



Learn, Grow, Eat & Go!

Promoting teamwork, inclusion, and reducing bullying behaviors in kids through a garden-based education program

EL TEJAR, GUATEMALA

September 2017 | The Center on Conflict and Development at Texas A&M University and The Conflict and Development Foundation

YOUTH VIOLENCE: Bullying and exclusion are some forms of school violence present in rural indigenous communities studied in Guatemala. Tense situations arising from hunger are experienced by kids in impoverished villages. Gardening activities conducted through this program promoted inclusion and a platform to discuss the role that hunger may play in exhibiting violent behaviors.

BACKGROUND AND OBJECTIVES

The Center on Conflict and Development partnered with the Conflict and Development Foundation to introduce the *Learn, Grow, Eat & Go!* program for kids living in or near El Tejar, Guatemala. This one-year garden-based intervention was aimed at engaging kids in the garden while providing a safe place to discuss tense situations they experience, such as inequality, poverty, hunger, and school violence.

This youth gardening education program was also aimed at enhancing knowledge on horticultural sciences and nutrition while promoting physical activity. The program was conducted in 2016-2017 and included participation from over 500 Mayan kids, ages 5-12.

PROGRAM ACTIVITIES

A series of educational workshops were conducted in an elementary school, a training garden, and an after-school center for kids. The majority of the kids that participated were enrolled in school, from pre-kindergarten to 5th grade. Instructors offered interactive lessons based on the *Learn, Grow, Eat & Go!* curriculum, a research-based, evidence-based curriculum project of the International Junior Master Gardener® program developed at Texas A&M University.

LESSONS LEARNED

1. Garden-based educational activities can be one way to help reduce violent behaviors.
2. Kids learned a sense of ownership and responsibility by caring for crops and for each other.
3. There is a need to conduct more research on the inter-relationship between hunger and anger.

The four main components of each workshop were:

1. **Learn:** Lessons and activities centered on part plants we eat, nutrients, and introduction to topics like diversity and positive social relationships.
2. **Grow:** Garden preparation, planting, and maintenance and introduction to topics like teamwork, inclusion.
3. **Eat:** Food tastings and recipe demonstrations; raw, fresh vegetable sampling, benefits of healthy food choices and introduction to topics like hunger and the effect that food may have in our moods.
4. **Go:** Benefits of a healthy lifestyle through exercise, and how to help release stress and calm anger through physical activities.

Data was collected through interviews with teachers and parents, and through dialogues and group dynamics with kids. Training gardens and outdoor classrooms provided a safe place for kids to discuss the types of bullying behaviors that they have been exposed to; identify inequality or discrimination issues affecting them; and experiencing the benefits of horticultural therapy. Instructors used award-winning books to discuss topics like being different and how to cope with feelings that may lead to violent behaviors.



Kids from a rural public elementary school in Guatemala exhibiting bullying behaviors

SUCCESSSES

The program was successful in studying the impact that the Learn, Grow, Eat & Go! garden-based program had in improving interpersonal relationships and reducing bullying behaviors.

Impact:

1. This gardening-based program helped kids build positive social connections with other kids through participation in gardening and physical activities.
2. Kids learned to explore ways to identify and report bullying behaviors, and to cope with feelings that may lead to violence like anger and frustration.

3. Training gardens created safe spaces for kids to open up and have discussions about difficult topics such as school violence, hunger, and poverty.
4. The program contributed positively to healthy lifestyles by including vegetable production, exercise, and nutrition components in each workshop.

CONCLUSION

- Researchers observed that kids exhibited aggressive behaviors when hungry. Additional studies are needed to conclude if anger and aggression in kids are hunger-induced behaviors.
- The majority of mothers participating in this study had observed that hungry kids exhibited irritability and mood swings.
- Through data collected during dialogues, researchers determined that bullying behaviors were also related to stressful situations being experienced by kids living under the poverty line.
- Gardening and exercise, coupled with provision of a healthy snack proved an effective way of regulating emotions and improving mood in kids that participated in this program.



Interview with a young Guatemalan mother of three kids to collect data on the inter-relationship between hunger and anger.

The Center on Conflict and Development (ConDev) at Texas A&M University and The Conflict and Development Foundation seek to improve the effectiveness of development programs and policies for conflict affected and fragile countries through multidisciplinary research, education and development extension. The Center uses science and technology to reduce armed conflict, sustain families and communities during conflict, and assist states to rapidly recover from conflict. For more information see our website at condevcenter.org - Learn more at condevcenter.org / condevfoundation.org