## KEYS 4 Healthy Kids School Wellness Initiatives and Outcomes

Over the past four years, KEYS 4 HealthyKids has used a combination of social marketing with a PSE (policy, system, environmental) approach into one initiative that will reinforce one another to create a synergistic effect for diabetes prevention. The movie, Fed Up, is intended to gain the interest of the students using social marketing strategies and adding the policy, system and environmental approach. Policy, system, and environmental change (PSE) is a phrase used to describe sustainable changes that go beyond awareness, education, and attitude change to create an environment where the healthy behaviors are convenient and occur by default. The policy, system and environmental changes are all evidenced based strategies to make the healthier choice, the easier choice within schools.

## Pilot Project - Kidz Bite Back

Kidz Bite back is a social marketing campaign in elementary schools to expose how "Big Fat Industries" and "Couch
 Potato Companies" take advantage of youth by promoting over-consumption of unhealthy foods and drinks, as well as encouraging over-use of TV watching and video gaming. The campaign is led by youth ages 8-12.

KidS don't get it, But KidZ do. And Kidz are spreading the word to their families, friends, neighbors, classmates - even elected officials who need some education about Big Fat Industries and Couch Potato Companies.

KEYS has adapted the KEYS Community Toolkit for use in schools to assist sites in a accomplishing the environmental and policy changes within the school setting resulting in two policy changes, 7 environmental changes, and behavioral health improvements.

KEYS 4 HealthyKids and Charleston Gazette food writer, April Hamilton, cooked hundreds of pounds of sweet potatoes to make Charleston Gazette food writer's famous Sweet Potato Chili for all 332 students. The sweet potatoes were graciously donated by WV Department of Agriculture. This event led to a healthy celebration policy at Ruffner Elementary. All school celebrations at Ruffner Elementary now prohibit food and incorporate physical activity into the party. KEYS presented an award to Ruffner principal, Henry Nearman, as a health hero for his dedication to children's health in 2017.


Ruffner Elementary School students preparing the sweet potatoes.

Dr. Jeffrey, Kim Earl, and Henry Nearman



Grandview held a playground makeover day organized by several organizations including Action for Healthy Kids and KEYS 4 HealthyKids in the fall of 2015. We worked together to build an outdoor classroom, 16 raised beds, create a walking trail, and paint inside and outside murals and blacktop games creating six environmental changes for the school.
Over 85 volunteers came out to help with Grandview's playground makeover. Grandview also created new policies that institute physical activity at recess during inclement weather days.


Pratt and Kasson Elementary created new edible gardens and incorporated gardening into their curriculum creating a policy and environmental change.

We measured educational and behavioral changes for Grandview Elementary students. Below are survey results.

1. The majorities of families eat and drink less fast food, soft drinks and junk food.

|  | Response | Student Pre | Student Post |
| :--- | :---: | :---: | :---: |
| A. During an average week, how many days does <br> your family eat take-out meals (drive-thru, fast food, <br> sit down restaurants)? | $0,1,2$ | $44 \%$ | $54 \%$ |
| B. How many drinks like fruit drinks, punch, soda, <br> sports drinks, sweet tea do you have each day? | $3,4,5,6,7$ | $39 \%$ | $29 \%$ |

Response to question 1 A indicates that the number of families that ate take out meals decreased from $39 \%$ to $29 \%$. Following, the number of families that ate out less ( $0,1,2$ ) increased from $44 \%$ to $54 \%$ which was the desired effect.

At first glance, the response to 1 B that shows kids that drank $0-2$ servings went up from $44 \%$ to $60 \%$ seems to contradict our proposed outcome. But considering that the kids that drank 3-5+ servings decreased from $56 \%-40 \%$ tells us that the high consumers of sugared sweetened beverages shifted to the more acceptable category of $0-2$ servings.
2. The majority of families eats more fruit and vegetables and drinks more water.

|  | Response | Student Pre | Student Post |
| :--- | :---: | :---: | :---: |
| On an average day, how many times do you eat fruits? | $0,1,2$ | $44 \%$ | $48 \%$ |
|  | $3,4,5+$ | $56 \%$ | $52 \%$ |
| On an average day, how many times do you eat <br> vegetables? | $0,1,2$ | $63 \%$ | $51 \%$ |

These questions were getting at whether the knowledge was affecting their healthy behavior changes. These results indicate that there were negligible changes in fruit consumption, but that vegetable consumption of $3-5+$ servings increased from $36 \%$ to $49 \%$. This is an unexpected finding since increased consumption of fruit if first followed by vegetable intake.
3. The majorities of the families are more physically active.

| A. On an average school day, how many hours do you <br> spend doing something physically active (anything <br> where you are moving, breathing harder and possibly <br> sweating)? | $0,1,2$ | $56 \%$ | $58 \%$ |
| :--- | :---: | :---: | :---: |
| B. On an average school day, how many hours do you <br> spend watching TV, playing video games, or using the <br> computer for fun? | $0,4,5+$ | $44 \%$ | $42 \%$ |
| C. I am not active after school: | $3,4,5+$ | $59 \%$ | $39 \%$ |

There was a negligible change pre to post for Question 3A indicating there was no change in average physical activity.

Just like Question 1B, the results of Question 3B indicate that students shifted from 3+ hours of screen time to the more desired category of 0-2 hours.
4. The majorities of the families are better educated consumers.

|  | Response | Student Pre |  |
| :--- | :---: | :---: | :---: |
| A. Do you think fast food companies tell the truth <br> in their advertisements? | Never or sometimes | $69 \%$ | $81 \%$ |
| B. Do you think soda companies tell the truth in <br> their advertisements? | Never or sometimes | $48 \%$ | $79 \%$ |
| C. Do you think junk food companies tell the truth <br> in their advertisements? | Never or sometimes | $54 \%$ | $82 \%$ |
| D. How much do you think TV networks care <br> about you being healthy? | Don't care much at all, <br> Don't care very much | $50 \%$ | $72 \%$ |
| E. How much do you think video game companies <br> care about you being healthy? | Don't care much at all, <br> Don't care very much | $65 \%$ | $76 \%$ |

5. Based on internal process evaluations, each student will spread the word to 12 people through direct education:

| How many people did you educate on Kidz Bite <br> Back? | None | $41 \%$ |
| :--- | :---: | :---: |
|  | $1-4$ | $23 \%$ |
|  | $5-9$ | $3 \%$ |
|  | $10-14$ | $0 \%$ |

Overall, our team was pleased with these results since the Kidz Bite Back initiative was carried out over two months instead of the anticipated and usual six month time period.

## WV Fed Up (Social Marketing / Policy, System, Environmental Change Approach)

KEYS altered the Kidz Bite Back pilot project based on lessons learned and created WV Fed Up for middle and high school students to create WV Fed Up for middle and high school students.


In 2014, KEYS and WV Department of Education Office of Child Nutrition (OCN) sponsored the Fed Up documentary screening at Marquee Theaters in South Charleston, WV. The documentary followed children suffering from childhood obesity and showed daily obstacles that they face. Food policy, politics and focus on the sugar industry were dramatically highlighted. Late in 2015, Healthy Kids, Inc. and KEYS 4 HealthyKids partnered to purchase a student version of the Fed Up documentary for every school in WV through a Fed Up Kickstarter campaign. To date, over 400 films with curriculum that meets WV
Content Standards have been delivered to schools all over WV. The students' reacted to the film with strong emotions ranging from sadness to anger. But there was no doubt that they were ready to take positive action and create healthier school environments. Following, the FED UP movement began.

WV Fed Up is a teen grassroots movement to expose how the fast food, soft drink and junk food industries - we call them Big Fat Industries - have made West Virginia the sickest in the nation. It is not only a counter marketing campaign, but also an action campaign to eat real food and create access to healthier options where students live, learn and play.

In October of 2016, Bureau of Public Health funded the first Teen WV Fed Up conference bringing 58 students from 12 schools around the state. The students used school health assessments and community development strategies to create action plans to make the healthy choice, the easy choice in their schools. The conference was held concurrently with the WV

Department of Education School Wellness Conference which afforded the opportunity for the students to present their action plans to their food service directors and county wellness chairs. KEYS continue to offer on-going technical assistance to the WV Fed Up schools to assist them in implementing their action plans.


Students at the WV Fed Up Teen
Conference, October 2016


A student from Bridge Street Elementary is presenting her action plan to the other students at the WV Fed Up Teen Conference.


Nathan Lucas from Bridge Street Middle School is interviewed by WV Public Broadcasting

In partnership with Healthy Kids, Inc., KEYS helped to create a website to share the successes of students in West Virginia. The website, http://wvfedup.org, is a clearinghouse to give teachers students to health curriculum to be used in conjunction with the Fed Up film, blogs of student
successes, and submit stories to share with others. In addition, WV Public Broadcasting created a documentary highlighted the huge successes of creating policy and environmental change within schools. The 13 minute film is on the main page of the website.


In early 2017, KEYS partnered with WV Department of Education Office of Child Nutrition and Healthy Kids, Inc to organize two regional meetings in conjunction with county nutrition directors.
Thirty five students attended the regional WV Fed Up trainings in which current student WV Fed Up leaders trained new students on becoming advocates for a healthier school environment. During these meetings, we conducted focus groups among the teens.

## Results of Teen Focus Groups

We found clear themes develop from the focus groups.
Overwhelmingly, we found that teenagers responded to more explicit and graphic messages on advertising about the negative attributes of drinking sugary drinks. Clean water accessibility was reported as inadequate with most students refusing to drink from the existing school fountains. Health factors were a consideration for students. However all of the health benefits mentioned were short term or relatively short term effects such as increased energy from drinking water or clearer skin. Students did report an awareness of advertising unhealthy drinks by the bev erage industry in commercials seen at home but did not specifically mention the sugary drink marketing within schools.

Specifically for message testing, teenage students believed that although the educational messages were informative and understandable, they did not attract their attention and would not be as effective as the emotional message. There was discussion of including a live sugar demonstration with the message to increase its effectiveness. For some, they did not believe the amount of sugar that was listed. However, the reactions were clearly in favor of using a fear-appeal message to decrease sugar-sweetened beverage consumption and increase water consumption for themselves and their peers.

There were consistent themes across the middle and high schools including both low and average income schools. We did not find significant differences in themes among the different focus groups.

Below is a list of quotes/themes that represented predominant views:
Habits and Knowledge of Health Effects

- "Drinking sugary drinks gives you a sugar crash. It may seem like you're getting more energy but you will crash from the sugar."
- "Being hydrated increases your energy."
- Students stated how they get rid of acne when they drink more water.

Water Accessibility

- "The water fountains are gross. I would only drink from them if I had to."
- Students stated that there is trash in the water fountains. It's too unsanitary.
- Most students stated that they are allowed to bring water bottles to class.

Message 1 - Drinking Fat Ad

- "Eww! That's gross."
- "If this was placed near the vending machine, I would get disgusted and not drink the soda."
- Students reported that they would share this ad on social media.

Message 2-22 packs of sugar

- "This would work for some kids, but some might not believe it."
- Students said that the ad needs to be more visual because you don't actually see how much sugar is in the 22 packs.
- One student said that the ad could be combined with a live sugar demonstration to be effective.


## Message 3 - "Make a Good Choice" ad

- "If people take time to read it, it will be effective."
- "People won't take the time to read it."


## Proposed Strategies Resulting from Research

1. Combine the most effective Rethink Your Drink Campaign materials with increased access to clean water in schools and increased supportive school wellness policies.
2. Use existing Rethink Your Drink Campaign materials that teenagers prefer (such as emotional messages) in middle and high schools. Locations such as on vending machines, in the cafeteria, in hallways, and above water fountains would be ideal.
3. Promote health benefits of drinking water that are valued specifically by teens, such as experiencing increased energy and clearer skin.
4. Encourage all schools to create environmental changes such as installing filtered water bottle stations throughout all WV schools.
5. Advocate for school policy changes such as permitting students to have clear, water bottles filled with water in classrooms.


Starting in 2016- ongoing, teen leaders work to create healthy living clubs in each of the seven schools to conduct activities leading to 4 policy and 20 environmental changes so far. There are 4,186 students in these schools affected by these changes to make healthy choices easier to make in the school setting.

| Hamlin pk-8, <br> Lincoln <br> County | 553 <br> students | - <br> -Began healthy lifestyle classes which includes cooking and <br> agriculture for $7^{\text {th }}$ and $8^{\text {th }}$ graders <br> Converted yearbook class into a class devoted to healthy living. <br> - <br> Completion of raised bed gardens with integration into <br> curriculum. <br> Moundsville <br> Middle, <br> Marshall512 <br> students |
| :--- | :--- | :--- | | -Built outdoor classroom, kickball, four-square courts, and <br> basketball hoops. <br> - Raise funds for the school wellness projects by selling transparent |
| :--- |


| County |  | water bottles. <br> - Used smarter lunchroom tactics to increase plain milk consumption over chocolate milk consumption. <br> - Created a school wellness social media campaign, \#trojanchoices5210. <br> - Add fitness class elective for students available each semester. <br> - Allow transparent school approved water bottles to be used by students in classrooms. |
| :---: | :---: | :---: |
| Bridge Street Middle, Ohio County | $\begin{aligned} & \hline 308 \\ & \text { students } \end{aligned}$ | - Began teen cooking classes with taste tests and recipes to send home. <br> - Installed one filtered water bottle station. <br> - Provide fruit water at lunch and after school snack time. <br> - WVU Extension provided pedometers for upcoming walking program. |
| George <br> Washington <br> High, <br> Kanawha <br> County | $\begin{aligned} & \hline 1088 \\ & \text { students } \end{aligned}$ | - Raised funds to purchase and install three water bottle stations. Stations have been used over 3,000 times in 3 weeks since installation. <br> - Held a water bottle fundraiser with healthy messaging. Water bottles are being refilled for use in classrooms. <br> - Food from the garden is used in cafeteria salad bar. <br> - Educate students at local elementary schools through sugar demonstrations. |
| Pocahontas County High, Pocahontas County | $\begin{aligned} & \hline 340 \\ & \text { students } \end{aligned}$ | - Student organized school-wide assembly to screen Fed Up. <br> - Healthy Heart Week organized and implemented by teacher and students. |
| Barboursville Middle, Cabell County | 811 <br> students | - Healthy concessions for school sponsored after school activities. <br> - Increased physical activity through a "Walking Classroom" project. |
| Princeton <br> Middle, <br> Mercer <br> County | 574 <br> students | - Fundraiser and installation of filtered water station <br> - Policy to allow water bottles in class. <br> - Water bottles sold in school. |



In the fall of 2017, KEYS held a Teen WV Fed Up Leadership Summit bringing eight student leaders from four schools in WV. The students worked with Healthy Kids Inc. strategic planner, Mandy Curry, to plan the following year's WV Fed Up priorities and goals. The ideas were incorporated into KEYS 2018 Strategic Plan for Schools.

