The following is a copy of a manuscript that was accepted for publication in the journal *Health Promotion Practice* in September 2021, and can be accessed in its final form below:

Beattie, H. M., FitzGerald, C. A., Koller, S. N., Scott, K. S., Garnett, B. R., & Holmes, B. (2021). Impact of Engaging Students in Health Survey Data Analysis and as Full Partners in School Change: Results From a Mixed Methods Study. Health Promotion Practice. https://doi.org/10.1177/15248399211048461

BACKGROUND

Young people are invested in shaping their world and they possess a deep desire to make a difference now (Mitra, 2014). Youth have the wisdom, creativity, and proven capacity to partner in health prevention efforts, ensuring the integrity and impact of those efforts (Gutuskey, McCaughtry, Shen, Centeio, & Garn, 2016). However, young people are seldom invited to address the pressing health issues impacting adolescents today (Curran & Wexler, 2017).

Based on a belief that schools were not providing meaningful ways to engage youth as change agents, the Getting to 'Y': Youth Bring Meaning to the Youth Risk Behavior Survey (GTY) initiative was developed in 2008, supported by the Vermont Agency of Education's Centers for Disease Control and Prevention (CDC) funding. GTY is a positive youth development initiative that is evidence based, theoretically informed and guided by several dominant models of youth engagement and youth participatory action research (Garnett et al., 2019). The founding hypothesis stated that young people would experience an increase in self-efficacy, resilience and protective factors, and capacity for self-advocacy in the health domain if provided with knowledge, skills, and opportunity to be change agents in the health and wellness of their community.

The GTY program design engages youth as analysts of their local Youth Risk Behavior Survey (YRBS) data. Part of the CDC's Youth Risk Behavior Surveillance System, YRBS is conducted biennially in more than 40 states and U.S. territories. GTY participants use these data to inform change in their schools and communities, pacing through 6 steps over the course of a year (Figure 1). Core GTY components and theoretical foundations are detailed in Garnett et al. (2019). Since 2008, youth in 44% of Vermont's middle and high schools have become health data analysts and activists through GTY, with adult partners by their sides. GTY has been incorporated into the Vermont Department of Health's strategic plan, providing an important bridge between education and health sector improvement efforts. GTY has been replicated in Albuquerque and Los Alamos, New Mexico, spearheaded by the University of New Mexico Prevention Research Center (UNM PRC), and was designated a Best Practice by the Association of Maternal and Child Health Programs in 2020. GTY dovetails with the CDC's National Health Educations Standards for students in Prek-12, touching on each of the eight standards (CDC, 2019).

GTY lies at the nexus of three theoretical, paradigmatic, and methodological approaches: positive youth development (PYD), youth-adult partnership (YAP), and youth participatory action research (YPAR). These approaches share the common goal of improving youth outcomes through youth engagement with meaningful activities (Hall, 2019). The PYD prevention model mobilizes youth to build assets, versus remediate deficits, as a primary means to impact health outcomes (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004). Sustaining a sense of purpose, agency and hope are central elements of the PYD model and self-efficacy and feeling valued are essential outcomes (McCammon, 2012).

YAP emphasizes "mutuality and respect among youth and adults, with a goal-oriented focus on shared leading and learning" (Zeldin, Christens, & Powers, 2013, p.385). This includes shifting a traditional adult dominated power dynamic to one of shared responsibility and ownership

(Beattie & Rich, 2018). Youth experience civic engagement as a lived experience; adults benefit from cross-generational relationships that augment the impact of their change efforts.

YPAR takes the PYD and YAP theoretical constructs and translates them into systematic steps whereby youth utilize research as a launching point for change efforts. Youth activism, informed by a respected source such as the YRBS, elevates youth credibility and impact while building health literacy (Fielding & Bragg, 2003). Shifting the position of youth from recipients of adult-directed actions to initiators in partnership with adults is key to the approach.

YPAR, PYD and YAP together form a synergistic youth centered structure and guiding principles for health intervention and social change (Hall, 2019). These frameworks, provided interdisciplinary empirical support and structure for this mixed methods evaluation of GTY by 1) identifying student level outcomes to assess and 2) informing the qualitative data collection protocol development to complement the operationalization of these frameworks in the design and implementation of GTY (Garnett, 2019).

PURPOSE

Despite a growing recognition of the importance of youth participation in policies and programs that affect their health, there is limited research to affirm the impact of scalable and sustainable strategies. Vermont's 13-year experience implementing GTY in public schools, grounded in a partnership between the Departments of Education and Health, positions it as a learning laboratory for other states interested in mobilizing youth as change agents in the health sector. Early evaluations (2011, 2014) indicated evidence of GTY's efficacy. This mixed methods study is the first step to formally evaluate student/individual-level outcomes. It explores GTY's impact in five domains conceptualized by Anyon, Bender, Kennedy, and Dechants (2018) and represented in literature on existing PYD and YPAR initiatives: health literacy, community engagement, self-efficacy, knowledge and skills, and resiliency and protective factors.

Building on the GTY theoretical concept overview (Garnett, 2019), this formal research sets the stage for subsequent studies regarding 1) key variables in the program design that contribute to its positive impact, 2) systemic changes resulting from change efforts, and 3) key factors in embedding and sustaining similar YPAR/PYD/YAP models into public school settings on a regional scope.

Health Literacy

The CDC (2020) defines health literacy as the ability to find, understand, and use information and resources to inform health decisions and actions. Health literacy is strongly linked to health behaviors, use of health services and "mitigating otherwise intractable health disparities" (Rubin, 2016, p. 3). Given the relatively lower rates of health literacy among young adults, the CDC has cited an "urgent need for health literacy training for adolescents and young adults" (Rubin, 2016, p. 48), and research points to the need for creating partnerships between health care and education (Winkleman, 2016). GTY involves students critically interpreting their own health data to improve health literacy.

Community Engagement

Community-engaged learning has a proven role in strengthening student achievement and postsecondary continuation and success (Alexander, Entwisle, & Olson, 2007), including increased goal orientation, future aspirations, resilience, motivation and engagement (Ballard, Hoyt, & Pachucki, 2019). These experiences improve mental and physical health (Ballard et al., 2019). GTY incorporates community dialogue and engagement with action implementation.

Self-Efficacy

Self-efficacy, or a person's confidence in their ability to conduct action leading to outcome, is a central component of Bandura's (1982) social cognitive theory that positions human behavior as reciprocally determined by one's environment and shaped by cognitive and environmental factors, including one's knowledge, perceived expectations of outcomes, and social support. Self-efficacy is an often measured outcome of YPAR and initiatives informed by PYD and youth empowerment (Anyon et al., 2018). Increased self-efficacy is anticipated due to the role of youth as credible and respected change agents in the public forum.

Knowledge and Skills

Knowledge is a critical cognitive factor influencing one's self-efficacy for a related task (Anyon et al., 2018). Therefore, it is important that YPAR, YAP, and PYD initiatives measure the extent to which relevant individual knowledge changes as a result of participation. GTY seeks to develop youth skills in project management, data analysis, public presentation, facilitation, a strengths-based change paradigm, and knowledge about health, prevention and resources.

Resilience and Protective Factors

Resilience is a centerpiece of the PYD framework (Lerner, Lerner, & Benson, 2011). On an individual level, resilience is "the capacity to spring back, rebound, successfully adapt in the face of adversity" (Henderson & Milstein, 2003, p.7). Resiliency models focus on identifying and building strengths, often referred to as "protective factors" or "developmental assets" (Benson, Scales, & Syvertsen, 2011). Prevention approaches that embrace resilience have proven to reduce risk taking behaviors and increase self-efficacy, academic performance, and thriving behaviors (Lerner et al., 2011). GTY develops meaningful relationships with caring adults and peers, and teaches a strengths-based perspective change paradigm.

METHOD

A convergent parallel mixed methods design was used in which quantitative and qualitative data were collected in parallel, analyzed separately, and then merged (Creswell & Plano Clark, 2018). In this study, quantitative pre- and post-intervention surveys from 256 middle and high school GTY participants were used to understand the influence of participation on changes in student self-efficacy, knowledge, health literacy, civic engagement, and resiliency. Qualitative focus groups explored the influence of GTY participation on student outcomes measured in the quantitative survey.

Quantitative Methods

Participants

Participants were 256 middle and high school students representing 20 Vermont public schools who participated in GTY during the 2018-2019 school year. Students participated as either Youth Leaders (n=192) or Data Analysis Retreat (DAR) Participants (n=64). As referenced in Figure 1, Youth Leaders attended a peer-led training day to learn skills needed to implement GTY in their own schools. These Youth Leaders then organized and led a one-day DAR with a larger group of peers (DAR Participants) to map existing assets, identify priority strengths and concerns in their local YRBS data, explore root causes and brainstorm solutions. The Youth Leaders also organized a community dialogue event, and then implemented action steps based on their work.

Instruments

To assess student-level outcomes, participants completed a survey that included 45 questions in 6 domains. Demographic questions included gender, race/ethnicity, grade in school, and number of years involved with the GTY program. Health literacy, community engagement, self-efficacy, resilience and protective factors, and learning outcomes domains included statements with five-level Likert-scale response options from strongly disagree (1) to strongly agree (5). The instrument components were selected from existing reliable and validated scales that had been used in previous YPAR, PYD and YAP studies, including questions from The Measure of Service Learning: Research Scales to Assess Student Experiences (Bringle & Phillips, 2004), and the California Healthy Kids Survey (Constantine & Benard, 2001). An internal test-retest reliability test was conducted with a partner site in New Mexico on the combined scales in 2012 and found good reliability. Four final items at the end of the survey assessed students' confidence in their ability to understand and talk about health data. Average scores were calculated in each domain.

Procedure

For Youth Leaders, the GTY Coordinator distributed and collected the paper-and-pencil pre-survey at the start of their fall 2018 training session. Post-surveys were sent to in-school advisors for Youth Leaders to complete in spring 2019, and advisors returned completed surveys to the GTY Coordinator. DAR Participants took the survey at the start and end of their one-day DAR event and were collected by the GTY Coordinator. A MPH student entered students' de-identified responses into a REDCap database, and the data was exported to Stata 14 (StataCorp. 2015) for analysis.

Data analysis

Demographic characteristics of participants are reported in counts and percentages. Wilcoxon signed-rank tests were used to determine whether participants' scores changed in each domain from the beginning to the end of their participation in GTY. The Wilcoxon's Alpha was set at .05.

Qualitative Methods

Participants

Focus group participants were 21 female and 11 male students from 5 different participating school teams: 2 grade 5, 3 grade 6, 10 grade 7, 8 grade 8, 1 grade 9, 2 grade 10, 3 grade 11, 2 grade 12. Participants from 4 different school teams were invited to provide written feedback. These teams were 30 female and 6 male students: 8 grade 7, 11 grade 8, 5 grade 9, 4 grade 10, 6 grade 11, 3 grade 12.

Instruments

Focus group questions were developed by UP for Learning and UNM-PRC faculty (Penaloza, 2019) to elicit details of the reasons, barriers and facilitators for initial and ongoing participation in GTY, and richer detail on individual impact on participants (Table 1). Written feedback questions were a subset of focus group questions chosen to assess individual outcomes.

Procedure

Two UP for Learning staff conducted focus groups in May 2019 at five different schools during their regularly scheduled GTY team meetings. The focus groups ranged from 30-45 minutes and were conducted before the quantitative survey results were analyzed. The adult advisor for each team was present, but did not provide feedback during the focus groups. Students responded to open ended questions in an inclusive circle or popcorn format, depending on the group norms of each team. Written feedback was collected in late spring 2019 from four additional teams via open-ended questions added to the post-intervention survey, administered and collected by advisors.

Data Analysis

Focus Group transcripts were analyzed utilizing a list of a priori codes based on domains from the quantitative survey and literature review: self-efficacy, health literacy, community engagement, protective factors, and knowledge and skills.The analysis revealed no additional codes beyond a priori. The qualitative analysis resulted in the identification of three top domains relative to increased engagement, knowledge gains, and indications of increased confidence.

Mixed Methods Analysis

This study reports on the results from a convergent mixed methods study design to develop a more comprehensive picture of the student-level impact of GTY, enhancing a depth of understanding of prior evaluations. The quantitative and qualitative results were compared narratively and also using a visual joint display (Guetterman et al., 2015). This produced high quality meta-inferences that would not have been possible in a mono-method approach (Creswell & Plano Clark, 2018).

RESULTS

Quantitative Results

A total of 192 Youth Leaders completed surveys: 148 completed the survey at the start of their training, and 94 Youth Leaders completed the survey at the end of their project. Fifty (50) Youth Leaders completed both the pre- and post-intervention surveys (Table 2). A total of 64 DAR Participants completed surveys as part of their schools' DAR. Of these, 63 completed the survey at the start of their retreat, and 61 completed the survey at the end of their retreat. Sixty (60) students completed both the pre- and post-intervention surveys. Among all participants (both Youth Leaders and DAR Participants), about 75% were female. Distribution of boys and girls was consistent for Youth Leaders and DAR Participants. One student identified as gender non-binary, and one student did not indicate their gender. Slightly more than half (51%) of students involved in GTY were in middle school. Among Youth Leaders, middle school students comprised 65%, but made up only 13% of student DAR Participants. Most (90%) of GTY's participants identified as White. About 5% identified as mixed-race, about 2% Asian, and about 1% as Hispanic or Black. Finally, a large majority of students (92%) were participating in GTY for the first time.

A total of 110 students with both pre- and post-intervention survey responses were included in the mean score analysis. Overall, the Wilcoxon Signed Rank Tests revealed statistically significant improvements in average scores from pre- to post-intervention in all five domains (Table 3). Because of uneven distributions of students by race/ethnicity and number of years students participated in GTY, we did not examine differences by these demographic characteristics. We found differences by gender, with no statistically significant change in boys' scores in domains of community engagement ($Z = -0.95$, $p = .345$), resilience and protective factors ($Z = -1.38$, $p=.169$), or self-efficacy ($Z = -1.94$, $p=.053$), though the change in self-efficacy scores for boys almost reached our alpha value.

By grade level (middle school vs. high school), we found a significant increase in scores from pre- to post-intervention in all five domains for high school students and in all domains except community engagement ($Z = -1.47$, $p = .143$) for middle school students. DAR Participants had statistically significant improvement in scores from pre- to post-intervention in all five domains, while improvements in Youth Leaders' scores in community engagement ($Z = -1.39$, $p = .164$) and resiliency and protective factors ($Z = -1.92$, $p = .055$) were not statistically significant. This finding was unexpected, stands in contrast to qualitative results, and warrants further exploration.

Qualitative Results

Four common themes emerged in the Youth Leaders' perception of their experience with GTY:

- **Increased sense of connection/community engagement.** Youth Leaders identified increased feelings of connection to peers and to adults in the community through GTY. They described gaining friendship, empathy for and from others, and feeling valued and heard by adults in their school and community.

- **Gain in knowledge.** Youth Leaders spoke of learning new information about health, health literacy, and mental health. They also cited new insight into things that were working well, and ways to help improve physical and mental health concerns.
- **Increased confidence/self-efficacy.** Youth Leaders cited increased confidence and belief that they made a difference in their community through their efforts as reasons for staying involved with GTY through the full school year despite challenges such as limited time for meetings. Youth expressed appreciation for their new sense of agency to shape their school and community.
- **Competing time demands.** Youth leaders noted the challenge of finding time to do the work due to competing demands of the school day.

Mixed Methods Integration

The side-by-side narrative display of the quantitative and qualitative results, as well as the joint display of the qualitative themes arrayed by corresponding quantitative survey items/domains, reveal the complementary relationships between data sets, lending strength to the findings (Table 4). The qualitative focus groups provide a window into the mechanisms of change illustrated in the quantitative analyses.

Discussion

This evaluation of a long-standing program examined whether Youth Leader or DAR participation in GTY resulted in improved student-level outcomes in empirically informed domains of positive youth development. This mixed methods convergent study demonstrated that in aggregate, participating in GTY positively impacts youth health literacy, knowledge and skills, community engagement, self-efficacy, resilience, and evidence of protective factors, which have all been linked by previous research to positive health and wellness outcomes.

While these outcomes are promising, it is important next to discern what aspects of the GTY experience contribute to their development. This data highlights that the student-led DAR is an influential event. Youth Leaders are also exposed to a wide variety of other learning and leadership opportunities, including planning and facilitating a Community Dialogue Night and creating and implementing an action plan to address identified YRBS health priorities. Other factors such as the relationship with the adult advisor or a sense of group belonging may contribute to the findings. This is a fertile area for subsequent research.

While GTY does not didactically teach health literacy, it engages youth in a unified PYD, YPAR, and YAP curriculum that is personalized, relevant, and purposeful. Further study could indicate benefits of integrating this pedagogical approach into school health curricula to supplement more traditional approaches.

Although national frameworks such as The Whole School, Whole Community, Whole Child Model (CDC, 2014), recommend bridging the health care and educational domains to increase youth health and well-being, few research-based scalable public school school prototypes exist to achieve this end. In fact, all too often health promotion efforts of the Departments of Education

and of Health are siloed. GTY is one means, proven over time in diverse settings, to build a bridge between these two sectors.

Limitations

The socio-demographic composition of our analytic sample is predominantly White. While this mirrors the overall racial demographics of Vermont, it is not generalizable to the US.

Post-survey collection was limited due to limited access to Youth Leaders at the end of the school year. While all Youth Leaders completed surveys at the start of a training event, post-surveys relied on each school team advisor to administer and return them to the GTY Coordinator. Further research is warranted to ensure a more robust and representative sample size in order to address concerns of potential nonresponse bias and add strength to these findings.

Implications for Practice and Research

GTY is poised to serve as a learning laboratory to inform other YPAR/PYD/YAP models in their efforts to expand within their own unique contexts. This study is a step toward this end, evaluating student-level outcomes of participation. Further research is warranted to better understand the Youth Leader's focus group findings highlighting enhanced community engagement, which was not mirrored in quantitative survey results. Given their year-long experience as change agents, why was this outcome ambivalent, particularly in comparison to the positive response of DAR participants? Exploration of the reported time challenges and the impact on outcomes would be beneficial. Also, subsequent study is needed to explore why males are less likely to participate or to report increased community engagement, resilience and protective factors and self-efficacy than their female counterparts.

The next tier of research will explore key process questions, such as training and support components critical to the YPAR/PYD/YAP model. Future studies will focus on equitable and representative student access to the opportunity, what priorities youth identify for action and what factors influence their choices. Increasing the sample size for subsequent research will contribute to confidence in the generalizability of findings.

Evaluating the systemic health impact of GTY actions on the community at large is key to validating this model. Finally, research to document and share what has been learned about implementing GTY in public schools on a state level, through key state partnerships promises to be a resource for those who have developed compelling YPAR/PYD/YAP models and seek to expand on a larger scale and integrate health and education sectors.

REFERENCES

Alexander, K., Entwisle, D., & Olson, L. (2007). Lasting consequences of the summer learning gap. *American Sociological Review, 72*(2), 167-180.

Anyon, Y., Bender, K., Kennedy, H. &, Dechants, J. (2018). A systematic review of youth participatory action research (YPAR) in the United States: Methodologies, youth outcomes, and future directions. *Health Education & Behavior*, *45*(6), 865-878.

Ballard, P., Hoyt, L., & Pachucki, M. (2019). Impacts of adolescent and young adult civic engagement on health and socioeconomic status in adulthood. *Child Development, 90*(4), 1138-1154.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist, 37*(2), 122-147.

Beattie. H., & Rich, M. (2018, April). Youth-adult partnership: The keystone to transformation. *Education Reimagined.* Retrieved from https://www.upforlearning.org/wp-content/uploads/2018/04/Youth-Adult-Partnerships_FINAL.pdf

Benson, P. L., Scales, P., & Syvertsen, A. (2011). The contribution of the developmental assets framework to positive youth development theory and practice. *Advances in Child Development and Behavior, 41,* 197-230.

Bringle, R., Phillips, M., & Hudson, M. (2004). *The measure of service learning.* Washington, DC*:* American Psychological Association.

Brown, S., Teufel, J., & Birch, D. (2007). Early adolescents perceptions of health and health literacy. *Journal of School Health, 77*(1), 7-15.

Catalano, R., Berglund, M., Ryan, J., Lonczak, H., & Hawkins, J. (2004). Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *The Annals of the American Academy of Political and Social Science, 591*(1), 98-124.

Centers for Disease Control and Prevention. (2014). *The whole school, whole community, whole child: A collaborative approach to learning and health.* Alexandria, VA: Centers for Disease Control.

Centers for Disease Control and Prevention C. (2019). *National health education standards.* Retrieved from https://www.cdc.gov/healthyschools/sher/standards/index.htm.

Centers for Disease Control and Prevention C. (2020). *What is health literacy?* Retrieved from https://http://www.cdc.gov/healthliteracy/learn/index.html.

Constantine, N., & Benard, B. (2001). California healthy kids survey resilience assessment module: Technical report. *Journal of Adolescent Health, 28*(2), 122-140.

Creswell, J., & Plano Clark, V. (2018). *Designing and conducting mixed methods research* (3rd ed). Thousand Oaks, CA: SAGE.

Curran, T., & Wexler, L. (2017). School‐based positive youth development: A systematic review of the literature. *Journal of School Health, 87*(1), 71-80.

Fielding, M., & Bragg, S. (2003). Students as researchers. *Making a difference.* Cambridge: Pearson.

Garnett, B., Beattie, H., Koller, S., Scott, K., Maseroni, M., & Holmes, B. (2019). Participatory survey data analysis as catalyst for empowering youth as school health change agents. *Health Promotion Practice, 20*(4), 483-488.

Guetterman, T., Fetters, M., & Creswell, J. (2015). Integrating quantitative and qualitative results in health science mixed methods research through joint displays. *The Annals of Family Medicine, 13*(6), 554-561.

Gutuskey, L., McCaughtry, N., Shen, B., Centeio, E., & Garn, A. (2016). The role and impact of student leadership on participants in a healthy eating and physical activity programme. *Health Education Journal, 75*(1), 27-37.

Hall, S. F. (2019). A conceptual mapping of three anti-adultist approaches to youth work. *Journal of Youth Studies, 23*(10), 1293-1309.

Henderson, N., & Milstein M. (2003). *Resiliency in schools: Making it happen for students and educators.* Thousand Oaks, CA: Corwin Press.

Lerner, R., Lerner, J., & Benson J. (2011). Positive youth development: Research and applications for promoting thriving in adolescence. *Advances in Child Development and Behavior, 41,* 1-17.

McCammon, S. (2012). Systems of care as asset-building communities: Implementing strengths-based planning and positive youth development. *American Journal of Community Psychology, 49*(3-4), 556-565.

Mitra, D. L. (2014). *Student voice in school reform: Building youth-adult partnerships that strengthen schools and empower youth.* SUNY Press.

Penaloza L. (2019). *Focus Group Interviewing: Skills and Technology*. Albuquerque, NM: Prevention Research Center.

Rubin, D. (2016). *A health literacy report: Analysis of 2016 BRFSS health literacy data.* Center for Disease Control. Retrieved from https://www.cdc.gov/healthliteracy/pdf/Report-on-2016-BRFSS-Health-Literacy-Data-For-Web.pdf

Winkelman, T., Caldwell, M., Bertram, B., & Davis M. (2016). Promoting health literacy for children and adolescents. *Pediatrics, 138*(6).

Zeldin, S., Christens, B., & Powers, J. (2013). The psychology and practice of youth-adult partnership: Bridging generations for youth development and community change. *American Journal of Community Psychology, 51*(3-4), 385-397.

Figure 1: Getting to 'Y' in 6 Easy Steps

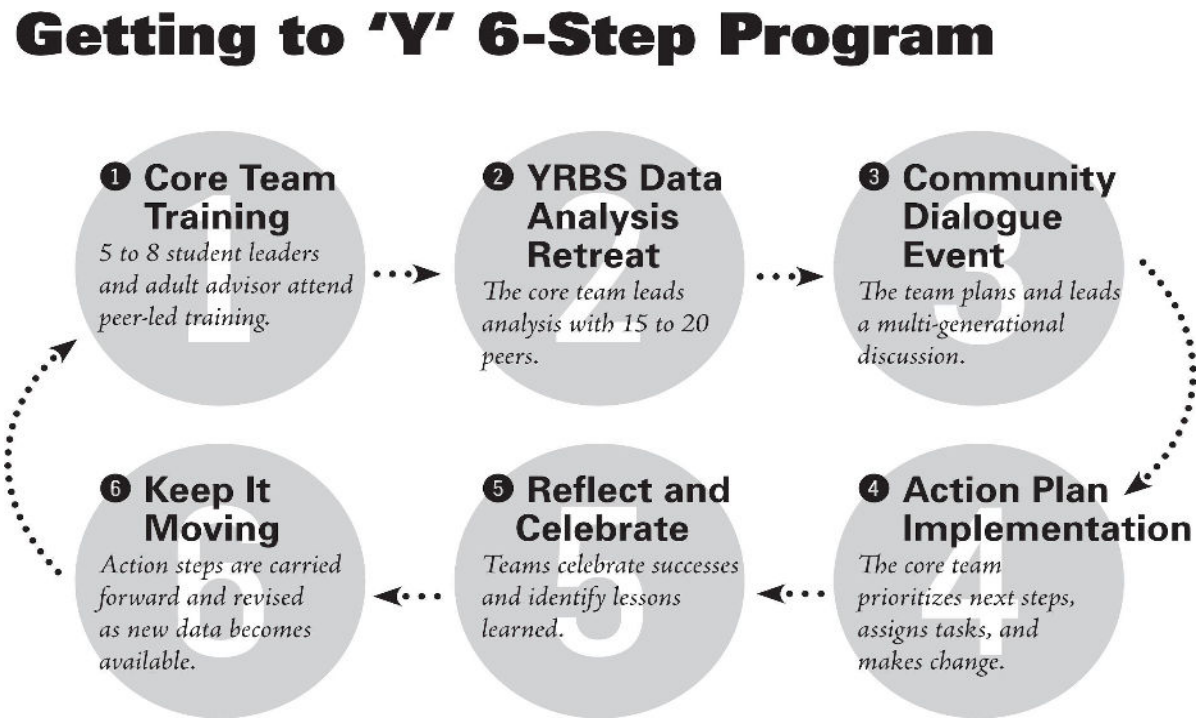

TABLE 1: Focus Group Questions

Guiding Research Question	Focus Group Question
What barriers and facilitators exist to keeping participants involved/engaged?	1. How many of you attended the Getting to 'Y' training day in Montpelier? How about some of the planning meetings here at school? The Data Analysis Retreat? And who was able to help at the Community Dialogue Night? 2. Think back to when you were first invited to participate in Getting to Y. What about Getting to 'Y' was appealing to you? 3. When you first started with the program, what were your expectations? 4. What happened during your Getting to 'Y' process that you did not expect to happen? 5. What about Getting to 'Y' made it difficult to stay in the program? 6. What about Getting to 'Y' made you want to keep participating/stay involved?
To what extent does participation in GTY improve student-level outcomes?	1. What did you gain by participating in Getting to 'Y'?
What broader school or community-level outcomes do participants perceive?	1. In what ways do you think your Getting to 'Y' work has made or will make change in your school or community?
	1. Anything else you'd like to say?

TABLE 2: Demographic Characteristics of GTY Survey Participants

	All participants N = 256		Completed pre & post surveys N = 110	
	N	**%**	**N**	**%**
Sex				
Girls	156	72.7%	87	79.1%
Boys	68	26.7%	22	20.0%
Other	2	0.8%	1	0.9%
Participant type				
Youth leader	192	75.0%	50	45.5%
Student DAR participant	64	25.0%	60	54.5%
Grade				
7th	43	17.2%	18	16.8%
8th	85	34.0%	21	19.6%
9th	36	14.4%	22	20.6%
10th	28	11.2%	11	10.3%
11th	24	9.6%	14	13.1%
12th	34	13.6%	21	19.6%
Race/ethnicity				
American Indian or Alaska Native	1	0.4%	1	0.9%
Asian	4	1.6%	1	0.9%
Black or African American	3	1.2%	1	0.9%
Hispanic	3	1.2%	1	0.9%

Native Hawaiian or Pacific Islander	1	0.3%	0	0.0%
White	229	90.2%	102	92.7%
Multiple races	13	5.1%	4	3.6%
Years participated in Getting to Y				
First year	234	91.8%	105	95.5%
One year	5	1.9%	3	2.7%
Two or more years	16	6.3%	2	1.8%

TABLE 3. Results of Pre and Post Test Survey on Student Outcomes

	Health Literacy			Community engagement			Self-efficacy			Resiliency & protective factors			Knowledge & skills		
	mean score change	Z	p-value	mean score change	Z	p-value	mean score change	Z	p-value	mean score change	Z	p-value	mean score change	Z	p-value
All students	0.22	-4.66	.000	0.14	-2.96	.003	0.13	-3.49	.001	0.11	-3.16	.002	0.35	-6.15	.000
By sex															
Girls	0.31	-4.04	.001	0.15	-2.82	.005	0.12	-2.88	.004	0.11	-2.71	.007	0.38	-5.75	.000
Boys	0.14	-2.54	.002	0.09	-0.95	.345	0.19	-1.94	.053	0.06	-1.38	.169	0.22	-2.06	.039
By grade															
7th - 8th	0.31	-3.21	.001	0.14	-1.47	.143	0.13	-1.97	.048	0.15	-1.97	.049	0.37	-3.72	.000
9th - 12th	0.14	-3.13	.002	0.14	-2.64	.008	0.12	-2.59	.010	0.08	-2.55	.011	0.35	-4.86	.000
By student type															
Youth leader	0.23	-2.82	.005	0.10	-1.39	.164	0.15	-2.11	.035	0.14	-1.92	.055	0.35	-4.49	.000
Student participant	0.19	-3.76	.000	0.17	-2.71	.007	0.12	-2.78	.005	0.08	-2.50	.012	0.35	-4.31	.000

TABLE 4: Qualitative Perspectives from Youth GTY Participants

Qualitative Domain	Youth Reflections/Supporting Quotes	Corresponding Quantitative Domain
Sense of Connection/Community Engagement	● "I've really gained a deeper insight and connection to both the school community and the wider community, and this has really helped me become more empathic with people around me." ● I like being part of THIS community (indicating the core team) and changing the big community if that makes sense. " ● "I gained friendship and I've learned that I can trust people, and I don't really trust people much. Before this I only trusted 3 people. Now I trust like 10 people" ● "...that in this group I would become friends with a lot of people I never even talked to, and that this was a great experience for me." ● "I was very surprised by the response that we got from the school board when we presented our data and the stuff around our community dialogue. It was very positive and open and lots of good questions were asked." ● "Like, there was an officer and a health manager or something that showed up to our dialogue night and they were both, they both like understood what we were talking about."	Community Engagement; Resiliency and Protective Factors
Knowledge	● "I feel like I learned a lot of new skills to apply to, like, my friends or something if they need more help" ● "I gained knowledge that I can use to help others around me if they are having a hard time." ● "I gained new knowledge about mental health of teens in Vermont." ● "I gained information about the problems and strengths about my community and state."	Knowledge and Skills; Health Literacy
Self-efficacy	● "I gotta stay involved 'cause this is the way to help the community." ● "I had more of an opportunity to lead others in the right direction when solving youth risk problems." ● "I gained a more confident voice and I learned to speak up about my opinion." ● "We made a difference in our school."	Self-efficacy

	● "I stayed involved because, because I liked that we were making a difference and looking through the data and seeing what we could do."	
Challenge: Lack of time	● "I feel like the hardest thing is like having the time to go to the meeting." ● "it's just always a matter of, there are other things going on as well. You know it's just scheduling stuff." ● "Just being busy." ● "like coming to some of like the all day data retreats are kind of hard just cause of like keeping up with like school work and stuff like that" ● "I think in the beginning it was also a little bit harder because with scheduling because it was kind of like we weren't scheduling always at a set time so now I think it's better but there's still not that much time." ● "Like a lot of scheduling difficulties. But I mean it's good that happens during school. Which is helpful. But it also takes away from like study hall and that's something that I value a lot."	No corresponding domain