

# The Greater Littleton Youth Initiative



Nurse-Family Partnership

Big Brothers Big Sisters

Incredible Years

LifeSkills Training

Bully Proofing

Functional Family Therapy

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**BLUEPRINT PROGRAM DATA AND OUTCOMES**

**2010**

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# BLUEPRINT PROGRAM DATA AND OUTCOMES

October 2010

## Background

The Greater Littleton Youth Initiative (GLYI) was organized in response to the Columbine High School tragedy in 1999 to research and implement effective programs for Littleton youth. Group members spent approximately two and one-half years investigating programs nationwide that addressed youth violence. This effort led to the discovery of the Center for the Study and Prevention of Violence. The Center, located at Colorado University, introduced GLYI members to the “Blueprint” programs, evidence-based programs proven to reduce teen violence, substance abuse and family conflict.

The Blueprints are generally considered the gold standard for effectiveness in that each program must not only change the numbers (e.g., reduce drug/alcohol use), be portable to other communities, but also remain effective over time.

Six of 11 Blueprint programs are now operating in Littleton.

- **Nurse-Family Partnership (NFP)**- A program that addresses parenting skills for first-time, low-income teen mothers
- **LifeSkills Training (LST)**- A substance abuse prevention/resistance skills training program for middle school students
- **Functional Family Therapy (FFT)**- A program that provides mental health treatment for teens facing school expulsion
- **Bully Proofing (BP)**- A bully prevention program for elementary school children
- **Incredible Years (IY)**- A social competence skill building program for toddlers
- **Big Brothers Big Sisters (BBBS)**- A mentoring program for children ages 7 to sixteen

A seventh Blueprint program, Multi-Systemic Therapy, is run by the 18<sup>th</sup> Judicial District, which covers a four-county area including Arapahoe County. Outcome data is now available for 4 of the 6 Blueprint programs used in Littleton: Nurse-Family Partnership, Functional Family Therapy, Incredible Years, and LifeSkills Training.

Three of the programs have produced excellent outcomes, and in many cases, better outcomes than the national program averages. One program, LifeSkills Training, has shown mixed results. We are in discussions with the creator of the program to determine why some areas fell below expectations. Two of the programs were not evaluated for reasons to be discussed later.

It should be noted that most of these programs are very low cost ranging from \$8 per student to \$2,000 per student. As a point of comparison, imprisoning a person runs about \$25,000 per year plus the cost of the facility.

### **Program Data and Outcomes**

Much of the data is technical in nature, related to the specific aspects of the program. **But for simplicity's sake, any increase in a bar can be interpreted as good progress.** Where possible we have provided state or national program data for comparison purposes. These national averages have been clinically tested to show significant improvements over control groups (students with similar risk factors but not enrolled in any program).

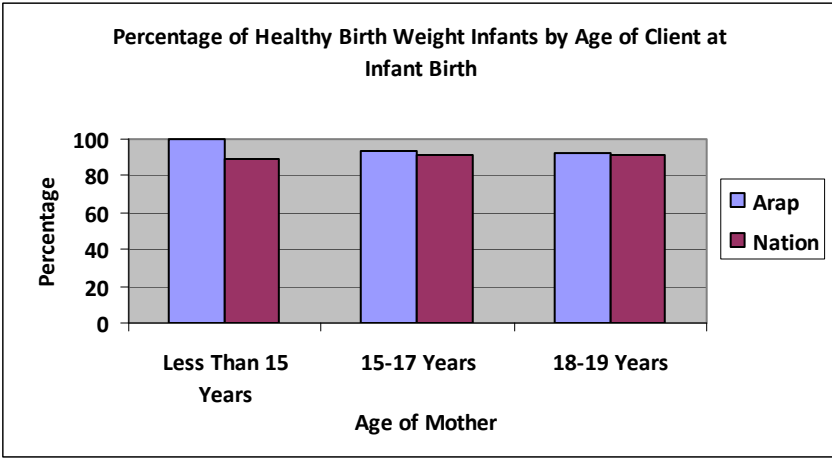
### **Nurse-Family Partnership**

The Nurse-Family Partnership (NFP) is a program that provides parenting skills to teenage mothers prior to a mother's twenty-eighth week of pregnancy and extending to her child's second birthday. Teens learn to care for their health as well as that of their growing babies. They also learn skills to help them obtain employment, finish their education, get access to community support, and find a safe living situation. The NFP program in Littleton is provided by public health nurses at the Tri-County Health Department. Data collected from these nurses is compared to data that is collected from NFP mothers at a nationwide level.

NFP's data measurement focuses on healthy birth weight and the mothers' progress in learning about family planning, such as in how to space subsequent children. Another objective of the NFP program is to assist mothers in reducing their need for public assistance both during and after pregnancy, as well as in helping them complete their education (high school diploma or GED). Because the NFP program is administered by the Tri-County Health Department, our data is at the county level as opposed to the city level. However, we have been advised that it is representative of Littleton moms.

#### *Infant Health-Low Birth Weight*

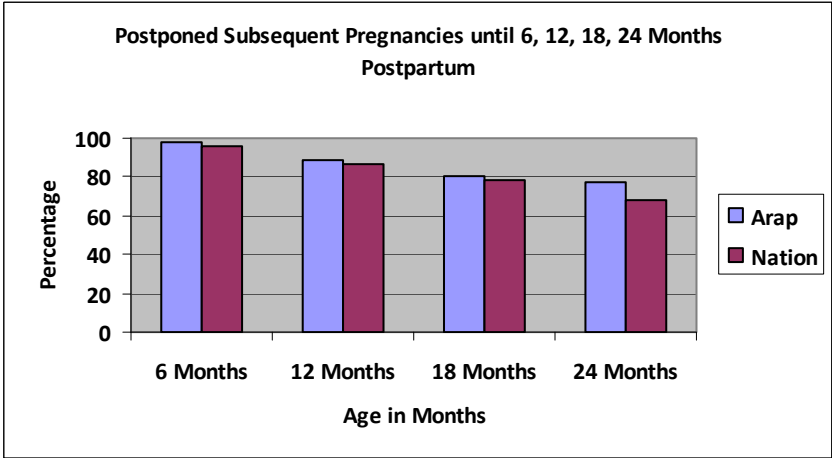
According to NFP program officials, an infant's weight is used as an indicator of his or her overall health. The occurrence of infant death, poor infant health outcomes and developmental delays are highly correlated with low birth weight.



In every age range, teen mothers of Arapahoe County gave birth to healthier birth weight babies than mothers in the national sample.

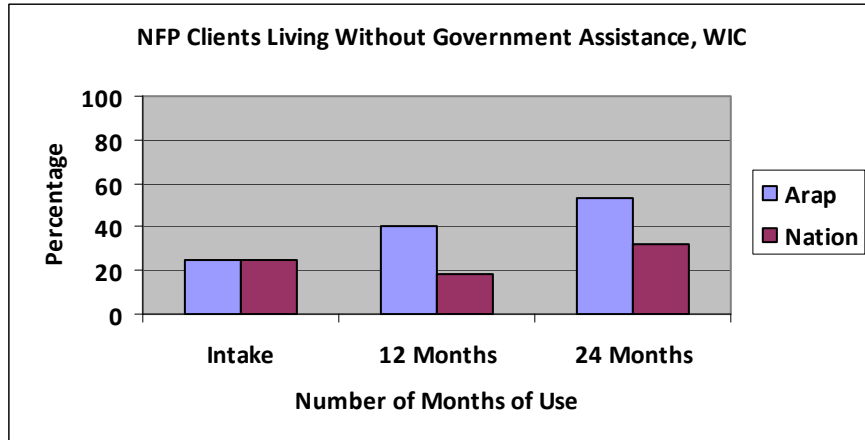
*Subsequent Pregnancies*

Timing and number of a woman’s subsequent pregnancies have important implications for her ability to stay in school, find work, find competent child care, as well as to ensure that her future pregnancies will have healthy outcomes. Delayed subsequent pregnancies are considered to be a positive outcome.



Arapahoe County mothers postponed subsequent pregnancies at a slightly higher rate than the national sample of mothers, especially at 24 months postpartum.

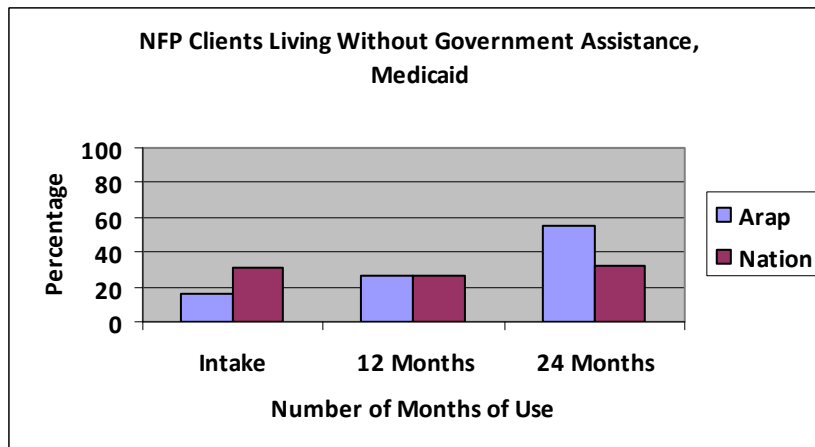
*Government Assistance, WIC (Food and Nutrition Service for Women, Infants and Children)*  
 WIC provides federal grants to states to cover the costs of supplemental foods, health care referrals, and nutrition education for mothers and infants who are found to be at risk.



After 24 months in the program, 55% of Arapahoe County’s NFP mothers were living successfully without WIC.

*Governmental Assistance, Medicaid*

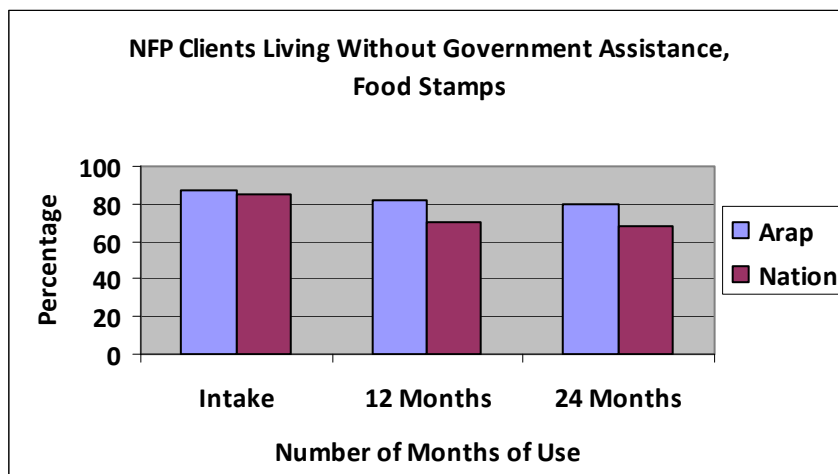
Medicaid is a federal medical care program for certain low-income and disabled individuals. The program is administered by the State of Colorado. The objective of the NFP program is to get young mothers off Medicaid so that they can support themselves and their family.



Eighteen percent of Arapahoe County clients were living without Medicaid at the time of program intake. After 24 months into the program, roughly 55% of the Arapahoe County mothers were living without Medicaid, a figure that far exceeds the national average of the program.

*Governmental Assistance, SNAP (Supplemental Nutrition Assistance Program)*

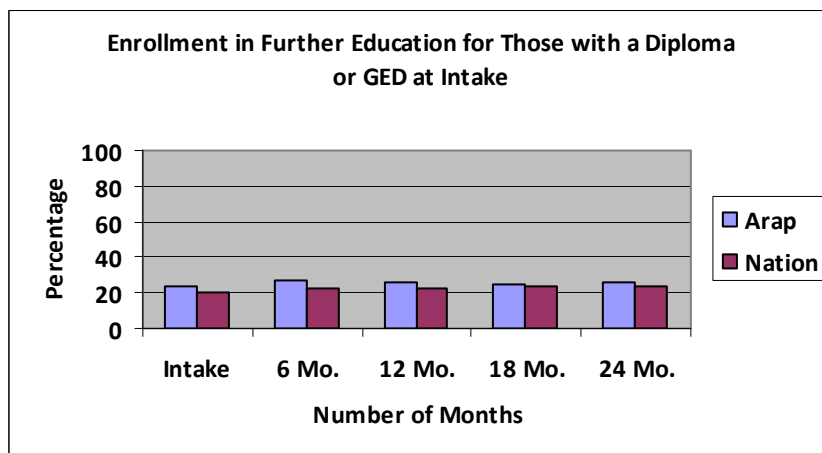
More commonly known as Food Stamps, SNAP is a federal nutrition program for low-income individuals who are in need of support in finding food to eat. Benefits are provided on an electronic card that is used like an ATM card and accepted at most grocery stores.



More than 80% of both Arapahoe County and national mothers used the SNAP program at program intake. At 12 and 24 months, Arapahoe County mothers decreased their dependence on Food Stamps by several percentage points while national mothers' dependence dropped to 70% or more.

### *School Enrollment*

One of the objectives of the NFP program is to encourage mothers who have previously obtained a high school diploma or GED to consider furthering their education beyond the high school level..



At program intake, more than 20% of national NFP mothers chose to return to school. For every month in between program intake and program completion, Arapahoe County mothers participated in post high school or GED education at a rate of 22% or higher than their counterparts who did not participate in the program. While the absolute numbers are relatively low, it should be remembered that only 28% of all Americans obtain a college education.

### *Summation*

The NFP program serves approximately 12 teen mothers at any given time in the greater Littleton area. The program was initially funded by the GLYI, but shortly after implementation in 2000/2001, a large, multi-state tobacco lawsuit settlement that was awarded to Tri-County Health Department (and other Colorado entities) began covering program costs. This funding arrangement continues today.

NFP data outcomes demonstrate the high value of this program to the Littleton community. The GLYI is grateful to have NFP as a resource to offer community teens that would otherwise have little support and access to such positive life opportunities. The key aspect of the program is the mentoring relationship that is built between the young teen mom and her visiting nurse. Through nurturing and encouragement provided by the nurse, mothers learn how to raise healthy children while making a valuable contribution to the community. This is a much better option than facing a life of struggle and poverty.

## **Functional Family Therapy**

Functional Family Therapy (FFT) is a therapy program that creates effective communication in a family by targeting and improving unhealthy interaction styles among family members. The program is commonly used with families experiencing chaos and/or high-risk behavioral issues such as substance abuse, violence or school truancy. Littleton Public Schools (LPS) provides FFT to specific students who have been expelled from the district or to students who are in danger of being expelled. A small number of mental health treatment professionals from Arapahoe/Douglas Mental Health District provide the therapy. Typically, a therapist travels to a student's home to work with all family members.

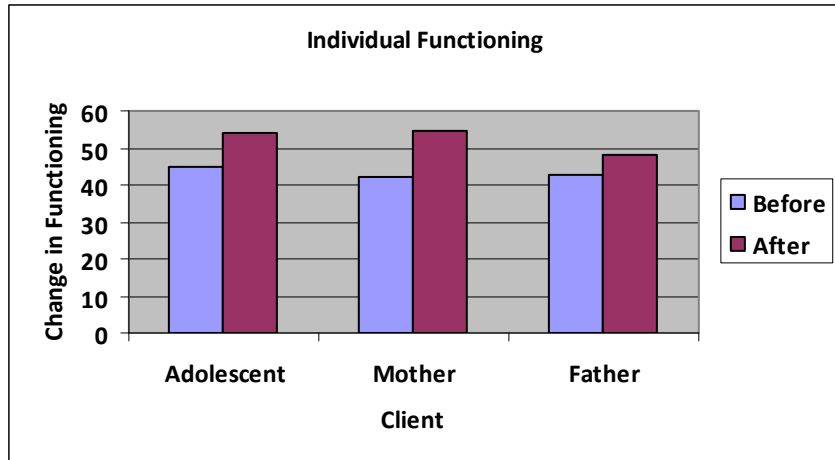
Scientific studies of FFT have demonstrated that the program can have substantial, long-lasting effects in as few as 8 to 12 weeks. Outcomes are measured by the therapist the adolescents themselves and their parents by observing positive changes in the adolescent's behavior over time. Therapy effectiveness is measured using a scientifically-validated instrument that is recognized by the mental health community.

By June 30, 2009, 114 families had been referred to the FFT program. Thirty-four of these families never engaged in services while 55 families completed treatment. Nineteen families were still receiving services at the time of this report. Since the program's implementation, only 6 families who started the program have dropped out.

The national FFT model requires each family member to complete a pre-questionnaire and a post-questionnaire to describe overall family functioning. This is a measurement of how family members handle discomfort in life situations, conform to societal expectations, and sustain long-term interpersonal relationships.

There are 45 questions that are rated on a 0 to 4 point scale (0 = almost always; 1 = frequently; 2 = sometimes; 3 = rarely; 4 = never). Sample questions include; "I get along well with others", "I feel worthless", "I have trouble getting along with friends and close acquaintances", "I feel fearful", and "I blame myself for things." Scores are additive and a decrease in total point value indicates positive change in an individual's functioning.

Total	Adolescent			Mother Figure			Father Figure		
	Pre	Post	Change	Pre	Post	Change	Pre	Post	Change
	54.24	44.97	-9.27	54.84	42.3	-12.54	48.13	42.84	-5.29

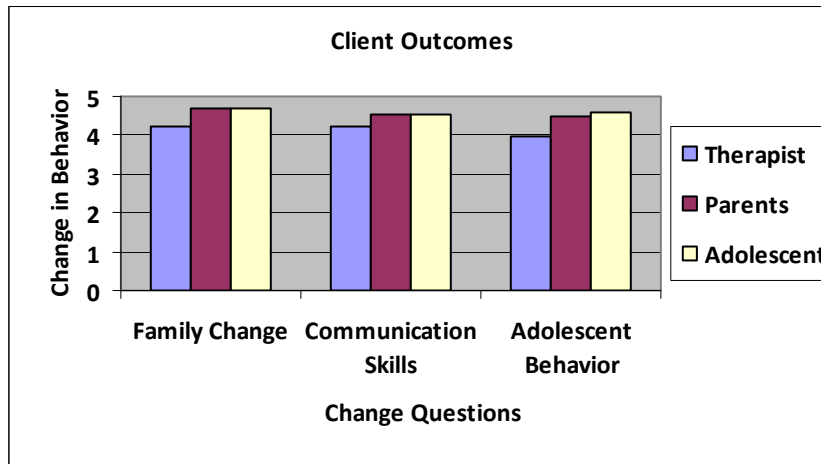


Each family member receiving FFT therapy showed improvements in functioning. The presence of negative factors went down for each individual. Fathers demonstrated the least amount of change.

FFT progress was also rated for:

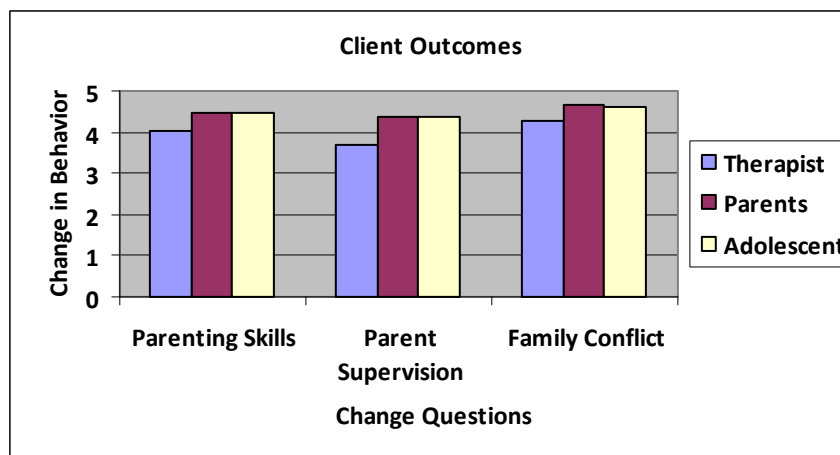
- Family Change (overall change in family functioning)
- Communication Skills
- Adolescent Behavior
- Parenting Skills
- Parent Supervision
- Family Conflict

A great deal of positive change was observed in all measurement areas, not only by the parents and the adolescents but by the therapists as well.



Parents and adolescents were virtually tied in their perceptions of family change, communication skills and adolescent behavior. Therapists recorded a bit lower in all categories.

A great deal of positive change was also seen in the areas of parenting skills, parent supervision and resolving family conflict.



Interestingly, parents reported a slightly higher reduction in family conflict than the adolescents. The therapist's observations were similar to the other outcome measures; however they rated parent supervision approximately 13% lower than the other change questions.

### *Summation*

The GLYI is pleased to have founded the FFT program as its effectiveness is unparalleled by other therapy programs. Typically, FFT therapy can drastically (positively) alter the dynamics of a chaotic or troubled family in as little as 8 weeks and the results are long-lasting.

### **Incredible Years**

The Incredible Years (IY) is a social competency program for children ages 3 through eight . Children learn how to communicate, control negative behaviors and to work with their peers in a group setting. The program involves the use of dinosaur puppets that teachers manipulate to imitate various life lessons. It also has a parent education component that provides the children's parents with basic parenting skills

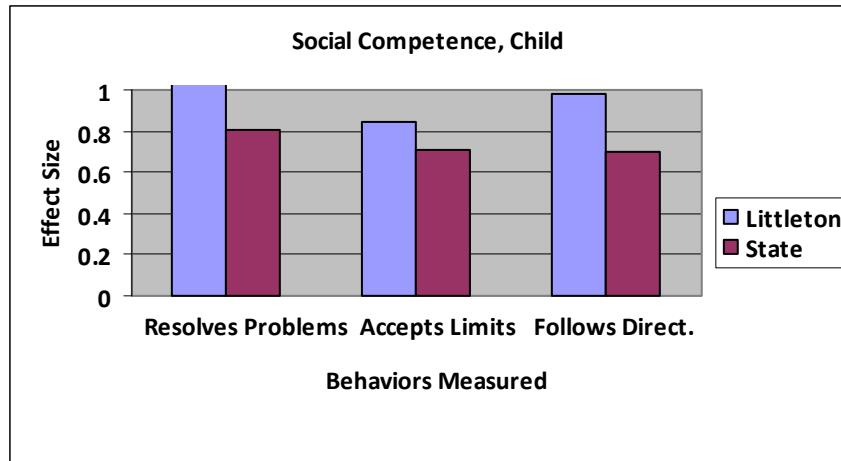
The IY program was implemented at the Village Preschool in the 2005/2006 school year as part of the school's social-emotional curriculum expansion process for meeting new state standards. The IY program has grown each year since implementation and is now used in all 14 classrooms. To date the program has served over 1000 children.

IY has produced extremely impressive outcomes since its implementation. Two data scales measure program outcomes: *Social Competence* (growth of child's behavior skills) and *Appropriate Parenting Practices* (growth of parent's parenting skills).

Outcome data is compared to state samples of children receiving the IY program as well. Outcomes are measured by "effect size" or the amount of change seen in a sample with 0 representing no change. (This works similarly to interpreting a "percent difference" on a metric scale.) Within social research, effect sizes tend to be small, often less than .2. Most Village Preschool outcomes are much higher than this and higher than state outcomes as well.

The first scale for program measurement is *Social Competence*, which includes the following subscales.

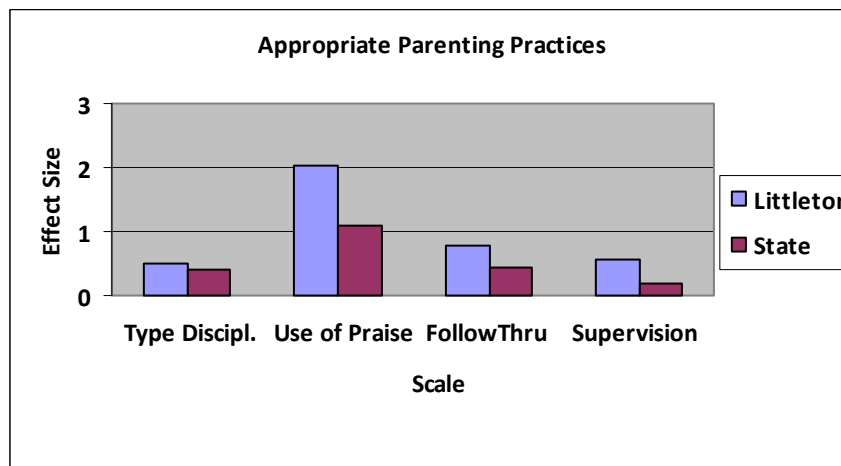
- Resolves Problems (child can resolve peer conflict issues)
- Accepts Limits (child can accept teacher's expected behavior)
- Follows Directions (child is able to follow classroom directions)



Village Preschool children made greater strides than their state counterparts, particularly in solving peer problems and following teacher instructions. Village Preschool effect sizes ran .13 to .28 higher than state samples.

The *Appropriate Parenting Practices* scale is made up of the following subscales.

- Type of Discipline (parent’s discipline matches situation)
- Use of Praise (parents’ praising or complimenting child)
- Parent Follow Through (parent follows through with action)
- Supervision (parent supervises child appropriately)

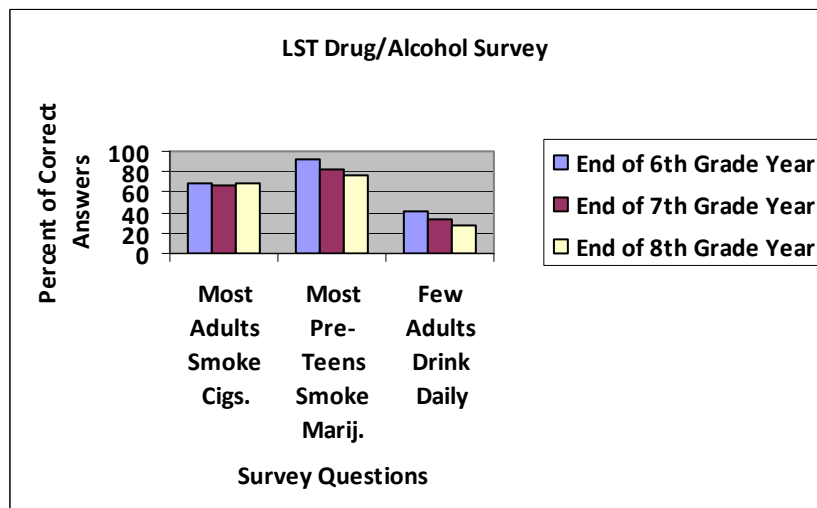
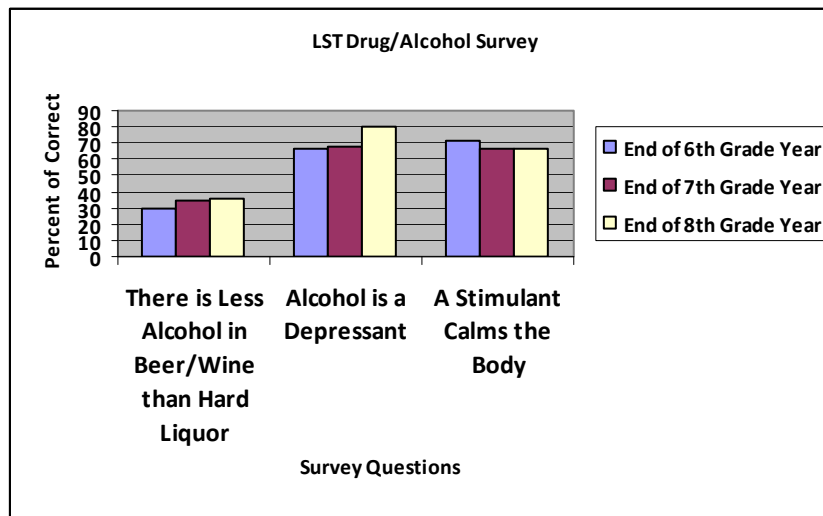


All 4 subscales show positive parental growth and skill development with respect to using appropriate discipline, following through on their teachings and providing appropriate child supervision. Parents demonstrated a great deal of growth in using praise with their child. Effect sizes ranged from .09 to .94 higher than state samples.

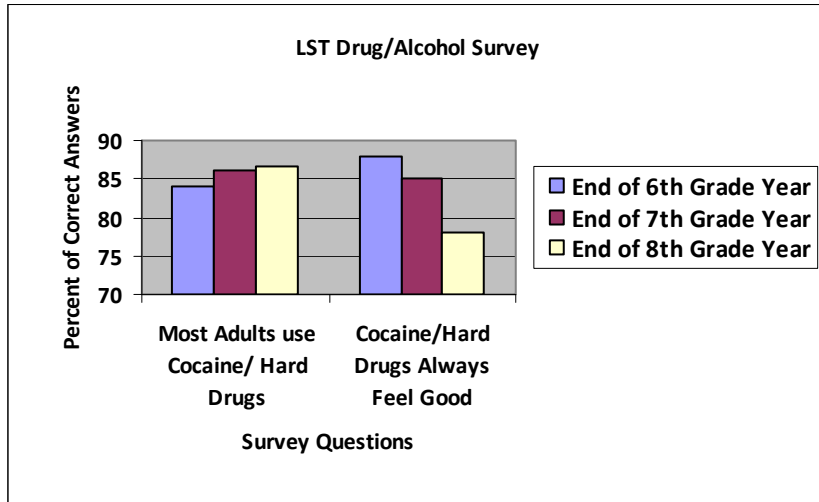
## LifeSkills Training

LifeSkills Training (LST) is a drug/alcohol resistance and social skills learning program designed for middle school children, grades 6 through eight. Students learn drug and alcohol refusal skills, and other social skills that frequently help them to raise their self-esteem. The LST curriculum consists of 15 lessons in sixth grade, 10 lessons in seventh grade and 5 lessons in eighth grade. The effects of LST are proven to carry into the high school years. The program is a non-scare tactic program that teaches an accurate view of the effects of drug and alcohol use on the human body.

The LST program has had somewhat mixed results. As can be seen in the 2 following charts, there were 2 questions that consistently graded low in all 3 grades (“Is there less alcohol in a glass of beer/wine than in a hard liquor drink?” and “Do only a few adults drink daily?”)



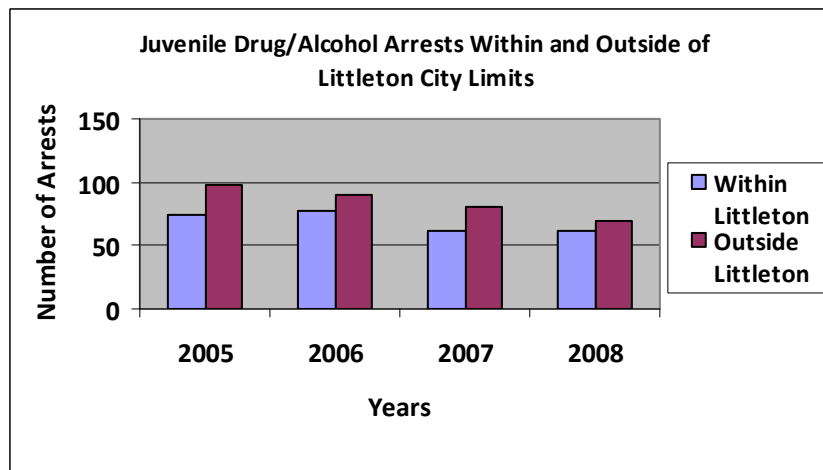
Interestingly, this trend is seen in all 3 grades, all classes and all years. After conversing with other communities who have experienced these same phenomena, we began questioning the nature of the exam and the construct of the questions. We also considered the strength of the fidelity in teaching the program. Another possibility could be that students were seeing something different in real life; therefore, when faced with a choice between what they were taught and what they had seen, they choose the latter.



Because of the questions surrounding the effectiveness of LST, we looked at additional local data sources that might give us an indication of whether juvenile drug and alcohol usage was an issue in our community. We began with the Littleton Police Department.

#### *Drug and Alcohol Arrests*

The Littleton Police Department keeps specific records for juvenile drug and alcohol arrests. We looked at data from the 2005 base year (No high school class had all 3 years of the LST program) through 2008 (The freshmen, sophomores and juniors had all 3 years of the LST classes). We also divided the data of individuals who were arrested into 2 categories: those living within the city limits and those living outside of the city limits.

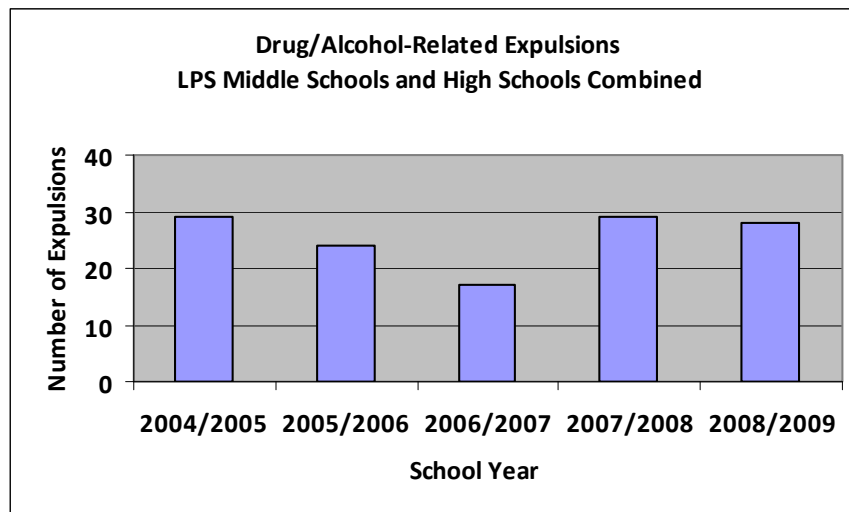


Outcomes demonstrated that while the number of drug and alcohol arrests outside of Littleton declined each year beginning in 2005, the number of arrests within Littleton followed a similar but more inconsistent pattern of change.

Littleton Public Schools tracks drug and alcohol-related expulsions for students in the district. We examined their data from the 2004/2005 school year through the 2008/2009 school year.

*School Expulsion Data*

The total number of drug and alcohol-related expulsions for both middle schools and high schools combined is low.



The data demonstrate however that the number of offenses is not dropping significantly but rather follows an inconsistent pattern. The school district is continuing further in-depth analysis of these expulsion patterns as well as the needs of students and families. This analysis includes determining the details of each case to establish whether there are patterns of infractions that are related to drugs or alcohol.

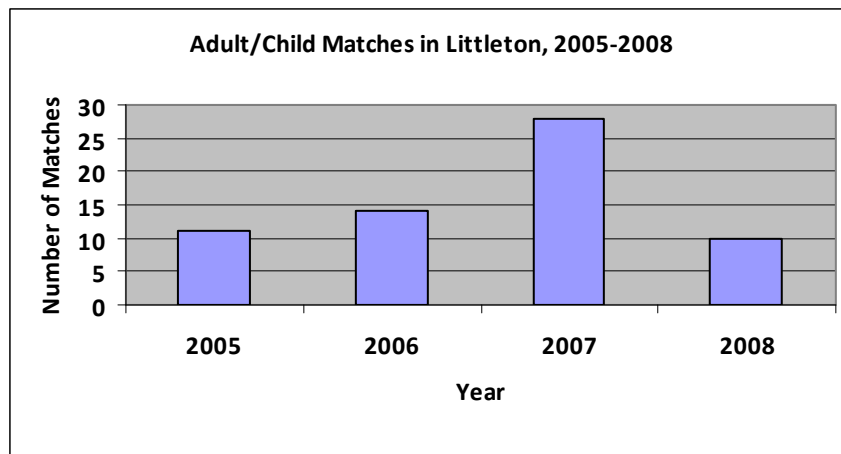
*Summation*

The LST program has variable results with end-of-year test data that shows several questions with a high failure rate. Littleton Police records indicated an overall positive 4 year decline in youth arrests for drug and alcohol offenses. LPS expulsion data is variable with some patterns requiring further examination. LPS is in the process of determining the impact of LST through focus groups of participating students and staff and a closer examination of discipline data. All 3 types of community data must continue to be collected and compared so that more accurate conclusions can be drawn, and solutions can be planned for addressing drug and alcohol use and abuse by Littleton’s community youth.

## Big Brothers Big Sisters

Big Brothers Big Sisters (BBBS) is a well-established mentoring organization that provides services to children ages 7 through 16 in the Denver metro area. Although BBBS operates both community and sports mentoring programs, its largest program provides mentors to children who use the state's Free & Reduced Lunch program as well as have one or more parent in long-term incarceration.

The GLYI works with BBBS in helping provide mentor and/or child recruitment when possible and has done so since GLYI's inception. BBBS is administered by a local Denver metro agency that has had budget challenges in recent years. The organization has reported activity data about successful mentor relationships (or matches of "Bigs" and "Littles") in the Littleton area for the years 2005 through 2008.



While the number of mentor relationships showed an increasing trend in 2005 and 2006, and a substantial increase in 2007, mentor numbers dropped significantly in 2008. This was a reflection of a downturn in the local economy which resulted in fewer and smaller funding streams than usual.

In addition to the BBBS program, the City of Littleton has actively participated in a local mentoring program for the past 9 years that appears to be very effective. East Elementary School brings community volunteer mentors together with school children over a lunch hour once a week. In a typical year, 12 or so city staff (out of 30 to 40 total mentors) participate in the program. Although this is not a Blueprint program and no formal evaluation has been made, anecdotal information indicates that the program is valuable in improving student class work. It also helps students build self-esteem and learn how to establish positive relationships with adults.

## Bully Proofing

Bully Proofing (BP) is one of the GLYI's smaller programs and is designed to reduce bullying in an elementary school setting. The program weaves a bully prevention culture into the school

environment so that bullying behavior is not tolerated by children or adults. The program provides special assistance to victims, as well as one-on-one work with the bully.

BP is not used in all LPS elementary schools. Following the Columbine High School tragedy of 1999, the State of Colorado directed all Colorado schools to have a bully prevention “plan” put in place. LPS had been using the Second Step and Character Education programs prior to this time, but then began implementing BP when possible. Five elementary schools in total adopted the BP program.

Recently a new program has been introduced in many district schools (and will ultimately be placed in all LPS schools) called Positive Behavioral Supports. This program provides character education and includes a bully prevention component. While this is not a Blueprint program, LPS believes it is an effective program and that it dovetails well with other district objectives. No evaluation data is available for the BP program in Littleton.

## **SUMMARY**

Although Littleton suffered a terrible tragedy with the student shootings at Columbine High School in neighboring Jefferson County, good things have grown in the Littleton community as a result of the event. The establishment of the GLYI has allowed the Littleton community to implement a number of highly effective, evidence-based programs to help youth and families. These programs cover a gamut of issues including prenatal health, toddler social skill building, family conflict resolution and teen drug/alcohol use.

Outcome data for the Nurse Family Partnership, Incredible Years, and Functional Family Therapy programs demonstrate that these programs are making a significant change for the good. Program data surpasses that of state and national comparison data in many cases.

The LifeSkills Training program has had variable outcomes. This is of concern to staff and is being investigated further regarding the fidelity and future use of the program. Police arrest data shows an overall positive decreasing trend but school expulsion data has no particular pattern. The City of Littleton and Littleton Public Schools will continue their work in hopes of resolving these varied outcomes.

Big Brothers Big Sisters program data demonstrates that the organization continues to build mentoring relationships in our community as they are financially able to do so.

The Bully Proofing program is used in 5 elementary schools and is supplemented by 2 non-Blueprint programs (albeit programs that have been shown to be effective) at the remaining schools. LPS has not formally evaluated BP making it difficult to demonstrate program value, however the program objectives fit nicely with the new district-wide Positive Behavioral Supports program.

Although this report focuses mainly on evaluation data, it must be mentioned that all of the programs provide on-going anecdotal feedback regarding the positive effect the programs have on community individuals and families.

## **CONCLUSION**

We recommend that GLYI members remain committed to Blueprint programs because their proven success and their positive cost/benefit outcome demonstrates responsible use of our scarce resources. Original research shows that when implemented correctly, the programs are clinically proven to be effective. It is our opinion that the Blueprint programs have been beneficial to the youth and families of the Littleton community and that they are making a real difference for people of all ages, from babies to teenagers, parents and families.

The programs have been funded by an unbroken string of five Littleton city councils working closely with major community organizations such as Littleton Public Schools, Arapahoe/Douglas Mental Health Network, South Metro Chamber of Commerce, 18<sup>th</sup> Judicial District, Arapahoe County Sheriff, Tri-County Health Department, South Suburban Parks and Recreation District, Arapahoe Community College and numerous committed community organizations and volunteers. GLYI is a model of extraordinary collaboration between community organizations and individuals which is helping to make Littleton a safer and healthier place for youth and families to live.