

# KidsCAN Avoid Tobacco Final Evaluation Report March, 2013

### Introduction

EDUCATION CONNECTION, in partnership with the school districts of New Britain and Danbury, as part of its ongoing efforts to support and expand tobacco prevention and cessation efforts at the local level, has completed the implementation of the "*KidsCAN Avoid Tobacco Program*" funded by the Connecticut Department of Public Health (CDPH). The KidsCAN program targeted three primary goals: 1) Prevent initiation of tobacco use in youth, 2) Promote access to cessation programs and 3) Promote the elimination of exposure to second hand smoke.

As one component of these ongoing efforts, the Center for Collaborative Evaluation and Strategic Change (CCESC) at **EDUCATION CONNECTION** completed evaluation activities in partnership with the external evaluator, Words & Numbers Research, Inc. Evaluation was intended to document the success and results of implementation efforts. Overall evaluation activities were designed to provide insight into the effectiveness of project activities and achievement of goals and objectives; to encourage the adaptation of practice based on data to enhance project effectiveness and to assess the relationship between project activities and tobacco use cessation and prevention. This report summarizes results of the interim evaluation activities.

#### **KidsCAN Avoid Tobacco**

The *KidsCAN Avoid Tobacco Program* is an elementary and middle school initiative designed to incorporate high potential, engaging, school-community approaches to prevent, reduce or eliminate tobacco use by Connecticut youth. Using an innovative program model, the KidsCAN delivery plan develops and pilots innovative and promising strategies using coordinated and engaging school-community approaches to tobacco use prevention. Activities are targeted to youth ages 5-14 to promote tobacco free lifestyles that focus on preventing initiation, promoting access to cessation programs by students, parents and school personnel and promoting the elimination of exposure to second hand smoke. KidsCAN builds upon promising innovative national and state youth tobacco use prevention programs and resources including the Campaign for Tobacco Free Kids, Legacy's Truth Campaign, Tar Wars, and model practices from the Orange County (NY) Department of Health's Tobacco Control Program. Guidance from the Centers for Disease Control and Prevention's (CDC) *Best Practices User Guide: Youth Engagement*—State and Community Interventions is also integrated.

Implemented activities developed to address key project goals include:

## **Goal 1:** Prevent initiation of tobacco use in youth:

- Develop, pilot and implement curricular enhancements in arts, language arts and PE classrooms to reach all K-8 students
- Coordinate and conduct professional development workshops and in-classroom coaching fully integrating tobacco use prevention in K-8 arts, language arts, and PE classes.

### **Goal 2:** Promote access to cessation programs

- Develop and implement school and community programs, after school clubs, and student-led tobacco prevention leadership activities to engage students and foster youth leadership and advocacy.
  - o School programs include:
    - After School Clubs—once/week for six weeks, repeated twice per year
    - Kick Butts Day
    - Gaffitti Wall
    - Middle School After School Dance Clubs—eight times per year for two years
    - Middle School Digital Media Clubs—ongoing for two years
    - K-8 Billboard Competition
    - Interactive Master Theatre and Writing Workshops
  - o Community programs include:
    - KidsCAN Tobacco-Free Family Fun Day at Quassy Amusement Park

- Rock Cats Baseball Tobacco-Free Family Fun Game Night
- Advertise and market the tobacco use prevention program to agencies and organizations that serve youth.
- Refer tobacco users to the Connecticut Quitline

**Goal 3:** Promote the elimination of exposure to second hand smoke:

- Develop and conduct Parent Involvement/Empowerment programs to improve family protective factors and skills in preventing tobacco use in children. Parents programs include:
  - o Everyone's an Asset Builder
  - o Great American Smoke Out Family Program
  - o Coordinate and conduct Family-Centered Weekend/Summer Community Health Promotion and Tobacco Use Prevention Educational Programs and Special Events

## **Final Evaluation Summary**

<u>Overview</u>: Internal and external evaluation activities were completed during 2011-2013 and were designed to collect data to assess completion of activities and achievement of the goals of the *KidsCAN Avoid Tobacco* program. The internal evaluator, Dr. Mhora Lorentson of CCESC, worked closely with the external evaluator, Dr. Susan Carroll of Words & Numbers Research, Inc. to ensure that internal evaluation activities supported but did not duplicate external evaluation activities. Internal evaluation activities were developed and data collected to enhance the data collection process conducted by Words & Numbers Research.

**Evaluation Questions**: The internal and external evaluation processes were designed to answer evaluation questions linked to program goals and objectives. Evaluation questions addressed include the following:

Question 1: To what extent has the KidsCAN program implemented tobacco-prevention programs designed to prevent the initiation of tobacco use in youth?

<u>Question 2</u>: To what extent has the KidsCAN program implemented programs to promote access to cessation programs for the school community?

<u>Question 3</u>: To what extent has the KidsCAN program implement programs designed to promote the elimination of exposure to second hand smoke?

**Data Collection Methods and Activities:** Data collection methods informed process and outcome evaluation and included qualitative focus group interviews conducted with teachers, observations of classroom activities in one elementary and one middle school one time per activity type, a pre-post survey to club participants in grades 3-8, teacher and club leader satisfaction surveys, a professional development survey administered to teachers participating in professional development activities, parent satisfaction surveys administered at each activity, observations of one community activity per year, and examination of process data collected by the Project Coordinator and provided to Words & Numbers Research for compilation and analysis.

Data collection methods informed process and outcome evaluation and included the following:

- A. *Professional Development Survey*: One survey administered to teachers participating in professional development activities:
- B. *Process Documentation:* Documentation occurred as follows.
  - *Process Tracking*: Words & Numbers provided the Project Coordinator with an excel template for use in tracking all process data. The completed file was used to summarize process data.
  - *Document Review*: Meeting notes and documents related to the implementation process at the local level were reviewed to assess and document the process used. Documents reviewed included:
    - o All reports provided to the CDPH
    - o Curricula and materials provided to schools and districts and shared at community activities
    - o Tar Wars presentations
    - o Free Schools Portfolio

- Observations: Activities were observed as follows:
  - Two elementary school observations of classroom activities in preparation for Child's Play during spring,
     2012
  - One whole school presentations of Child's Play held at Vance Elementary School, New Britain
  - One Kid Butts activity held during the physical education period for fifth grade students at Morris School, Danbury.
  - One Parent Leadership workshop held in New Britain
- C. Quarterly Meetings with the EDUCATION CONNECTION Project Director and Coordinator: Drs. Lorentson and Carroll participated in quarterly planning and review meetings with the project staff.
- D. *Teacher Satisfaction Surveys:* These surveys were designed by CCESC and administered in scannable form upon completion of key activities.
- E. *Pre-Post Surveys for Elementary and Middle School Participants*: These surveys were designed by CCESC in partnership with Words & Numbers and were administered prior to and upon completion of club activities.

## **Instrumentation and Data Collection**

The instrument development and data collection process used is summarized below for each component of the methodology including on-line survey, interview and observation development and administration.

- A. <u>Professional Development Survey:</u> Survey questions were developed linked to project goals and were designed to access perceptions of professional development.
- B. <u>Documentation Activities</u>: Documentation activities included a review of the excel file used to track project activities, a review of meeting notes and documents related to the implementation process, and observation activities. Throughout the documentation process, key activities, discussions and interpersonal events or reactions were noted as appropriate. Documentation activities were evaluated by Dr. Susan Carroll.
- C. <u>Pre-Post and Satisfaction Surveys</u>: Survey items were developed linked to project goals objectives and were designed to access perceptions of project implementation, success of project activities and student achievement. Administration of pre-post surveys was accomplished using student identification numbers and was designed to facilitate the collection of paired data.
- D. <u>Quarterly Evaluation Meetings</u>: Evaluators participated in quarterly project meetings designed to share evaluation results and project activities as appropriate.
- E. <u>Classroom/Community Observations</u>: An observation guide linked to program goals and objectives was designed and used to collect data related to the implementation of program activities at a local level.

<u>Data Analysis</u>: Conceptual analysis of responses was used to analyze focus group interview results. Survey results were analyzed using SPSS, Statistical Package for the Social Sciences. A one-sided paired t-test was used to compare pre-post results.

## **Final Evaluation Results**

It is noted that this report provides summary information for activities occurring through March, 2013.

### **Evaluation Results**

Results are described for each data collection method used.

## A. <u>Professional Development Survey:</u>

An on-line survey was administered to 80 classroom teachers participating in any aspect of instructional coaching or small group work facilitated by the KidsCAN program. Twenty four teachers completed the survey providing a response rate of over 25%. Of responding teachers, 40% were from New Britain and 60% were from Danbury. Teachers had been primarily involved in the following activities:

Action Club: 12.5% Student Action Club: 4.2% Healthy Children, Healthy Minds: **Summer Enrichment Programs:** 25% 33% Child's Play: 4.2% Tar Wars: 8.3% Kick Butts Day: 12.5% Billboard Competition: 20.8%

Science Saturdays: 20.8%

Table 1: Teachers Perspective on Professional Development: Classroom Teachers Frequency and Mean

		Strongly Disagree or Disa- gree (1 and 2)	Neither Disagree Nor Agree (3)	Agree or Strongly Agree (4 or 5)	Mean
1)	I am confident in my ability to integrate tobacco-use prevention for children and youth into my teaching.	0%	8.7%	91.3%	4.3
2)	The information I was provided helped me integrate tobacco prevention into my teaching.	0%	17.4%	82.6%	4.2
3)	I am satisfied with the information I received throughout the KidsCAN project.	4.5%	13.6%	81.8%	4.1
4)	The instructional coaching/professional development I received gave me the information I needed to teach my students.	4.3%	13.0%	82.6%	4.1
<b>5</b> )	I was provided the resources I needed to teach KidsCAN activities	4.3%	26.1%	69.6%	4.0
6)	I found the instructional coaching/professional development I received very helpful.	0%	26.1%	73.9%	4.0
7)	The instructional coaching/professional development I received was well-organized.	0%	34.8%	65.2%	3.9

Survey results showed that, for 4 out of 7 items, 80% or more of teachers "Agreed" or "Strongly Agreed" with the statement, indicating a high level of overall satisfaction with professional development. All items received a mean response of 3.9 or higher indicating overall agreement.

# B. <u>Documentation Activities</u>

## Process Tracking:

A process tracking form was maintained by the Project Coordinator and submitted to Words & Numbers Research on a quarterly basis and was used to collect data on a monthly basis. Information collected included the program component, the target goal or objective, the months and days of implementation, the numbers of participants including staff, students, parents and community members, district and school type.

A review of the completed tracking form identified comprehensive documentation of a range of activities implemented to achieve each program goal. The final report of these activities submitted by Dr. Susan Carroll is below.

*Background and Goals*: The KidsCAN Avoid Tobacco Program was funded through a grant from the Connecticut Department of Public Health (DPH). The recipient of the award was Education Connection, a Regional Education Service Center (RESC) in northwestern Connecticut. The Program Coordinator was Lauren Contorno.

The purpose of KidsCAN was to prevent the initiation of tobacco use in youth ages 5 through 14. To accomplish this goal, innovative approaches were designed and implemented. These included:

- Curricular enhancements and activities that extended beyond traditional health education courses to the arts, language arts, and physical education;
- Interactive school and community programs;
- After school clubs and student leadership activities;
- Parent involvement and empowerment;
- Other related initiatives.

New Britain (NB) and Danbury (D) provided program participants. Students in grades kindergarten through eight represented 29 elementary and middle schools from those two districts.

External Evaluation Methodology: Words & Numbers Research, Inc. (WNR) provided external evaluation services during the course of the grant. Dr. Susan Carroll, president of WNR was the evaluation consultant. The method used to externally evaluate the project was Results Based Accountability (RBA) which poses three questions:

- How much did you do?
- How well did you do it?
- What impact did you have?

The external evaluation focused on the first question of RBA: How Much Did You Do? To assess this, a Program Implementation Monthly Activity Report was designed by WNR. Lauren Contorno, the Program Coordinator, submitted this report to WNR. This report asked for the program component, target objective, dates and lengths of implementation, number of students by grade and level, number of human resources deployed and the school district.

In addition, quarterly meetings were conducted with the Program Coordinator Lauren Contorno, the Interdistrict Grants and Development Coordinator Abby Peklo and the Internal Evaluator, Dr. Mhora Lorentson. These individuals were staff members of Education Connection. The meetings occurred in September 2011, December 2011, March 2012, July 2012 and December 2012 at the Education Connection headquarters. The purpose of these meetings was to review program activities, determine if progress was made toward goal attainment, discuss programmatic strengths and challenges, and strategize any changes needed to facilitate program implementation going forward.

The following report documents the implementation of the activities/deliverables as contracted with DPH. There were 16 activities or deliverables. However, the first two were project management functions and not programmatic. Fourteen deliverables (3 through 16) were evaluated by WNR. Each will be identified with respective analysis

Summary of External Evaluation Findings: The KidsCAN Avoid Tobacco Project satisfactorily provided the 14 contracted deliverables, as were proposed:

- Curriculum enhancements were developed and implemented.
- Leadership Action Clubs were developed and implemented.
- After School Art Clubs were developed and implemented.
- Digital Media Clubs were developed and implemented.
- After School Dance Clubs were developed and implemented.
- Parent/Guardian Empowerment workshops were conducted to assist with risky behavior avoidance in children.
- Community-wide special presentations (formerly Family Game nights) in conjunction with GASO were held.
- Events and activities related to Kids' Kick Butts Day were held during March.
- The annual Art in the Park Day at Quassy Amusement Park was sponsored.
- Tobacco Prevention Game Day at Rock Cats New Britain Minor League Baseball Park was sponsored.
- A billboard competition focusing on tobacco use prevention was conducted.
- A theater program (Child's Play) focusing on tobacco use prevention was implemented.

- Collaboration with community agencies was undertaken.
- Program participants and their families were referred to the CT Quitline for smoking cessation support.

It is estimated that approximately 150 program days were dedicated to <u>actual</u> implementation (not planning) activities. There were 5,823 elementary students and 2,345 middle school students who participated. Eighty-eight teachers assisted in the implementation. Parents (450) and community members (410) were also involved.

The following pages provide details to support these findings.

- I. Develop and assist with the implementation of the KidsCAN <u>curriculum enhancements</u> in the New Britain and Danbury school districts.
- Teachers in New Britain and Danbury were introduced to curriculum enhancements.
- Program Coordinator Lauren Contorno was fundamental in the curriculum enhancement acquisition process
  and spent a great deal of time onsite with educators. She introduced games and activities such as Tobacco Bingo, Clever Catch Ball Hot Potato, Circle Catch & Answer, Smoker's Roulette, Interview an Ex-Smoker,
  Healthy Choice vs. Non-Healthy Choice Game. Specifically, teachers learned how to infuse tobacco prevention into their curricula through instructional coaching and shared resources.
- Inclusion into math, science, language arts and physical education classes was encouraged. The Program Coordinator introduced games and activities with anti-tobacco themes.
- A Tobacco Educator held a professional development workshop with twenty-five teachers from grades K through 5 in Danbury. The focus was on tobacco ideas for use in the classroom (Tobacco Math: How much would you spend in a week/ month/ year/ 20 years/ 50 years if a pack of cigarettes is \$9.57? What can you buy with all the money you saved from not using tobacco? Hands-On Cigarette Science: Carbon Monoxide & Other Poisons; Smokeless Tobacco; Tobacco Stains; and Simulated Blood Vessel Restriction.)
- Teachers also worked in conjunction with Child's Play educators. 29 teachers in Danbury and New Britain attended Child's Play to reinforce usage in the classroom.
- Detailed descriptions of Tobacco Facts were made available as well as social norms for teachers' ability to reference
- II. Develop and assist with the implementation of <u>After School Student Action Clubs</u> for middle school youth in Danbury and New Britain.
- KidsCAN Student Action Club advisors were hired, and student participants, recruited. The Program Coordinator met regularly to ensure the integration of tobacco related items into the discussion.
- The clubs met regularly with 10 students at Rogers Park Middle School (D) and 15 at the YMCA Student Action Club (NB). Students at both locations set up interactive exhibits and educational materials.
- Interactive exhibits for middle school students included Smoker's Roulette, age appropriate tobacco displays, such as ingredients in a cigarette, diseased tongue, tar in a jar and stinky butts. Educational reading materials such pamphlets on peer pressure, coping with stress in a healthy way, secondhand smoke, smokeless tobacco, effects on the environment, tobacco marketing and effect on appearance were disseminated. Information for parents, such as second and third hand smoke, smoking in the car and at home was shared. Free instructional incentives included logoed pencils, buttons, bracelets, chains, mints, gum and comic books.
- At the elementary level the interactive display also included colorful pamphlets containing activities, such as the effects of smoking on animals. Free instructional incentives included a colorful activity book designed and printed by Education Connection and Smoke-Free Home & Car Pledge placements written in Spanish and English.
- There were numerous activities undertaken by the Action Clubs in Danbury and New Britain. The following summarizes a sampling of these:

Tobacco Free Pledge posters were created and displayed in Danbury schools. This was an activity that the students created and implemented on their own. The Student Action Club recruited the help of their Student Council. Together this group visited homerooms to promote the poster contest. Each homeroom was left with poster boards and markers. P.A. Announcements were made each morning by the Action Club students to encourage peers to sign the poster and state a reason why it was important to be tobacco free. The Action Club students then chose ten students they thought gave the most thoughtful statements. Each student received a \$15 gift certificate to J.K.'s a local, popular restaurant. The owner of J.K.'s was presented with a thank you card and a KidsCAN Avoid Tobacco t-shirt for his generous contribution of a discounted price, which allowed the purchase of gift certificates for the winners.

- III. Develop and assist with the implementation of <u>After School Student Action Clubs</u> for middle school youth in Danbury and New Britain.
- The Action Club students in Danbury created the *Question Box*, placed in the media center for a month. Each week a question was displayed outside the box for students to contribute thoughtful responses. Also, students were encouraged to ask a question about tobacco related issues that middle school students face. At the end of each week, the Action Club chose a question or answer to share with the school during P.A. morning announcements.
- The Action Club students in Danbury traveled with the project's exhibition table to Morris Street School for the *Evening Science Celebration*, which was attended by more than 400 students and parents. The Action Club returned to Morris Street School to present a short tobacco prevention skit to 4th and 5th grade parents and students during an Open House.
- The Action Club in New Britain planned a *Tobacco Education event* for K-8 students at the YWCA's afterschool program. The students designed and created a Healthy Choice Ball Toss game, Tobacco Ingredients in a Box game and a creative version of The Game of Life. The Action Club students also learned how to facilitate Smokin' Straws activity, which shows how tobacco use affects the lungs' ability to function normally. The students also staffed the tobacco education table with displays and instructional incentives. They led a friendly competition for students to return the Smoke Free Car and Home Pledge, signed by a parent. Each student who returned a pledge received a project pencil. There were other contests as well, including guessing the number of stinky butts in the container, collected from an actual smoker. The winner received a \$10.00 gift card to a local business.
- Friendly's restaurant displayed the smoke free car and home placemats (in Spanish and English) due to the initiative of the Student Action Club members who thanked the staff with personal notes.
- Student Action Club movie nights were held for 150 students to introduce ways that cigarettes are marketed to youth and siblings. A discussion was facilitated afterwards
- IV. Develop and assist with the implementation of <u>After School Art Clubs</u> in Danbury and New Britain focusing on tobacco use prevention.
- Students at the YMCA Escape to the Arts (D) and the New Britain Museum of American Art (NB) created art work focusing on themes of healthy living and tobacco avoidance.
- Six meetings were held twice a year for two years. There were 25 participants from Danbury and 17 from New Britain. Two staff members assisted at each site.
- Every art initiative had a tobacco prevention message and was conducted under the guidance of an art instructor.
- Jefferson and Lincoln Elementary Schools (NB) and Park Avenue, South Street and Morris Street Schools (D) altogether had 160 participants.
- There were numerous activities undertaken by the Arts Clubs in Danbury and New Britain. The following summarizes a sampling of these:

*Collages*: Student-created tobacco prevention messages with drawings and 3D images made from paper. The art teacher took the children's designs and made a large collage. Some collages were hung at the museum in New Britain, and others were displayed at schools.

*Cartoons*: Students used two or three characters to develop a comic strip with a hero who helped another character avoid tobacco use.

*Self- portraits*: Students created healthy tobacco-free images versus how they would look if they used tobacco. Students also used their self-portraits to show themselves engaging in a healthy activity as a way of explaining the importance of making healthy choices.

*Famous People*: Students received two copies of the same picture of a famous person. They had to alter one copy to show the effects of long-term tobacco use on appearance - such as yellowed, black or missing teeth, wrinkled skin, drawn look, and flat, stringy unhealthy hair.

*Tobacco Puzzle*: Students decorated one puzzle piece. All of the puzzle pieces were glued together to read, "We will Be Tobacco Free!" This was hung up in a prominent location.

- V. Develop and assist with the implementation of <u>After School Digital Media Clubs</u> in Danbury and New Britain focusing on tobacco use prevention.
- Digital media club advisors were hired, and student participants, recruited.
- The focus was to develop public service announcements (PSAs) to be screened at the CT Film Festival.
- The OIC YMCA (NB) and the Broadview (D) Digital Media Club had about 20 students who learned to develop story boards, how to video tape and the art of filmmaking.
- The students were exposed to statistics associated with tobacco use for incorporation into their PSAs. They recorded background music, determined what facts should be incorporated into the films and learned to use equipment.
- All of the activities with these clubs were dedicated to getting the message across about the harmful effects of tobacco usage.
- New Britain students also created mini skits that showed how kids are pressured by their peers to smoke. The students split into groups of two or three students, and with their iPhones, taped their creation. Each group played back their skits to the other groups.
- The New Britain Digital Media Club won an award at the CT Student Film Festival for their tobacco prevention PSA. These winners showed their winning PSA at their end of the year celebration at the YWCA and were very proud of their accomplishment.
- VI. Develop and assist with the implementation of <u>After School Dance Clubs</u> in Danbury and New Britain focusing on tobacco use prevention.
- For middle school students, the Hip Hop Dance Club at the YMCA in New Britain and the Escape the Arts in Danbury provided students with the opportunity to see how tobacco could affect performance.
- The goal was to learn firsthand the connection between healthy, tobacco free bodies and the ability to maintain physical fitness.
- Meetings were once a week for six weeks and under the supervision of a certified dance instructor.
- There were 8 students from Danbury and 8 from New Britain.
- The classes began in each spring and concluded in June/July.
- Student performed in several venues:

At the Kent Film Festival, the dance students worked with other dancers from around the state. They participated on the stage and danced with various groups.

In front of parents and peers for the *end-of-the-year program award dinner* for all students who attended the YMCA. The New Britain students also performed their dance at a YWCA event.

At the *Rock Cats Tobacco Free Game Night* at Rock Cats New Britain's Minor League Baseball Team. In addition, two Danbury students sang for the opening ceremony with the "National Anthem" and "Firework" (by Katy Perry).

- VII. <u>Conduct Parent/Guardian empowerment</u> to assist parents and guardians in encouraging children to make good choices regarding risky behaviors.
- Using tobacco was acknowledged as a risky behavior. Therefore, training provided by KidsCAN to parents was critical.
- The purpose was for parents to learn new strategies and tools to raise happy self-reliant kids. Parents learned positive parenting approaches and how to be effective communicators with their children during the difficult middle school years when risky behaviors (tobacco-use) can become a part of the child's life. Parents learned how to avoid power struggles by setting clear rules and creating clear choices with consequences appropriate to the misbehavior.
- The workshop was called, *Say Yes to No.* Information for this program came from Search Institute and was also based on a book by David Walsh, PhD, *No: Why Kids of ALL Ages Need to Hear It and Ways Parents Can Say It.* It promotes behaviors and positive attitudes. It empowers parents to protect youth from high risk behaviors.
- Training materials were purchased under KidsCAN and staff was trained in delivery.
- The workshop was for parents and their middle school students so that they could learn what risky behaviors are and how to avoid them. Parents learned how to set protective boundaries.
- The workshop was one hour and offered three times during the KidsCAN program.
- Programs were held at YWCA and North Oak Community Room in New Britain and at Broadview Middle School in Danbury.
- VIII. Conduct Family Night for the Great American Smoke Out (GASO)
- Mad Science was hired to conduct community-wide assemblies called *The Science Behind Tobacco* at the Danbury and New Britain libraries.
- Under the leadership of the Student Action Clubs, Middle School students in both New Britain and Danbury were exposed to KidsCAN initiatives. Student Action Club members set up an interactive tobacco education table. The theme was *Celebrate More Birthdays*. Students wrote postcards encouraging family and friends who use tobacco to consider quitting. Students enjoyed mini-cupcakes to celebrate many future happy, healthy and tobacco-free birthdays.
- Fourth grade students in Danbury and New Britain participated in an interactive program called *Tar Wars* throughout the month of November in conjunction with GASO. The program is aligned with 4<sup>th</sup> grade academic standards. The program coordinator visited classrooms with mini cupcakes in support of GASO's message to *Celebrate More Birthdays*. The project also purchased tobacco education books for classrooms.
- At Broadview Middle School there were 1200 participants and 750 at Slade Middle School in New Britain.
- IX. Conduct events and activities for the Campaign for Tobacco Free Kick Butts Day.
- Preparations for Kick Butts Day were planned and executed. Several programs were held in March of each year.

Participating schools included:

- In Danbury, King Street Intermediate, Shelter Rock, Pembroke, Great Plains, Park Avenue, Hayestown, Ellsworth, King Street Primary, Mill Ridge Primary and the Academy of International Studies.
- In New Britain, North End, Jefferson and Lincoln elementary schools participated.
- For program sustainability, instruction to Physical Education teachers was provided. Following a brief introduction, the Program Coordinator facilitated the students in a tobacco simulation activity called "Smokin' Straws." The activity showed how the lungs cannot perform their job efficiently, if tar is clogging the pathways. During the kick ball game, each time a child scored a run, a classmate on the field threw the tobacco education clever catch ball. The scorer caught the beach ball, read a tobacco education question, and tried to answer the question. At the end of the class period, the students chanted "I will be tobacco-free!" Each student received a KidsCAN Avoid Tobacco logo pencil. The PE teachers received a brand new tobacco-education purple kickball.
- Bilingual professional educator and graphic designer, Bill Hernandez instructed middle school students in Danbury and New Britain in tobacco education themed cartoon drawing. He brainstormed with the students about how a tobacco user would spend her/his time, how s/he might look and feel, how s/he spends leisure time, etc. This discussion lead to a drawing that depicted how tobacco use affects people, their surroundings, family, pets and life choices. In addition to the cartooning/visualizing activity, students played Tobacco in a Box, a game that KidsCAN staff created. It deals with tobacco-related issues such as peer pressure, environmental issues and health risks. Two students (who won) per session were chosen to have a self-portrait created by the artist.
- It is estimated that close to 3000 students benefited from the Kids Kick Butts Days.
- X. Sponsor Annual Art in the Park Day at Quassy Amusement Park.
- A large scale undertaking, KidsCAN Avoid Tobacco Art in the Park clocked approximately 1200 visitors, according to Quassy amusement Park on May 15<sup>th</sup>.
- KidsCAN program staff and volunteers disseminated educational materials and manned a highly visible education table with multiple handouts that were informative.
- It is estimated that 200 to 300 individuals stopped to pick up materials.
- There was also a tobacco-free themed Sidewalk Chalk competition which 200 students entered.
- The KidsCAN program sponsored 235 students from New Britain and Danbury.
- Quassy Amusement Park agreed to become a tobacco-free park beginning on this day.
- Six staff members assisted in the execution of KidsCAN that day.
- XI. Sponsor Tobacco Free Game Night at Rock Cats, New Britain's Minor League Baseball Team.
- On August 11<sup>th</sup>, 6700 fans packed the Rock Cats stadium for a tobacco free event.
- KidsCAN distributed 400 free tickets to students and their families.
- Eight staff members assisted in the execution of KidsCAN.
- A KidsCAN educational table was stationed at the park entrance to greet guests and provide educational materials and goody bags to children and their families.
- During the game, a PowerPoint display on the large screen gave baseball fans information on being tobacco free.
- Students from the After School Dance Club performed for the visitors.
- XII. Conduct a billboard campaign for tobacco use prevention.
  - KidsCAN provided all students in grades K through 8 in the New Britain and Danbury schools with the opportunity to design a billboard.
  - The purpose was to create an effective billboard that promoted a tobacco avoidance message.

- Lamar Advertising of CT and Western Massachusetts was the sponsor and served as one member of the selection committee.
- Art teachers, classroom teachers, the Student Action Club members and others received packets with the guidelines and templates for entering.
- There were a total of 200 entries. The Program Coordinator created large collages of the entries that were prominently displayed at each participating school.
- From Danbury, 89 elementary and 15 middle school students participated. New Britain had 45 elementary and 28 middle school students. Eight teachers from these schools assisted in the entries.
- One winner was chosen from each city. The winners had their tobacco prevention message displayed on a life-size billboard in their city, on a prominent road, for more than two weeks, in conjunction with GASO.
- The winners were given a framed picture of their design decorated with a first place blue ribbon.
- Lamar Graphic graciously provided each winner with a mini billboard model of their winning design. Local newspapers published articles with photos.

# XIII. <u>Implement a theater program</u> focusing on tobacco use and prevention

- Child's Play Theater Troupe Educators conducted writing workshops with 29 classrooms.
- Teachers received instructional materials so they could integrate tobacco education into their lesson plans and at the same time, have this aligned with state standards.
- All student writing submissions were sent onto to Child's Play educators so that they could be incorporated into the full scale assembly plays that the Troupe produced.
- The outcome was an hour long show generated by student ideas.
- There were Certificate of Creativity awards to student authors when the work was integrated into the performance.
- The themes that were predominant included: second hand smoke, health, social issues and harmful environmental issues.
- There were 338 elementary students from Danbury and 775 elementary students from New Britain who participated. Eighteen teachers from each district also worked on this aspect of KidsCAN for the Child's Play performance.
- Students were chosen to perform during live performances alongside the theater group. All performances were highly interactive.

# XIV. Build a collaborative with community agencies

Some of the agencies that KidsCAN collaborated with during the course of the project included:

- Housatonic Valley Coalition Against Substance Abuse
- The Connecticut National Guard
- The New Britain Youth Network
- The Family Resource Center of New Britain
- The New Britain Discovery Collaborative
- PTOs in Danbury
- YWCA in New Britain
- City Center Danbury (sponsored the Greater Taste of Danbury)
- New Britain Youth and Family Services (sponsored the Substance-Free Family day)
- XV. <u>Refer</u> all program participants and family members who use tobacco <u>to CT Quitline</u> for support in cessation services.
  - Promotional materials were disseminated with information about CT Quitline.

The number of CT Quitline was on all promot It is difficult to assess who called into the hotl	ional materials. ine.	
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XVI. Additional initiatives that KidsCAN provided to reinforce the theme of the project in target communities.

- At a *Taste of Danbury* in July 2011, KidsCAN set up a Tobacco Education Table to create awareness in the city of the KidsCAN Avoid Tobacco Prevention Program. Several hundred children and adults passed by to discuss the topic and pick up materials.
- At **Substance-Free Family Day in New Britain**, KidsCAN set up a Tobacco Education Table to promote billboard competition. Along with the usual interactive displays, resources, pamphlets and instructional incentives, there was a special activity for children. With the help of two Action and Dance Club volunteers, young visitors made Troll Heads. Each Troll head had a flag attached to its container that read, "Be Tobacco-Free: Plant the Seeds for Lifelong Health." Approximately, 150 elementary students, 50 middle school students and 200 adults visited the table.
- KidsCAN and The Center for Healthy Schools & Communities @ EDUCATION CONNECTION partnered for an outreach effort promoting tobacco-free and healthy choices to the *City of Torrington*. KidsCAN reached out to the public with visually appealing educational materials including smoking cessation resources.
- C. <u>Pre-Post and Satisfaction Surveys</u>: Pre-post surveys and satisfaction surveys were collected at the elementary and middle school levels. Results are summarized below.

# I. <u>Elementary Pre-Post Survey:</u>

82 students completed the pre-test and 90 students completed the post-test. Of students completing the pretest, 40.5% were from New Britain and 59.5% were from Danbury. Approximately half of respondents were in each of grades 4 and 5. One third of respondents were boys and two thirds were girls. 75.3% were Black, Hispanic, Asian or American Indian while slightly less than one quarter were White. Post-test respondents consisted of 43.5% students from New Britain and 56.2% Danbury students; 11.3% were in third grade, 37.5% in fourth and 51.2% in fifth; 36.4% were male and 63.6% were female and 76.7% were non-White.

A summary of results is provided below.

Table 2: Elementary School Student Agreement: Pre-Post Comparison Frequencies

		Pre-Test			Post-Test			
		Disagree	Not Sure	Agree	Disagree	Not Sure	Agree	
1)	It is important that people do not use tobacco.	0%	3.7%	96.3%	6.8%	0%	93.2%	
2)	I will not try tobacco of any kind after today.	2.5%	1.2%	96.3%	4.6%	3.4%	92.0%	
3)	I talk to my parents about the effect of tobacco on health.	4.9%	14.8%	80.2%	10.6%	17.6%	71.8%	
4)	Smoking is the only type of tobacco use that is bad for your health.	52.5%	15.0%	32.5%	43.2%	27.3%	29.5%	
5)	All tobacco products are addictive.	11.4%	25.3%	63.3%	12.5%	33.0%	54.5%	
<b>6</b> )	Most people use tobacco.	6.6%	42.1%	51.3%	9.1%	43.2%	47.7%	

No major differences between student perceptions in this area were obvious between the pre and posttest results.

Table 3: Elementary School Perceived Content Knowledge: Pre-Post Comparison Frequencies

		Pre-Test			Post-Test			
How much do you know about each of the following?		Nothing	Some but Not a Lot	A lot		Some but Not a Lot	A lot	
1)	The effect of smoking on health.	7.4%	48.1%	44.4%	6.9%	31.0%	62.1%	
2	The effect of chewing tobacco on health.	35.8%	34.6%	29.6%	17.2%	34.5%	48.3%	
<b>3</b> )	The effect of secondary tobacco smoke on health	16.7%	46.2%	37.2%	14.9%	35.6%	49.4%	

Students on the post-test were more likely to rate themselves as having "A lot" of knowledge about each area than students on the pre-test.

A one-sided paired t-test was conducted on the sums of the six items related to Agreement and on the sums of the three items related to content knowledge. Paired results were available for 54 students.

Results indicate a significant increase in students self-perception of knowledge of items related to tobacco prevention on the post-test as compared to the pre (p<.05). There was no significant difference between the pre and post-tests for elementary students on items related to agreement.

# II. <u>Elementary Satisfaction Surveys</u>

Table 4: Elementary Student Satisfaction: Frequencies

		Disagree	Not Sure	Agree
1)	I liked participating in KidsCAN.	1.1%	5.7%	93.2%
2)	I learned a lot from being in KidsCAN.	1.1%	4.6%	94.3%
3)	I learned a lot from doing tobacco-use prevention activities through KidsCAN.	2.3%	4.6%	93.1%
<b>4</b> )	I would recommend KidsCAN to a friend.	1.1%	8.0%	90.9%
5)	I like doing projects that help people learning not to use tobacco.	1.1%	3.4%	95.5%

Over 90% of the 90 elementary school students completing the satisfaction survey agreed with each item. Students appear to be very satisfied with KidsCAN activities.

## III. Middle School Pre-Post Survey

89 students completed the pre-test and 25 students completed the post-test. Of students completing the pretest, 69% were from New Britain and 31% were from Danbury. Approximately one third of respondents were in each of grades 6, 7 and 8. Almost all (93%) of respondents were girls. 70.1% were Black, Hispanic, Asian or American Indian while 29.9% were White. Post-test respondents consisted of 48% students from New Britain and 52% Danbury students; 24% were in sixth grade, 40% in seventh and 36% in eight; 12.5% were male, 87.5%% were female and 63.6% were non-White.

A summary of results is provided below.

Table 5: Middle School Student Agreement: Pre-Post Comparison Frequencies

		Pre-Test			Post-Test			
		Disagree	Not Sure	Agree	Disagree	Not Sure	Agree	
1)	It is important that people do not use tobacco.	1.1%	3.4%	95.5%	4.0%	0%	96.0%	
2)	Using tobacco in any way can hurt my health.	1.1%	2.2%	96.6%	0%	0%	100.0%	
3)	I will not try tobacco of any kind after today.	3.4%	7.9%	88.8%	0%	20.0%	80.0%	
4)	I talk to my parents about the effect of tobacco on health.	18.0%	29.2%	52.8%	12.0%	24.0%	64.0%	
5)	I talk to my friends about the effect of tobacco on health.	22.7%	30.7%	46.6%	16.0%	40.0%	44.0%	
<b>6</b> )	Smoking is the only type of tobacco-use that is bad for your health.	47.1%	36.5%	16.5%	60.0%	12.0%	28.0%	
7)	Not using tobacco is hard to do.	43.2%	44.3%	12.5%	44.0%	36.0%	20.0%	
8)	All tobacco products are addictive.	4.6%	46.0%	49.4%	12.0%	24.0%	64.0%	
9)	Tobacco use is expensive.	3.4%	33.3%	63.2%	4.0%	48.0%	48.0%	
10)	Most people use tobacco.	4.7%	67.4%	27.9%	8.0%	36.0%	56.0%	

A review of the percent of students who were likely to "Agree" on the post test compared to the pretest indicates that, for most items, students were more likely to agree with each item after completion of the program.

Middle school students were also asked "How sure are you that you will not use tobacco after today?". Of the preschool respondents, 94% were "Sure or absolutely sure" while of the post-test respondents, 86% were "Sure or absolutely sure".

Table 6: Elementary School Perceived Content Knowledge: Pre-Post Comparison Frequencies

		Pre-Test			Post-Test			
H	low much do you know about each of the following?	Nothing	Some but Not a Lot	A lot		Some but Not a Lot	A lot	
1)	The effect of smoking on health.	1.1%	28.7%	70.1%	0%	8.3%	91.7%	
2)	The cost of tobacco use.	12.9%	43.5%	43.5%	8.3%	33.3%	58.3%	
3)	The effect of chewing tobacco on health.	16.1%	39.1%	44.8%	16.7%	25.0%	58.3%	
<b>4</b> )	The effect of secondary tobacco smoke on health.	13.8%	44.8%	41.4%	12.5%	8.3%	79.2%	
5)	Reasons people start to use tobacco.	11.6%	46.5%	41.9%	4.2%	37.5%	58.3%	

Post-test students were more likely to rate themselves about knowing "A lot" about each item than pre-test students.

A one-sided paired t-test was conducted on the sums of the ten items related to Agreement and on the sums of the five items related to content knowledge. Paired results were available for 17 students.

Results indicate a significant increase in students self-perception of knowledge of items related to tobacco prevention on the post-test as compared to the pre (p<.05). There was no significant difference between the pre and post-tests for middle school students on items related to agreement.

## IV. <u>Middle School Satisfaction Surveys</u>

Post-test respondents also completed a satisfaction survey. Results are summarized in Table 7 below.

Table 7: Middle School Student Satisfaction: Frequencies

		Disagree	Not Sure	Agree
1)	I liked participating in KidsCAN.	4.2%	8.3%	87.5%
2)	I learned a lot from being in KidsCAN.	4.2%	4.2%	91.7%
3)	I learned a lot from doing tobacco-use prevention activities through	4.2%	4.2%	91.7%
	KidsCAN.			
<b>4</b> )	I would recommend KidsCAN to a friend.	4.2%	25.0%	70.8%
5)	I like doing projects that help people learn not to use tobacco.	4.2%	12.5%	83.3%

Over 70% of elementary school students completing the satisfaction survey agreed with each item. Students appear to be very satisfied with KidsCAN activities.

# V. <u>Teacher Satisfaction Surveys</u>

Satisfaction surveys were administered to teachers, hired by KidsCAN, who were responsible for all instructional coaching and activity implementation for each key activity implemented through the project. Questions identified teacher perceptions of the importance of this activity to student learning.

A total of 11 surveys were received. Six surveys were from teachers in New Britain and five were from Danbury teachers. There was at least one individual responding to the survey who was responsible for each of the following activities: Action Club, Digital Media Club, Art Club, Dance Club, Child's Plan, Kick Butts Day, Say Yes to No and "Other activities".

Table 8: Teacher Satisfaction Surveys: Teachers Running Activities Frequencies and Means

		Strongly Disagree or Disagree (5 or 4)	Neither Disagree nor Agree (3)	Agree or Strongly Agree (4 and 5)	Mean
1)	It is important that schools provide activities like this to help children learn not to use tobacco.	0%	0%	100.0%	4.9
2)	I am glad that my students were able to participate in this activity.	0%	0%	100.0%	4.8
3)	I would recommend this activity to a friend.	0%	0%	100.0%	4.7
<b>4</b> )	Children enjoyed participating in this activity.	0%	0%	100.0%	4.7
5)	This activity helped children learn not to use tobacco.	0%	20.0%	80.0%	4.5
6)	Children learned a lot from this activity.	0%	9.1%	90.9%	4.5
7)	Children were interested in this activity.	0%	20.0%	80.0%	4.5

Means for each item were 4.5 or above indicating strong agreement overall. The item with the highest mean was "It is important that schools provide activities like this to help children learn not to use tobacco."

- D. <u>Quarterly Evaluation Meetings</u>: Evaluators participated in quarterly project meetings designed to share evaluation results and project activities as appropriate. Meetings were productive and attended by the external and internal evaluators, the Project Director and Project Coordinator. The project was consistently on-track and exhibiting a conscientious and diligent effort to fulfill program obligations and achieve program goals and objectives in a creative and positive fashion. Specifics of these meetings may also be found in section B, process tracking, completed by Dr. Susan Carroll of Words and Numbers.
- E. <u>Classroom Observations</u>: An observation guide linked to program goals and objectives was designed and used to collect data related to the implementation of program activities at a local level. Activities were observed as follows:
- o One observation of Child's Play activities held on December 5, 2011 in Danbury
- One observation of Child's Play activities held on December 6, 2011 in New Britain
- One observation of Kick Butt's Day on June 4, 2012 in Danbury
- One observation of Child's Play on May 9, 2012 in New Britain
- One observation of a Parent Leadership Workshop held on February 28, 2013 in New Britain

All observations indicated a high degree of project-based activities, focused on tobacco-prevention and with a high degree of engagement of students. Due to the small number of observations completed, no statistical analysis was completed. Results of the observation checklist suggested that the following indicators were typically considered to be "descriptive" or "very descriptive" of project activities.

## Lesson Design and Implementation

- The lesson involved basic concepts of the subject.
- Instructional strategies and activities activated students prior knowledge
- Lesson activities demonstrated scientific concepts
- Lesson provided students hands-on opportunities.
- The activities were high-interest and engaging for participants.
- Connections with the real world were discussed.
- Connections to tobacco education were observed.
- The lesson incorporated activities to promote higher-order thinking/problem solving.
- Lesson used research-based teaching strategies.
- The lesson incorporated activities to develop inquiry-skills.
- Lesson incorporated resources that address the age, skill level and readiness of the learner.
- The lesson included activities or discussion related to language arts.

### **Teacher**

- The teacher had a solid grasp of the subject matter of the lesson.
- The teacher engaged the students in problemsolving.
- The teacher was confident in management of activities during the lesson.
- The teacher used effective instructional strategies.
- The teacher encouraged student collaboration to solve problems.

# • The teacher encouraged students to use evidence to address questions.

### **Students**

- Students were reflective about their learning.
- Students were engaged throughout the lesson.
- Students were active participants in the activities.
- Students reflected on their results.
- Students demonstrated via discussion or activities that they understood the content of their lessons.

## **Student and Teacher Interactions**

- The teacher acted as a resource person, working to support and enhance student investigations.
- Active participation of students was encouraged.
- The teacher's questions triggered divergent modes of thinking.
- Students were engaged as members of a learning community.
- Students were encouraged to generate conjectures, alternative solution strategies, and ways of interpreting evidence.
- There was a high proportion of student talk and a significant amount of it occurred between and among students.
- There was a climate of respect for what others had to say.
- The intellectual rigor, constructive criticism and the challenging of ideas was valued.

Only one indicator was ever checked as "Never or rarely occurred". This indicator was the following:

• The lesson included activities or discussion related to language arts.

## **Data Strengths and Limitations**

This final evaluation report summarizes data collection efforts developed and implemented to present a comprehensive picture of the results of the internal evaluation of the *KidsCAN* project during 2011-2013 in two Connecticut school districts. To this end, the data collection effort has the following strengths:

- Good student participation in data collection for pre- and post-test assessments;
- Good teacher participation in professional development and teacher satisfaction surveys.
- Excellent participation of the evaluators, Project Director and Coordinator in quarterly meetings
- Diversified data collection strategies including surveys, focus group and individual interviews, observations and document review;
- Participation from a wide range of stakeholders including teachers, students and project staff; and
- Successful tracking of process data by the Project Coordinator with support provided by Words & Numbers, Inc.

However, as with any research study, data collection and the use of data have some limitations. These limitations include:

- No interviews or focus groups were completed;
- No pre-post tests for staff were administered;
- Minimal observations were conducted;
- Lack of input from parents.

### **Conclusions and Recommendations**

The evaluation was successful in providing information to address each evaluation question. Conclusions and recommendations are provided below.

<u>Question 1</u>: To what extent has the KidsCAN program implemented tobacco-prevention programs designed to prevent the initiation of tobacco use in youth?

Data indicate that the KidsCAN program was successful at **implementing tobacco-prevention programs to prevent the initiation of tobacco use in youth**. Survey results indicate that teachers and students perceive the project as successfully achieving this goal. Surveys and observations indicate a **high level of support and buy-in** at all levels. A variety of activities were implemented in two school districts in multiple grade levels.

Curricula implemented throughout the *KidsCAN* program were evidence-based. All data suggest that teachers were successfully provided the information and support needed to achieve project goals. Document review and observations indicate a high level of student engagement and involvement in both districts and grade levels. Data indicate that all student activities were successfully completed. Teacher surveys indicated a high level of satisfaction with support provided.

Pre-post comparisons of elementary and middle school students indicate that, for both groups, students perceive themselves as knowing more about a number of tobacco-related topics after completion of the program. Post-test means were statistically higher than pre-test means using an alpha level of p<.05/

<u>Question 2</u>: To what extent has the KidsCAN program implemented programs to promote access to cessation programs for the school community?

Data suggest that KidsCAN successfully implemented programs to promote access to cessation programs for the school community through the implementation of school and community programs, after school clubs and student led tobacco prevention leadership activities. Additionally, the tobacco use prevention program was successfully marketed to agencies and organizations that serve youth through collaboration with community agencies, referral to Connecticut Quitline for smoking cessation support, intensive education for students, parents, and educators, community-wide presentations, events and activities related to Kids Kick Butts Day, activities at Quassy Amusement Park, Tobacco Prevention Game Day and a billboard competition.

Question 3: To what extent has the KidsCAN program implement programs designed to promote the elimination of exposure to second hand smoke?

Data suggest that this goal was primarily addressed through tobacco use prevention education for parents, students, teachers and community members and the implementation of Parent Empowerment activities for workshops. All educational activities stressed the importance of elimination of exposure to second hand smoke in activities.

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