have annual health checkups this year than last year (see the percent column in Table 19). This improvement impacted 684 children at three service locations that received funding from First 5 Kern.

TABLE 19: PERCENT OF CHILDREN WITH ANNUAL CHECKUPS

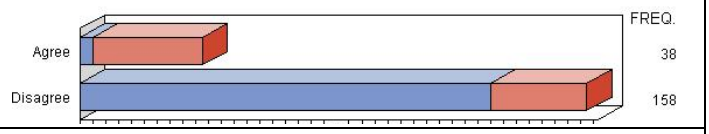
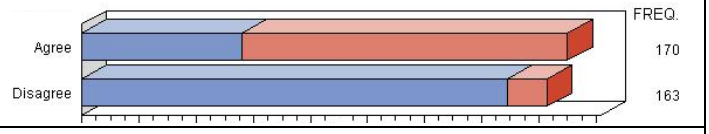
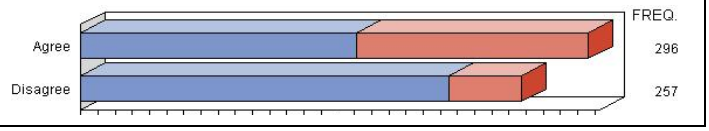
Program Site	Year	Percent	Pattern*
BCSD	2009-10	72	
	2010-11	82	
MVIP	2009-10	9	
	2010-11	19	
Shafter	2009-10	41	
	2010-11	69	

*Blue color for FY 2009-10, and red color for FY2010-11

Following the most recent state guidelines, service integration has been strengthened this year to support family functioning. An item was included in the Family Stability Rubric (FSR) to assess availability of medical insurance that allowed all household to see a doctor, if needed. As a result, 369 children were impacted by improvement of insurance coverage that allowed all household to see a doctor at Buttonwillow, Indian Wells Valley (IWV), and McFarland (Table 20). Through promoting the systems of care, children were more likely to receive preventive care, and live in a healthier home setting (Galbraith, Wong, Kim, & Newacheck, 2005).

[10]Source: http://www.kidsdata.org/data/topic/Dashboard.aspx?cat=51#whatitis

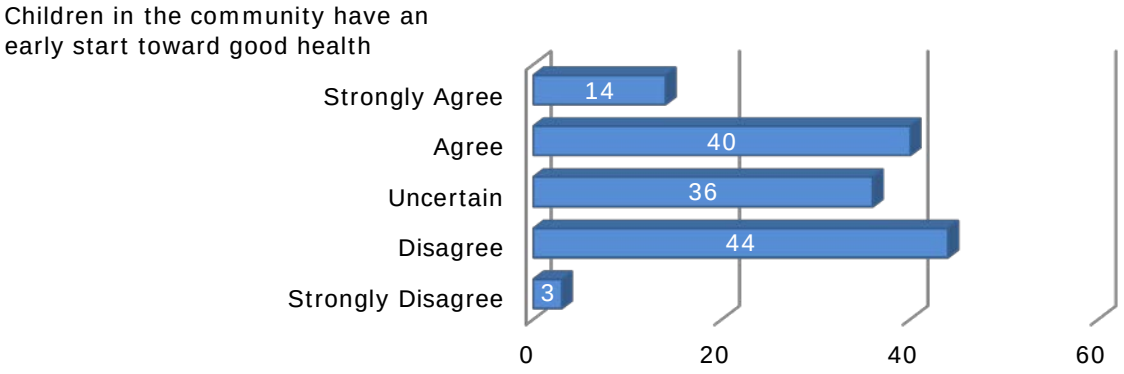
TABLE 20: PERCENT OF FAMILIES WITH INSURANCE FOR ALL HOUSEHOLD TO SEE DOCTOR

Program Site	Year	Percent	Pattern*
Buttonwillow	2009-10	3	
	2010-11	53	
IWV	2009-10	27	
	2010-11	89	
McFarland	2009-10	43	
	2010-11	76	

*Blue color for FY 2009-10, and red color for FY2010-11

Tables 17 -20 provided preponderance of evidence in the *Health and Wellness* area to indicate consistent improvement of First 5 Kern services on multiple fronts. Meanwhile, the School Readiness Articulation Survey (SRAS) concurred that "Children in this community have an early start toward good health". Figure 55 showed that the statement was *strongly agreed* or *agreed* by the majority of SRAS respondents.

Figure 55: SRAS Results on Children's Early Start Toward Good Health

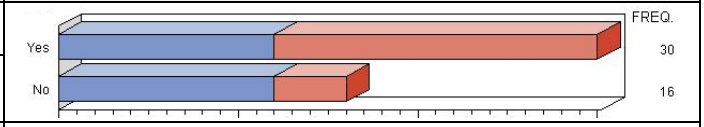
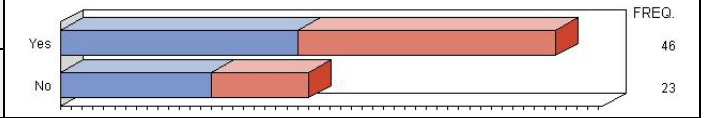
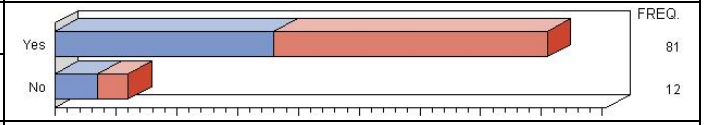
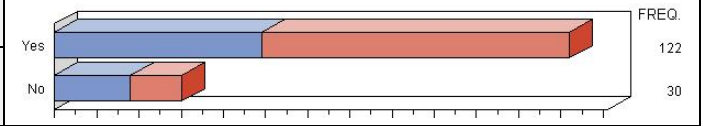
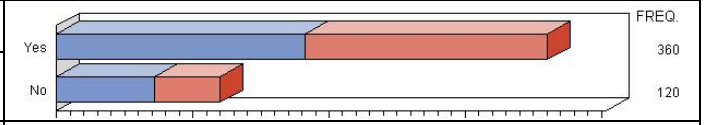
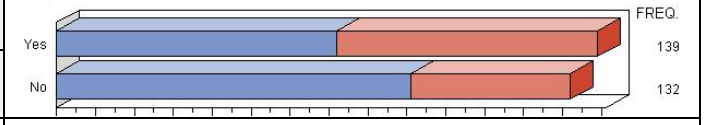
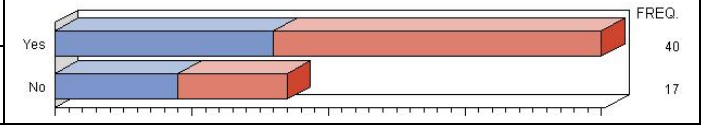


Improvement of Parenting Skills

Starting from child birth, breastfeeding offers multiple health advantages to mothers, such as reducing the risk of breast and ovarian cancer. Breast milk is also acknowledged as the most complete form of nutrition for infants, with a range of benefits for infant health, growth, and development. Thus, parent education is needed to increase the proportion of children being breastfed in the first year. Although the rate of breastfeeding was 33% for Kern County in 2009, more children were breastfed with support from First 5 Kern.[11] Built on the high breastfeeding rate from last year, further improvement has been observed at seven program sites this year (Table 21). A total of 556 children were impacted by the progress in FY 2010-11.

[11]Source: http://www.kidsdata.org/data/topic/Dashboard.aspx?cat=46#whatitis

TABLE 21: PERCENT OF MOTHERS FOR BREASTFEEDING

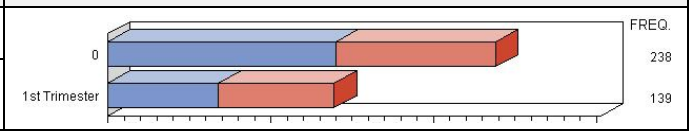
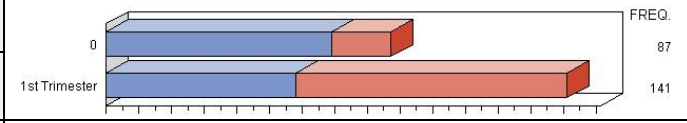
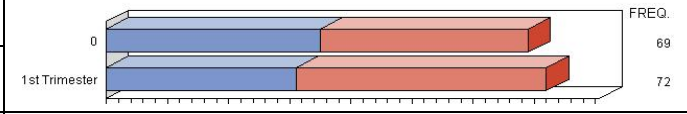
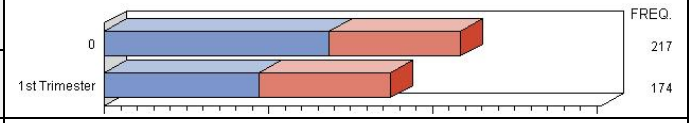
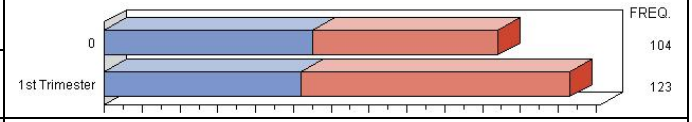
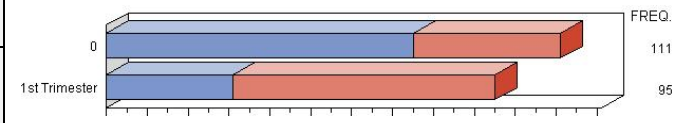
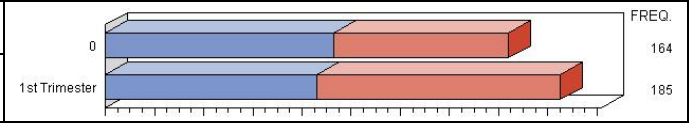
Program Site	Year	Percent*	Pattern**
Buttonwillow	2009-10	50	
	2010-11	82	
Henrietta Weill	2009-10	61	
	2010-11	73	
IWV	2009-10	83	
	2010-11	90	
MVIP	2009-10	73	
	2010-11	86	
Neighborhood Place	2009-10	71	
	2010-11	79	
SENP	2009-10	44	
	2010-11	62	
Wind in the Willows	2009-10	64	
	2010-11	75	

*Percent of "yes" response in the blue and red bars, respectively
**Blue color for FY 2009-10, and red color for FY2010-11

Inadequate prenatal care is another issue leading to mother's nutrition deficiency. It also causes baby's birth defects, such as premature births, lower birth weight, and higher infant mortality. The US Department of Health and Human Services set a target that 77.9% of pregnant women receive prenatal care beginning in the first trimester by 2020.[12] In California, the percentage of infants whose mothers received timely prenatal care ranged from 54% to 94.5% in 2009 across counties. In Kern County, seven service locations sponsored by First 5 Kern showed the percentage below the lowest average of 54% in 2009 (see Table 22). Through enhancement of parent education, health professionals were given opportunities to identify and resolve potential medical problems and offer guidance on healthy pregnancy. First 5 Kern's support has improved the rate of timely prenatal care, and 895 children were impacted by the percentage increase in FY 2010-11.

[12]Source: http://healthypeople.gov/2020

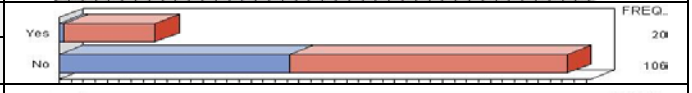
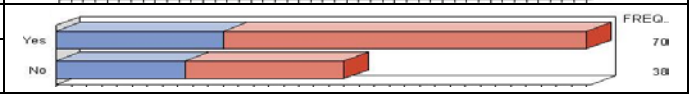
TABLE 22: PERCENT OF MOTHERS STARTING PRENATAL CARE IN THE FIRST TRIMESTER

Program Site	Year	Percent	Pattern*
Arvin	2009-10	33	
	2010-11	42	
Delano	2009-10	46	
	2010-11	82	
Homeless Center	2009-10	47	
	2010-11	55	
Greenfield	2009-10	41	
	2010-11	50	
MVIP	2009-10	49	
	2010-11	59	
Shafter	2009-10	29	
	2010-11	64	
Taft	2009-10	48	
	2010-11	58	

*Blue color for FY 2009-10, and red color for FY2010-11

Parents are children's first and most important teachers. Parent education also extends critical support for children's social, emotional, physical, and cognitive development. First 5 Kern funded programs to enhance parenting skills. Table 23 showed that parents or guardians were more likely to report nursery school attendance by their children after age 3 in FY 2010-11. This positive change impacted a total 182 children at three service delivery locations.

TABLE 23: PERCENT OF PARENTS REPORTING CHILD ATTENDANCE OF NURSERY SCHOOL

Program Site	Year	Percent*	Pattern**
Homeless Center	2009-10	46	
	2010-11	64	
Lost Hills	2009-10	2	
	2010-11	25	
Mountain Communities	2009-10	56	
	2010-11	70	

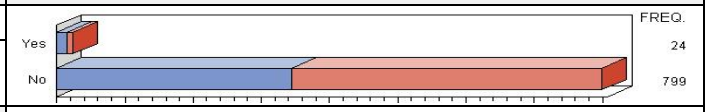
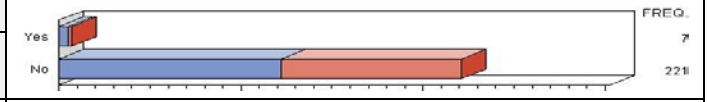
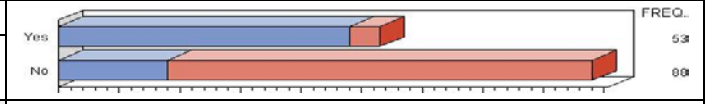
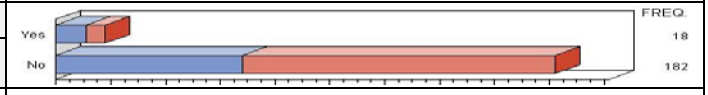
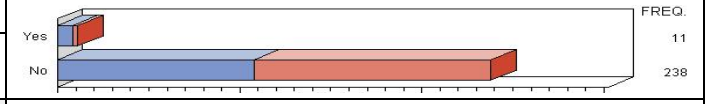
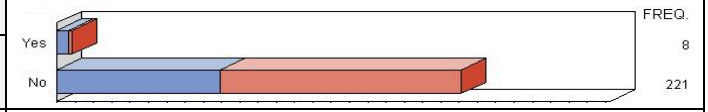
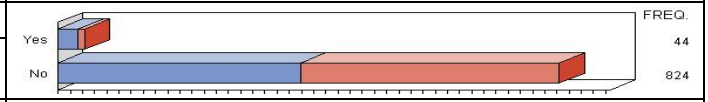
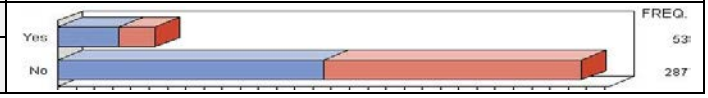
*Percent of "yes" response in the blue and red bars, respectively
**Blue for FY 2009-10, and red for FY2010-11

It was indicated in First 5 Kern's (2011) Strategic Plan that "The Results-Based Accountability model as adopted by First 5 California requires the collection and analysis of data and a report of findings in order to evaluate the effectiveness of funded programs" (p. 16). While parents received guidance on breastfeeding and prenatal care, attending education classes gave them a chance to act as an active learner in exploring various options to meet child needs. Thus, programs funded by First 5 Kern in *Parent Education and Support Services* played an indispensable role to enrich the learning opportunities that were essential to children's health and well-being at the youngest ages.

Enhancement of Child Development and Protection

Child protection can be enhanced at both family and individual levels. As was highlighted in Proposition 10, "Cigarette smoking and other tobacco use by pregnant women and new parents represent a significant threat to the healthy development of infants and young children. Smoking is the leading preventable cause of death and disease in California" [Section 2(i)]. To promote child-focused anti-smoking strategies, First 5 Kern collaborated with its partners across the county through both home-based and center-based case management projects. The percent of children with exposure to cigarette/cigar smoke has dropped in FY 2010-11 (Table 24). This benefit impacted 1,237 children at eight locations across Kern County.

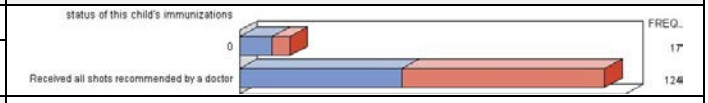
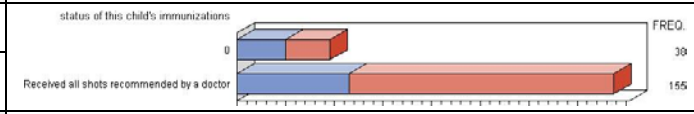
TABLE 24: PERCENT OF CHILDREN EXPOSED TO CIGARETTE/CIGAR SMOKE

Program Site	Year	Percent*	Pattern**
BCSD	2009-10	4	
	2010-11	2	
Delano	2009-10	4	
	2010-11	2	
Homeless Center	2009-10	73	
	2010-11	7	
Mojave	2009-10	14	
	2010-11	6	
IWV	2009-10	7	
	2010-11	2	
Lamont	2009-10	6	
	2010-11	1	
Neighborhood Place	2009-10	8	
	2010-11	3	
Taft	2009-10	18	
	2010-11	12	

*Percent of "yes" response in the blue and red bars, respectively
**Blue color for FY 2009-10, and red color for FY2010-11

A milestone has been identified in First 5 Kern's Strategic Plan to ensure that children ages 0 to 5 will have up-to-date immunizations. Immunizations recommended by doctors protect children from serious diseases, such as polio, diphtheria, tetanus, pertussis, measles, mumps, rubella, hepatitis B, and chicken pox. Since many of these diseases are contagious, the protection is also linked to public health. State policy currently requires immunization records for kindergarten admission. To support school readiness, programs funded by First 5 Kern have helped more children meet the immunization requirement. Table 25 showed consistent improvements this year at four program sites that impacted a total of 799 children.

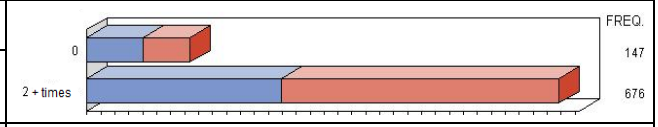
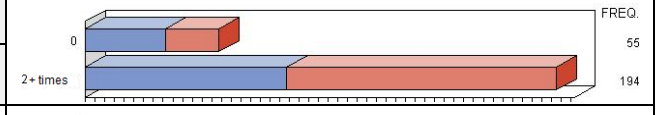
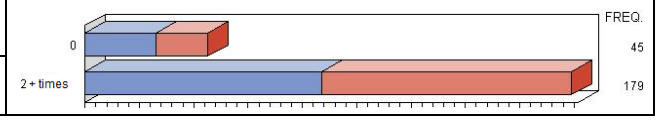
TABLE 25: PERCENT OF CHILDREN RECEIVED ALL SHOTS

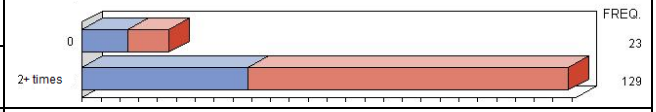
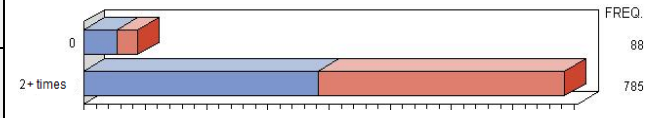
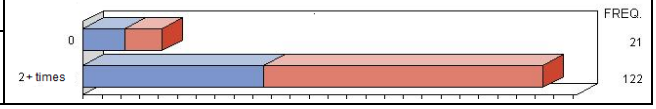
Program Site	Year	Percent	Pattern*
Homeless Center	2009-10	83	
	2010-11	92	
Greenfield	2009-10	90	
	2010-11	97	
Lost Hills	2009-10	70	
	2010-11	86	
Neighborhood Place	2009-10	91	
	2010-11	95	

*Blue color for FY 2009-10, and red color for FY2010-11

Armbruster, Lehr, and Osborn (2006) pointed out, "Learning to read and write can start at home, long before children go to school" (p. 1). Children who are not ready for school need extra support to catch up and keep up with their peers; otherwise, they tend to fall further behind over time. Thus, First 5 Kern's Strategic Plan has designated an indicator on the "Number and percentage of families who report reading or telling stories regularly to their children" (p. 12). Table 26 showed that children were more often living with parents who read to them twice or more per week this year. This progress impacted 1,125 children at six program sites that received funding from First 5 Kern.

TABLE 26: PERCENT OF CHILDREN BEING READ TO TWICE OR MORE PER WEEK

Program Site	Year	Percent	Pattern*
BCSD	2009-10	78	
	2010-11	86	
IWV	2009-10	72	
	2010-11	84	
KRV	2009-10	78	
	2010-11	83	

Program Site (continued)	Year	Percent	Pattern*
Mountain Communities	2009-10	78	
	2010-11	88	
Neighborhood Place	2009-10	87	
	2010-11	92	
Wind in the Willows	2009-10	8	
	2010-11	88	

*Blue color for FY 2009-10, and red color for FY 2010-11.

In summary, First 5 Kern has funded programs and services to help children enter kindergarten physically, mentally, emotionally and cognitively ready to learn. In this chapter, effectiveness of First 5 Kern funding has been assessed across focus areas. Comparable program data were gathered from the Core Data Element (CDE) survey and Family Stability Rubric (FSR) assessment. The effects of *turning the curve* during FY 2009-11 have been indicated by ongoing improvements on 10 fronts:

1. Low birth weight occurred less often in rural communities (371 children impacted);
2. More children had dental visits in less than 12 months (780 children impacted);
3. More children had annual health checkups (684 children impacted);
4. More families had medical insurance to allow all household to go to doctor (369 children impacted);
5. More mothers breastfed their children (556 children impacted);
6. More mothers started prenatal care within the first trimester (895 children impacted);
7. More parents/guardians reported child attendance of nursery school after age 3 (182 children impacted);
8. Fewer children were exposed cigarette/cigar smoking at home (1,237 children impacted);
9. More children received all shots recommended by a doctor (799 children impacted);
10. More children had parents read to them twice or more times per week (1,125 children impacted).

Those accomplishments illustrated well-rounded progresses across focus areas of *Health and Wellness* (Points 1, 2, 3, & 4,), *Parent Education and Support Services* (Points 5, 6, & 7), and *Early Childcare and Education* (Points 8, 9, & 10) stipulated by the First 5 Kern Strategic Plan. Analyses of those outcome measures were guided by the RBA model to justify the return on state funding through the ongoing *turning the curve* process.

Chapter 5: Conclusions and Future Directions

This Annual Report is designed to track the impact of First 5 Kern-funded services in FY 2010-11. In previous chapters, program effectiveness has been evaluated to help justify state funding in local communities. While the outcome assessment was guided by the Results-Based Accountability (RBA) model, the Strategic Plan of First 5 Kern (2011) further highlighted a learning aspect from the results dissemination:

The Commission believes that program evaluation is an ongoing feedback process. The goal of evaluation is to identify program outcomes in order to build a "road map" for the continued development of programs to serve the needs of all children. These reports are also used to identify best practices. (p. 16)

To address both service accountability and program improvement, this chapter delineates the report structure to recap multilevel findings resulted from grant support of First 5 Kern. Through the provision of health care, parent education, and childcare services, First 5 Kern has improved the well-being and development of children ages 0 to 5 in Kern County. "Though accountability matters, learning still matters most" (Angelo, 1999, ¶. 1). Merits of the assessment instruments are examined in the literature base to incorporate quality standards in local data gathering. In the end, past recommendations have been reviewed to provide feedback on outcome measures, and new recommendations are adduced to sustain the *turning the curve* process.

Recap of the Report Structure

Re-structuring First 5 Kern annual report was a two-year process beginning in 2009 to improve the utility of the evaluation findings for local stakeholders. On the basis of the experiences gained from FY 2009-10, an evaluation framework has been established in Chapter 1 to describe the report alignment with both state guidelines (First 5 California, 2005; 2010a) and the local Strategic Plan. Chapter 2 was devoted to analyses of program-specific data in focus areas of *Health and Wellness*, *Parent Education and Support Services*, and *Early Childcare and Education*. A paradigm of *Context, Input, Process,* and *Product* (CIPP) was incorporated to support fact findings on *what works, for whom*, and *in which context*.

In addition, the annual report is expected to aggregate results across programs and present "a 'big picture' of the impact that First 5 Kern services have made on individual children in Kern County" (CS&O, 2010, p. 8). The "big picture" has been composed in Chapter 3 to synthesize sustainable outcomes from service integration. Inclusion of this new chapter reflected a revision of First 5 Kern's mission statement that placed more emphasis on service integration. The "big picture" has been expanded on the time dimension to examine comparable findings between two adjacent years (see Chapter 4).

In combination, depth of the First 5 Kern support is reflected by the program-specific results in Chapter 2 that delineate details of the far-reaching impact through community-based projects. Breadth of the local services is articulated in Chapter 3 to address service integrations across focus areas. Sustainable progress is summarized in Chapter 4 to identify best practices during the *turning the curve* process since the last annual reporting.

Features of First 5 Kern Story

According to the RBA model, one additional step beyond *turning the curve* is to *tell the "story behind the curve"* (Hayes, 2002, p. 15). Following First 5 Kern's vision and mission, features of the *turning the curve* story are highlighted in five aspects:

(1) Focus all programs and activities on the **integrated needs** of Kern County's children

First 5 Kern acknowledged children's integrated needs in its mission statement, and urged its partners to provide "the integration of services with an emphasis on health and wellness, parent education, and early childcare and education" (First 5 Kern, 2011, p. 2). The evaluation results indicated that multiple programs have joined their effort in meeting the basic needs of child protection and support. For instance, over 21% of the parents or guardians were reported smoking in the Black Infant Health Program. Through an integrated approach of case management and parent education, more than 92% of the children in that program had no exposure to smoke at home. Similarly, substance abuse issues have been completely eliminated by GBLA's Domestic Violence Reduction Project that offered legal protection and case management for 183 children this year.

Implementation of the mission statement has been proven mutually beneficial. While the integrated system overcomes service barriers for children, 38 service partners reported that First 5 Kern has increased their program awareness within the local community. Without First 5 Kern's support, 82% of the funded partners (or 36 programs) indicated no services coordination by county, state, or national agencies in the past. Across the county, the integrated effort on child protection has reduced the rate of smoke exposure in eight communities that impacted 1,237 children (see Table 24). In addition, over half of the "2-1-1 Helpline" services (or 10,771 counts) linked the callers to nutrition support, such as *Food Banks* and *Food Stamps*. Through insurance enrollment assistance, 807 children were granted access to health care.

(2) Incorporate **quality standards** to improve program effectiveness

Assessment of early childhood development is based on well-established screening instruments, such as ASQ-3 and DRDP-2010. According to Hix-Small, Marks, Squires, and Nickel (2007), "A multidisciplinary panel of specialists in neurology, child neurology, communication disorders, pediatrics, psychology, and psychiatry endorsed the ASQ" (p. 382). The Desired Results Developmental Profile-2010 (DRDP-2010) is an observation tool authorized by the California State Department of Education to record individual progress toward the desired results stipulated by the state. At the parent level, the Adult-Adolescent Parenting Inventory-2 (AAPI-2) is an inventory designed to assess parenting and child-rearing attitudes. The instrument developer has established a track record of quality checking since 1979.

The assessment procedure was designed to assess the improvement of program effectiveness. For instance, the Nurturing Skills Competency Scale (NSCS) was administered in 20 programs under a pre-test and post-test setting. According to Bavolek (2009), "The NSCS is ideally utilized as a pre and post-test" (p. 1). AAPI-2 data were gathered from 12 parents at Indian Wells Valley Family Resource Center

(IWV FRC). Although statistical significance is often linked to large samples (Wilkinson, 1999), the IWV FRC program has shown significant improvement despite the small sample size. Similarly, the ASQ-3 data indicate a balanced representation of the local population throughout Kern County. The results show that the gap of child development has been narrowed between Bakersfield and rural communities from 36th to 48th months (see Table 11).

(3) Institute **consumer-oriented** services to address special needs

First 5 Kern supported consumer-oriented programs to enhance the outreach effort in local communities. Ten programs offered services to children with immigration documentation issues, and 13 programs made their services available outside of regular business hours. The Successful Application Stipend (SAS) provided bilingual services to extend the enrollment coverage to 3,237 children ages 0 to 5 across 20 locations. The Children's Health Initiative of Kern County (CHIKC) provided ongoing health insurance enrollments for 487 children, including those ineligible for Medi-Cal or Healthy Families programs. In addition, 2,183 children were classified as new enrollees through CHIKC with 91% in the Hispanic group.

The vision of First 5 Kern is to help all children "thrive in supportive, safe, loving homes". The Early Intervention Program (EIP) provided support to help solve mental health issues for children with special needs. As a result, more children live in a safe and nurturing environment because (1) parents were less likely to spank, slap, grab, or hit a child (Figure 7) and (2) parenting skills have been enhanced to accommodate children's emotional reaction (Figure 8). The consumer-oriented services also facilitated behavior modifications in three aspects: (1) more children knew how to play with their peers appropriately (Figure 9), (2) children were more likely to maintain their task focus (Figure 10), and (3) children were less likely to hit their parents (see Figure 11) or fight with friends of their own age (Figure 12).

(4) Extend **culturally-appropriate** support for traditionally underserved population

Funding from First 5 Kern has increased the number of programs to support culturally-appropriate services in child healthcare (Figure 42). The funding also supported provision of family-focused services for multiple family members in traditionally underserved communities (Figure 43). Across different funding levels, First 5 Kern showed strong support for those programs offering culturally-appropriate services for English Language Learners (Figure 44). In addition, translation services were offered by a majority of the programs across all funding levels (Figure 45).

Strengthening culturally-appropriate services is particularly relevant to Kern County because of the trend of population change. The immigrant population is likely to stay despite the doomy local economy (Kern Golden Empire Television, 2009). Kern County needs more culturally-appropriate services because first-generation Hispanics often have seven or eight children (Wenner & Barrientos, 2011). To realize First 5 Kern's vision of preparing all children to "enter school healthy and ready to learn" (First 5 Kern, 2011, p. 2), improvement has been made over the last year to create a supportive environment for children on three fronts: (1) Fewer children were exposed to cigarette/cigar smoking at home (1,237 children impacted), (2) More

parents/guardians reported nursery school attendance by their children after age 3 (182 children impacted), and (3) More children had parents read to them twice or more times per week (1,125 children impacted).

(5) Establish an **easily accessible** system to broaden the service impact

First 5 Kern consistently funded community-based programs to assist health insurance applications at multiple locations. This service has made health care accessible to local children and parents. As a result, breastfeeding is provided by more mothers that impacted 556 children this year. Prenatal care also started within the first trimester for more mothers that benefited 895 children. At the child level, enhancement of accessibility benefited more children with regular dental care, health checkups, and complete immunization shots (Tables 18, 19, 25), and reduced the rate of low birth weight in rural communities (Table 17). Coordinated by the support from First 5 Kern, services became more easily accessible for children and families with (1) limited English proficiency, (2) special types of service needs, (3) immigration documentation issues, and (4) translation or transportation needs (see Table 15).

In conclusion, features of the *turning the curve* story have been supported by compelling evidences on those five fronts. As a whole, First 5 Kern provided **integrated, high-quality, consumer-oriented, culturally-appropriate,** and **easily-accessible** services for all children ages 0 to 5 in Kern County. In the new state guidelines, these key components were specified by the state commission to "achieve school readiness for each of California's children" (First 5 California, 2010a, p. 3).

Past Recommendations Revisited

Three recommendations were made in the last annual report to sustain First 5 Kern's progress this year:

(1) Extend the current longitudinal data gathering beyond the annual monitoring of First 5 Kern performance;
(2) Incorporate more explanatory and outcome variables to justify Results-Based Accountability (RBA) on each *Result Indicator*;
(3) Strengthen First 5 Kern's leadership role in the area of service integration.

Data coverage beyond annual performance

When advocating the Results-Based Accountability (RBA) model, Friedman (2005) described ongoing improvement as a *turning the curve* process with multiple years of data tracking (see Figure 53). In a report titled *First Five Kern Program Evaluation*, Gonzalez-Demont, Bristow, McNeill, and Matson (2011) concurred with the needs of outcome monitoring, and cautioned that "It is a challenge to the agencies [First 5 Kern and its funded partners] … to initiate development of short and long-term action plans that will have positive impact on the communities they serve and most importantly on the infants and children within them" (p. 11). Instrument streamlining completed last year has made the result-tracking possible FY 2009-10.

Besides the feasibility consideration, this past recommendation also appeared to be well-timed at the transition point between the two funding cycles. While this Annual

Report has been focused on FY 2010-11, First 5 Kern's services can potentially span multiple years, covering children prenatal through age 5. Despite the threat of AB 99, First 5 Kern maintained its commitment and extended the longitudinal data gathering beyond the period of annual reporting. The comparable data from CDE and FSR were analyzed in Chapter 4 to justify ongoing progress over two adjacent years. Therefore, **the first suggestion has been completely accepted by First 5 Kern to support outcome tracking along a time dimension**.

Variable articulation for RBA justification

First 5 Kern's (2011) Strategic Plan contains a list of *Result Indicators* to measure what works in each focus area. To facilitate the result interpretation, *explanatory* and *outcome* variables are needed to justify Results-Based Accountability. Additional merit of this recommendation is to support program improvement because it is the variable relationships that sustain the *turning the curve* momentum in local communities.

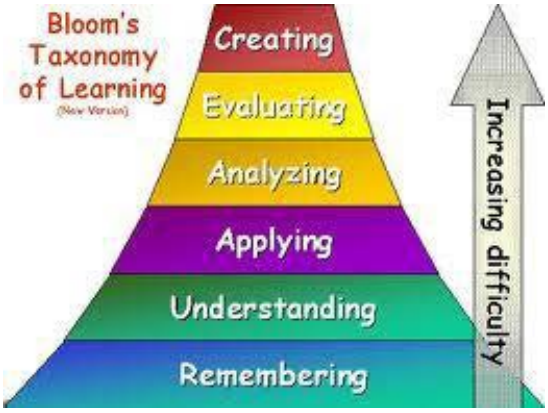
To incorporate more explanatory and outcome variables, First 5 Kern added the Nurturing Skills Competency Scale (NSCS) as a common outcome measure across 20 programs. The NSCS data collection was accompanied by the inclusion of more program-specific variables in this annual report. At the program level, extensive *explanatory* and *outcome* variables have been included in several channels of data collection, including the Anger Management Assessment (AMA), Be Choosey Be Healthy (BCBH), Child Assessment Summer Bridge (CASB), Comprehensive Need Assessment (CNA), Eyberg Child Assessment (ECA), Incredible Years Parenting Scale (IYPS), Student Behavior Assessment, School Readiness Articulation Survey (SRAS), and Substance Abuse Assessment. Thus, **the second recommendation has been addressed by the joint effort at First 5 Kern and program levels.**

It was indicated in First 5 Kern's (2011) Strategic Plan that "an effective evaluation program provides critical information to help continually improve the Commission's efforts to better the health and well-being of children and families throughout Kern County" (p. 16). In particular, NSCS is a curriculum-based assessment, and its inclusion has a profound impact on program alignment. According to the instrument specifications, the NSCS items employed in Chapter 2 are aggregated into two subscales: Part A assesses knowledge of the nurturing parenting attitudes and skills, and Part B covers application of nurturing parenting concepts, practices and strategies (Bavolek, 2009). In comparison, Part A deals with knowledge (*remembering*) to support utilization in Part B at the (*application*) level (see Exhibit 3 of Bloom's Taxonomy).

The curriculum alignment is essential to facilitating a meaningful interpretation of the assessment outcomes. The NSCS scales were field-tested at Nurturing Program sites in Hawaii and Louisiana.[13] Without systematic field-testing at a different location, Nebraska Families Collaborative (2011) found that a family could receive a score of "D" in the knowledge part and "A" in the application part. One plausible explanation was that the Part B applications were not built on the Part A knowledge, which imposed an issue of concurrent validity on the measurement outcomes.

[13]Source: https://www.assessingparenting.com/assessment/nscs

Exhibit 3. Revised Bloom's Taxonomy



Similarly, service providers funded by First 5 Kern seemed to need more time to align local curricula with the curriculum-based NSCS assessment. Without sufficient time for the curriculum standardization and field testing, the first year of NSCS implement has resulted in larger effect sizes in Part B for some programs (see Table 27). In addition, those programs with negative t values indicated a lower post-test score than the pre-test score on the NSCS scales. Except for those abnormal results, most programs demonstrated significant improvement in both parts of the NSCS assessment (see those programs with $p<.05$). While NSCS results have been found useful at the item level (see Chapter 2), subscale findings from Parts A and B seemed to suggest a need to strengthen curriculum alignments across local programs.

TABLE 27: OUTCOME COMPARISON OF THE NSCS ASSESSMENTS BETWEEN PARTS A AND B

Program Site	Outcome	df	t	p	Effect Size*
Arvin	Part A	22	2.73	0.0122	1.16
	Part B	28	1.51	0.1424	.57
BCSD	Part A	123	-0.16	0.8755	-
	Part B	142	-0.62	0.5373	-
Buttonwillow	Part A	18	1.64	0.1181	.77
	Part B	25	1.77	0.0898	.71
Mojave	Part A	10	2.22	0.0505	1.40
	Part B	12	2.13	0.0549	1.23
Greenfield	Part A	38	3.36	0.0018	1.09
	Part B	47	5.21	<.0001	1.52
Kern River Valley	Part A	17	2.23	0.0394	1.08
	Part B	20	3.14	0.0053	1.44
Mountain Communities	Part A	1	-4.33	0.1444	-
	Part B	1	1.00	0.5000	-
Southeast Neighborhood Partnership	Part A	3	-0.75	0.5060	-
	Part B	4	-2.26	0.0865	-
Taft	Part A	15	4.45	0.0005	2.30
	Part B	18	9.23	<.0001	4.48

Program Site (continued)	Outcome	df	t	p	Effect Size*
Richardson	Part A	24	-1.37	0.1835	
	Part B	25	1.36	0.1855	.54
Lamont	Part A	6	3.38	0.0149	2.76
	Part B	6	1.87	0.1109	1.53
Shafter	Part A	40	2.46	0.0181	.78
	Part B	47	6.38	<.0001	1.86

*The program list is confined in Focus Area 2 for illustration. Effect sizes were not computed for a couple of programs with small samples or worse results in the post-test.

In retrospect, both AAPI-2 and NSCS were distributed by a company named "the Nurturing Parenting Programs".[14] In this report, AAPI-2 was used in court-mandated parent education programs, and NSCS was administered in group-based or home-based programs. Perhaps because the court-mandated components were more rigorous in implementing the Nurturing Parenting curriculum, the AAPI-2 results showed consistent improvement in parent understanding of child needs (Construct B), as well as their beliefs in corporal punishment (Construct C) at sites of Southeast Neighborhood Partnership (SENP) and Kern River Valley (KRV) (see Table 6). In contrast, the NSCS results showed insignificant differences at both sides at α=.05 (see Table 27). Since this is the first year of NSCS implementation, these findings need to be reconfirmed by additional data next year.

Curriculum alignment is essential to facilitating a meaningful interpretation of the NSCS assessment outcomes.

First 5 Kern's leadership in service integration

First 5 Kern's leadership in service integration is guided by its new mission statement that empowers service providers in partnership development. A new chapter (i.e., Chapter 3) has been added to this Annual Report to accommodate results from a new version of Integration Services Questionnaire (ISQ). The extensive findings in Chapter 3 indicated that **First 5 Kern has addressed this recommendation through its continued leadership in service integration**.

Gonzalez-Demont, Bristow, McNeill, and Matson (2011) further suggested a strong need to sustain this leadership in future years. One of their recommendations was to "Continue to seek out additional information from stakeholders". First 5 Kern has established a protocol with the Institutional Review Board (IRB) of California State University, Bakersfield (CSUB) to support its data gathering (Appendix B). Hence, it is well-positioned to implement Gonzalez-Demont et al.'s (2011) additional recommendation in this area.

[14]Source: http://www.nurturingparenting.com/shop/p/177/AAPI2%20/%20NSCS%20Online%20Administrations%20%28AOL%29

New Recommendations

In the RBA model, the *turning the curve* process is documented through results tracking so that sustainable outcomes are built on prior experiences. Considering prior experience is not new for service grant awards at the federal government level. Dervarics (2007) reported that "Under the prior experience rules, an applicant can receive up to 15 points based on their performance under a previous grant" (p. 10). Thus, prior experiences have been considered in a subsequent funding cycle.

To promote best practices, **one new recommendation** is to identify and/or develop "signature programs" through a balanced consideration between *existing partners* with exemplary track records and *new partners* with strong potential to deliver groundbreaking services. Thus, evaluation data can be used to establish track records of high quality services at the program level, in addition to justifying a return on state investment throughout the county. First 5 Kern needs to incorporate the track records in its future funding decisions, and ensure that prior experience points are awarded in an accurate and transparent manner. Meanwhile, First 5 Kern needs to continue local capacity building, and provide opportunities for new partners to address additional needs yet to be fulfilled by the existing service system.

With the enhancement of accountability at the program level, service providers are empowered to ensure quality and credibility of their data tracking. Since accountability is centered on the *turning the curve* process, local programs can simplify data collection by reducing time-invariant variables. Hence, **the second recommendation** is to collect timely feedback from service providers to enhance performance tracking.

This recommendation is derived directly from an approach suggested in the state evaluation framework – "The [state] recommended approach is focused on ensuring the quality and credibility of data collected which is in part supported by reducing the quantity of data attempted to be collected" (First 5 California, 2005, p. 4). For instance, there is no mandate in Proposition 10 regarding a large number of partners for service integration. Thus, the Integration Services Questionnaire (ISQ) does not need to track the partnership count each year. In addition, service hours remain unchanged for most service providers, and the ISQ instrument can avoid repeating that question for each weekday. The focus on time-dependent variables will allow service providers to constantly analyze their strengths, weaknesses, opportunities, and threats for ongoing service improvement.

Bodenhorn and Kelch (2001) pointed out, "The preference for local decision making and local program development is at the heart of the Proposition 10 model" (p. 153). Unfortunately, the statute of local control was abandoned by the state assembly this year. As First 5 Kern exercised fiduciary responsibility for the new funding cycle, the State of California attempted to take $11.7 million from the prior year local reserve. Because the funding had already been committed to supporting programs in the next three years, the state budget crisis threatened the foundation of services to children and families in Kern County.

To cope with this unprecedented difficulty, First 5 Kern needs to further strengthen its partnerships with service providers. Among the 44 programs receiving First 5 Kern funding this year, 32 programs gathered CDE data at the individual level and 18 programs collected FSR data through the Outcomes Collection, Evaluation and

Reporting Service (OCERS) system. While the revenue decline is inevitable, the existing results cannot be solely used for supporting future funding decisions, particularly for those programs not involved in the data collection. To amend this void, **the third recommendation** is to invite input from service providers on additional evidences that could be gathered to represent their outcome-based contributions.

In summary, First 5 Kern abided by the Proposition 10 statutes, and offered integrated, high-quality, consumer-oriented, culturally-appropriate, and easily-accessible services for all children ages 0 to 5 and their families in Kern County. Following the RBA model, the first recommendation ensures that tracking data *will be useful* in identifying and/or developing *need-based* signature programs. The second recommendation is to make service outcomes more *accurate* and *measurable*. The third recommendation invites input from service providers to encourage a *transparent* approach to generate *appropriate* and *ethical* feedback between First 5 Kern and its funded partners. In reference to the evaluation design in Exhibit 2, those recommendations clearly fit the First 5 Kern Evaluation Framework.

First 5 Kern's operation includes both fiscal and evaluative components. To articulate outcome-based findings from both sides, cost-benefit analyses (CBA) were conducted in FY 2009-10 in the focus area of *Health and Wellness*. The benefits have been found far exceeding the costs according to benefit-cost ratios of 1.58 and 1.86 across multiple programs (VanGilder & Berri, 2010). The CBA report also rated the immunization program as one of the most cost-effective programs funded by First 5 Kern. Despite the drop of funding in the *Health and Wellness* focus area (see Figure 2), the number of funded programs increased from **eight** in the last year to **11** this year. Meanwhile, further improvements were made in immunization programs over the past year at four additional sites (see Table 25). The longitudinal comparison reconfirmed cost-effectiveness of First 5 Kern operation in FY 2010-11.

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Appendix A
Technical Advisory Committee (TAC)

Mimi Audelo
(Chair and Commissioner)
Director of Special Events, San Joaquin Community Hospital

Elena Acosta
Assistant Director, Child Protective Services - Kern County Department of Human Services

Charlotte Brandt
Retired R.N.

Tammy Burns
Coordinator Early, Childhood Council of Kern - Kern County Superintendent of Schools

Deanna Cloud
Children's System of Care Administrator, Kern County Mental Health System of Care

Tom Corson
Executive Director, Kern County Network for Children

Jesus Cordova
Coordinator, Shafter Healthy Start - Richland School District

Irene Cook
Childcare Director, Small Steps Child Development Center - Alliance Against Family Violence and Sexual Assault

Karen Goh
(Commissioner)
Executive Director, Garden Pathways

May Gordon
Attorney, Greater Bakersfield Legal Assistance

Jan Hefner
Director, Children's Health Initiative of Kern County - Friends of Mercy Foundation of Bakersfield

Sandy Koenig
Coordinator, West Side Community Resource Center -Taft City School District

Cathy Monsibais
Mental Health Unit Supervisor, Kern County Mental Health Systems of Care

Bill Phelps
Chief of Programs, Clinica Sierra Vista

Nancy Puckett
(Commissioner)
Program Coordinator, Kern River Valley FRC Great Beginnings Program - Kernville Union School District

Laurie Roth
Shafter Healthy Start - Richland School District

Lucinda Wasson, R.N.
Director, Public Health Nursing, Kern County Department of Department Health

Debbie Wood
Coordinator, Supporting Parents & Children for School Readiness - Bakersfield City School District

Appendix B
IRB Approval

CSUB

Grants, Research, and Sponsored Programs
California State University, Bakersfield
24 DDH
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2231
FAX (661) 654-3342

Institutional Review Board for Human Subjects Research

DATE: 01 February 2010

To: J. J. Wang, Advanced Educational Studies

cc: Paul Newberry, IRB Chair
Brian Hemphill, IRB Faculty Liason

From: Steve Suter, University Research Ethics Review Coordinator

Subject: **Continuing Review and Renewal of Protocol 07-91**

Thank you for attending the IRB meeting of 1-29-10 to participate in the continuing review and renewal of authorization of Protocol 07-91, **"Evaluation for Kern County Children and Families Commission [KCCFC]"**. Based on your quarterly report submitted on 1-06-10 and your discussion with Board members at the meeting, the Board:

[a] accepts the quarterly report for Protocol 07-91,

[b] authorizes a one-year renewal of authorization for Protocol 07-91.

This authorization will be valid until the end of January 2011. If you have any questions, or there are *any changes to your protocol*, *unanticipated problems*, or *adverse reactions*, please contact me immediately. Thank you.

Steve Suter, University Research Ethics Review Coordinator