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Mallory Antel, Student Dr. Corrine Williams, Committee Chair Dr. Sarah Wackerbarth, Director of Graduate Studies

# Positive Action: Implementing a Social-Emotional and Character Development Program in Marshall County, Kentucky Schools

CAPSTONE PROJECT PAPER

A paper submitted in partial fulfillment of the requirements for the degree of Master of Public Health in the University of Kentucky College of Public Health

> By Mallory Antel Lexington, Kentucky

Lexington, Kentucky April 16, 2019

> Committee Chair Dr. Corrine Williams

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## Abstract

Approximately 8% to 10% of children less than 5 years old experience clinically significant mental health problems, and 10-20% of all children and adolescents have a mental health problem of some type. While the prevalence of mental illness is similar between rural and urban residents, the services available differ significantly. Less than half of rural counties have a mental health facility that provides outpatient treatment for children and adolescents, resulting in children and adolescents in these areas being largely underserved. Following family homes, schools are the primary locations responsible for youth development. Research shows that welldesigned, well-implemented school-based prevention programs can significantly reduce healthrisk behaviors among all students. In rural areas lacking mental health services, school-based mental health interventions can reach youth whose needs would otherwise go unmet. Positive Action is a school-based, social-emotional and character development program spanning Pre-Kindergarten through 12<sup>th</sup> grade. Positive Action is an evidence-based program developing healthy mental and behavioral patterns in youth using age-specific curriculum. Using a one group time series design, we propose to implement Positive Action in three public schools in rural Marshall County, Kentucky.

## **Target Population and Need**

#### Burden

According to the Department of Health and Human Services, one in five children and adolescents will experience at least one mental health problem throughout their educational years. These mental health problems commonly include stress, anxiety, bullying, family problems, depression, a learning disability, and alcohol and substance abuse<sup>1</sup>, as well as emotional, behavioral, and social relationship problems<sup>2</sup>. Serious mental health problems, such as self-harming and suicide, are also becoming increasingly common in youth<sup>1,3</sup>. Currently, suicide is the second leading cause of death in the US in individuals aged 10-34<sup>4</sup>. Children with mental health problems may experience impairment in many areas, including social interactions, parent–child relationships, school problems, physical safety and physical health problems into adulthood. Children exhibiting problem behaviors are at an increased risk for conduct disorder, antisocial personality disorder, and police arrest. These children are also significantly more likely to commit violent offenses across adolescence and adulthood<sup>5</sup>.

#### Mental Health in Kentucky Youth

In Kentucky, more than 20 percent of middle and high school students report serious psychological distress<sup>6</sup> and suicide is the second leading cause of death for youth and young adults in Kentucky. According to the Kentucky Youth Behavior Survey, 15 percent of Kentucky high school students (1 in 7) reported having seriously considered suicide within a 12-month period. In addition, 17.4 percent of Kentucky middle school students (nearly 1 in 5) reported that they had seriously considered killing themselves at some point in their lives<sup>7</sup>. Despite the relatively high prevalence of mental health problems in Kentucky youth, the state was ranked

48th nationally in access to mental health care, with 67.5 percent of youth with depression not receiving mental health services. Of those who did receive mental health care, only 18.4 percent received consistent treatment<sup>7</sup>.

#### **Rural Mental Health Disparities**

The state of Kentucky is composed of 120 counties, 85 (71%) of which are classified as rural. It is well established that residents of rural communities have significant health disparities, including worse overall health, more health risk behaviors, and less access to resources than their urban counterparts, including access to mental health resources<sup>8,9</sup>. For children in rural communities, the availability and quality of behavioral health services and providers are often inadequate. For example, 61.6% of mental health professional shortage areas are in rural or partially rural areas<sup>10</sup>.

Factors that contribute to disparities in mental health services include accessibility, availability, and acceptability. Barriers to services for youths in rural areas include a lack of knowledge of mental health needs and treatments, lack of insurance for mental health services, limited transportation, and social isolation. Additionally, the stigma of needing or receiving mental healthcare can also affect the prevalence and use of mental health services in rural communities<sup>8,9</sup>.

Less than half of rural counties in the US have a mental health facility that provides outpatient treatment for children and adolescents, and only a third of rural counties have an outpatient facility with programs for youth with severe emotional disturbance<sup>11</sup>. In many rural communities, schools are the only reliable community resource for addressing children's mental health needs<sup>1,12</sup>, yet rural communities are less likely to offer evidence-based, early-intervention programs that may help improve mental health outcomes<sup>13</sup>.

## Marshall County, Kentucky

On January 23<sup>el</sup>, 2018, Marshall County High school of Benton, Kentucky was the site of a school shooting which resulted in the deaths of 2 students and injured 19 others. Following this tragic event, the Marshall County Public Library organized a community needs assessment in the form of open, round table focus group discussions with the community. Separate focus group discussions were also held for high school and middle school students. The results were recorded verbatim, and the Marshall County Health Department contacted the University of Kentucky for assistance with analyzing the results. Participation in the needs assessments was high relative to previous year, and participants from each category specifically identified a desire and need for increased mental health awareness and services in the community, and especially for students in relation to the shooting. Participants frequently expressed the possibility that such an event could have been prevented, and that future tragic events could be prevented, if the proper mechanisms were in place in the schools. Additional common concerns identified by respondents included behavioral problems such as bullying and an apparent increase in substance use among Marshall County youth.

Marshall County is a rural Kentucky county, located in the rural Western region of the state. Marshall County has a total population of 31,382, 97.9% of which is white. Twelve percent of the population lives below the federal poverty line<sup>14</sup>. The Health Resources and Services Administration has designated Marshall County as a High Needs Health Professional Shortage Area for mental health services<sup>15</sup> as there are currently 0 mental health providers per 10,000 children in the county<sup>16</sup> (see appendices for mental health providers county maps). Additionally, in the Marshall County School District, there are no school guidance counselors with mental or behavioral health training<sup>17</sup>. Recently, District Superintendent Troy Lovett publicly expressed

the need for funding to provide counselors in the schools so that children can access necessary mental and emotional guidance during their developmental years.

# Social and Emotional Learning (SEL) and Social-Emotional Character Development (SECD) Programs

The need for programs and services addressing the social, emotional, and mental health development in public schools remains a public health concern. Ten to twenty percent of children and adolescents have a mental health problem of some type<sup>18</sup>, yet an estimated 60% of students in need do not receive treatment for their mental health problems. Of the youth who do receive help, nearly two thirds solely at school<sup>1</sup>, as school have become the main provider of mental health services for youth<sup>19,20</sup>. Outside of family homes, schools are the primary locations responsible for youth development and well-being. Schools have direct contact with children during the most crucial years of their physical, intellectual, and social development, and thus serve as a critical locus for intervention across multiple domains including physical and mental health, safety, and success in into adulthood<sup>19,21</sup>.

Schools are increasingly adopting programs based on theories of social-emotional learning (SEL) and social-emotional and character development (SECD). The aims of these programs are to improve competencies in areas of mental and behavioral health such as prosocial behavior, honesty, self-development and self-control that, in the long term, prevent negative student outcomes such as violence and substance use, and promote positive student outcomes such as social competence and academic achievement<sup>22</sup>, as well as to improve overall school climate. Studies of school climates show that students' perceptions of school solidarity and belonging to a cohesive community of peers protects them from a multitude of academic and developmental risks<sup>23</sup>, and the risk of children developing a mental health problem can be

diminished by adjustments to the school environment and through the implementation of evidence-based school programs<sup>18</sup>. To address the lack of mental health support in Marshall County schools, the Marshall County Board of Education is proposing to implement the evidence-based, SEL and SECD school-based program *Positive Action* in Calvert City Elementary school, North Marshall Middle School, and Marshall County High School. The program is designed to reach all students in each of the proposed settings, amounting to approximately 2,300 students, which we will accomplish through partnerships and collaborations with several resources and agencies within and outside of our community.

## **Program Approach**

## **Positive Action**

Positive Action is a school-based SEL and SECD program developed in 1977 and released in 1983 by Carol Gerber Allred, Ph.D. The program consists of over 2,000 scripted lessons spanning Pre-Kindergarten through 12<sup>th</sup> grade, delivered by teachers using PA Classroom Kits containing age and grade-appropriate PA curriculum. The curriculum has been continuously updated since to better suit the changing needs of students over the decades since its inception. Over the course of a school year, students are taught 6 units that are designed work in tandem to achieve multiple outcomes. The outcome objectives determined for this project are improved school climate, attitudes towards self, attitudes towards others, social-normative beliefs and social-emotional character development. The expected long-term impacts include improved student achievement scores on standardized reading and math tests compared to previous years, lower rates of depression and anxiety, and lower rates of substance use, bullying and violence.

The program, based in the theory of self-concept, teaches that positive and healthy choices result in feelings of self-worth. The program addresses the whole behavior process,

teaching that thoughts come before actions, and that from our thoughts a decision is made about how to act. Furthermore, once an action is initiated, it cannot be undone and that for every action, there is a consequence. When our thoughts, actions and feelings are positive, we feel good about ourselves. This informs our feelings of positive self-worth - a powerful intrinsic motivator for continuing positive behaviors.

The curriculum is organized into 6 main unit concepts (outlined in Table 1) that are taught at a school-wide level, meaning that the concepts taught in each unit are the same concepts being taught to each grade level, allowing for the consistency and cohesion of PA lessons among the entire school. PA materials include the Climate Program, Counselor's Program, and Classroom Curriculum, all consisting of "kits" with lessons, flashcards, handouts, and activities corresponding to the Unit concepts. For classroom kits, there are 140 lessons per grade, which take 15 to 30 minutes each to complete.

<b>Table 1.</b> Positive Action C	Curriculum Units
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Unit	Торіс	Skills by Unit
Unit 1	Positive Action Philosophy and Self-Concept	<ul> <li>Defining self-concept, why it is important and how to form it</li> <li>Understanding the difference between positive and negative actions</li> </ul>
Unit 2	Physical & Intellectual Positive Actions	<ul> <li>Healthy behaviors</li> <li>Problem solving</li> <li>Decision making</li> <li>Cognitive skills</li> </ul>
Unit 3	Managing Yourself Wisely (Self-regulation)	• Managing thoughts, actions, feelings, time, energy, possessions
Unit 4	Getting Along with Others (Social Self)	<ul> <li>Respecting others</li> <li>Empathy</li> <li>Fairness</li> <li>Kindness</li> <li>Cooperation</li> <li>Not bullying</li> </ul>

Unit 5	Being Honest with Yourself and Others	•	Telling yourself and others the truth
		•	Being in touch with reality
		•	Knowing strengths and weaknesses
Unit 6	Continuous Self-Improvement	•	Setting physical and intellectual
			goals
		•	Setting social and emotional goals
		•	Believing in your potential
		•	Having courage to try

## Positive Action Evidence Base

Positive Action (PA) has completed three randomized-controlled studies, conducted in urban Chicago, in urban, rural and remote Hawaii schools, and in a southeastern rural school district. The studies matched schools using similar eligibility criteria, and the schools in each pair were then randomly assigned to either the treatment or control condition.

Program evaluation in Hawaii revealed that, after three years, Positive Action significantly reduced grade retention, suspensions, and absenteeism, increased reading and math scores on Hawaiian standardized tests, and improved student and teacher reports of school supportiveness across program schools, relative to control schools. Program youth reported significant improvements over time, compared to controls, in how they felt about themselves after engaging in positive behaviors. At the one-year post program follow-up, school-level data showed PA schools scoring significantly better than control schools on standardized tests of reading and math, along with lower absenteeism and suspensions. At the end of fifth grade, PA students were significantly less likely to engage in substance use, violent behaviors, and sexual activity. Teachers also reported less violent behavior. Furthermore, one-year post-trial, Positive Action schools in Hawaii reported significant improvements in school quality relative to control schools<sup>24</sup>.

The rural southeastern school district study revealed significant positive program effects on a measure of social-emotional and character development (SECD) and improved frequency of positive behaviors, consistent with the results of the rural schools in the Hawaii study, and thus demonstrate generalizability to small rural schools<sup>25</sup>.

In Chicago, after three years, program youth made significant improvements in honesty, self-control, problem solving, and affiliation with negative peers, compared with controls. Moreover, for program youth there was a 31% reduction in substance use behavior, 36% reduction in violent behavior, 41% reduction in bullying behaviors, and 27% reduction in disruptive behaviors. In this trial, long term follow-up (3 years later) found significant effects on substance use, normative beliefs supporting aggression, violence, bullying, emotional health, and health behaviors in program youth<sup>26</sup>.

Due to these positive outcomes, Positive Action is a top-rated program for "Improving Academics and Behavior" by the What Works Clearinghouse (WWC). The U.S. Department of Education has approved Positive Action as a "Whole-School Reform Program" for School Improvement Grants, and Positive Action has also been certified as a "Model" program by the Substance Abuse and Mental Health Service Administration (SAMHSA) and by Blueprints for Healthy Youth Development.

Because of Positive Action's well-established evidence base in multiple school and community settings, including urban and rural, and because program curriculum is highly structured, program adaptations have not been deemed necessary for this population and could put fidelity to the original program at risk. Further, because of its evidence base, the Board has chosen to implement and evaluate the program without the use of control schools. The program will be evaluated using a one group time series design to test for program effectiveness at the beginning and end the of the grant period, as well as at the beginning and end of each school year to show trends in program effectiveness (see Performance Measures and Evaluation section).

#### Implementation Overview

The Marshall County Board of Education is proposing to implement Positive Action in three Marshall County Schools. The program will be implemented school-wide and integrated into each grade level. In the first month, program materials will be ordered to ensure that materials will arrive before the start of the school year. Positive Action, Inc. provides the free services of Positive Action Consultants, which MCBE will use for guidance, customized implementation strategies and ongoing support throughout the project period. Additionally, MCBE will hold its first meeting with our Community Advisor Board to determine how the Board will work together to ensure successful implementation and completion of project milestones throughout the grant period. To establish teacher buy-in to the program implementation, the MCBE, Program Director, and PA Program Coordinator will hold meetings the second month of the grant period to educate teachers, guidance counselors and school principals about the program's mission, values and goals, how the program will be implemented, individual roles and expectations, and what support they will receive for the duration of the project. The Project Coordinator and all teachers, principals, and school administration involved with the project will attend on-site trainings at the high school. Since each training is effective for up to 50 participants, 3 training days will be held on the Friday, Tuesday and Wednesday prior to the first day of school to accommodate the 145 total participants requiring training. Each individual will receive a \$100 incentive for successful completion of training. PA will provide a trainer for whom we have budgeted travel expenses and lodging. The provision of a certified PA trainer will ensure fidelity of training, thus

increasing the likelihood of implementing the evidence-based program with fidelity. At the start of the fall semester, a school orientation in the form of a pep rally will take place during the first week in each school setting to introduce the new program and to promote school-wide engagement. Full-scale implementation is expected to occur the second week of school.

Since Positive Action is a highly structured program designed for school-wide implementation and administration at all grade levels, the program delivery plan will be very similar at the elementary, middle and high schools. Each teacher will be provided with an Instructor's Kit containing grade-appropriate curriculum for the school year, as well as an Instructor's Manual, which details the proper procedure for delivering lessons and activities. In each of the schools, the 15 to 25-minute lessons will be given at the start of the school day, nearly every day of the week. In each elementary classroom, the teacher will deliver that day's designated lesson to the students. Since students change classrooms throughout the day at the middle and high school, lessons will be delivered each morning in the students' homeroom. Using materials provided in the school climate kit, the Project Coordinator will designate school administration members to be responsible for distributing PA posters throughout the classrooms, hallways, lunchrooms and gymnasiums, which will promote key concepts from the current PA unit on a school-wide level, with the goal of influencing overall school climate. Over the span of the school year, the school climate posters will be replaced 6 times, at the start of each corresponding unit.

A predetermined guidance counselor from each of the three schools will receive a Counselor's Kit, equipped with a comprehensive Counselor's Manual. The Counselor's Kit is designed for use with individuals as a resource for intensive assistance and support, however the kit can also be used for small groups, large groups, classrooms, and families seeking additional support. Because Marshall County schools are not currently equipped with certified mental health professionals, Four Rivers Behavioral Health in neighboring McCracken County has agreed to contract out a mental health practitioner (MHP) from the agency. In our Community Needs Assessment, many Marshall County High School students described regularly experiencing post-traumatic symptoms following the shooting and requested an MHP be made available at the school. Once a week, this MHP will be available to provide counseling at the Marshall County High School, where the perceived need for mental health services is greatest. The MHP may also provide consultation for elementary and middle school guidance counselors and refer students to supplemental resources if needed.

To ensure fidelity to the evidence-based program, fidelity monitoring surveys and logs, provided by PA, will be distributed to teachers throughout the school year. At the beginning of each semester, school administration members will be responsible for providing Weekly Implementation Report forms to teachers, to be completed and collected on a weekly basis. Teachers will also receive copies of Unit Implementation Report forms, to be completed and returned about every 5 weeks at the completion of each unit. The Project Coordinator will work with principals to review these reports and identify any areas of concern in the implementation process. Using this information, at each school the Principal will hold meetings with teachers at the beginning middle and end of every semester to remind staff of the programs mission and values and maintain teacher morale. At these meetings, project progress and teacher attitudes towards the program and its implementation will be discussed. Teachers and principals will receive a meal at each meeting. The goal of these meetings is to monitor implementation and offer on-going support to teachers throughout the implementation process, to address potential pushback by teachers, and to troubleshoot challenges with program delivery. At the beginning of the project, outcome measure surveys will be administered as a pretest to determine a baseline measure for the project's intended outcomes. These surveys will also be administered as a posttest to measure overall program effectiveness towards changing intended outcomes. All evaluation surveys give explicit instructions for the administration and completion of surveys. See **Evaluation** section for descriptions of process and outcome measures.

## Community Advisory Board

A Community Advisory Board (CAB) has been selected to assist with initial data collection, implementation, and evaluation. The Marshall County Public Library, which initially undertook the community needs assessment identifying the need for a school and communitywide program addressing youth social and emotional well-being and problem behaviors, has demonstrated its interest in the well-being of the students and community and its reach in the community. Local churches, which capture a large community audience and also have vested interest in the well-being of its community members, will work as champions to promote and disseminate Positive Action messages in community and family settings. Students from the three schools will be consulted as experts in school climates and environments, and for students' overall feelings regarding the implementation of Positive Action in their schools. To maintain teacher engagement, teachers from each implementation site, as well as the principals from each site, will be part of our CAB. The Parent Teacher Association (PTA) Committee Chair will serve on the board as a representative of the parents of our students, who naturally have a deeply vested interest in the safety and emotional well-being of their children. Members from local organizations such the Marshall County Police Department, EMTs, and First Responders, who have expressed specific interest in a school-based prevention program following the Marshall

County High School shooting, have also been invited to join our CAB. The CAB will also serve to ensure appropriateness of PA curriculum implementation, as well inclusivity of the project regarding ethnicity, race, gender, sexual orientation of all involved. We will use the expertise of the CAB to identify other resources and services as needed.

#### *Sustainability*

To sustain school-based programs after grant funding ends, all involved in the project must be motivated and committed to continuing program practices. Teachers commit to programs when they experience success implementing them and have sufficient support (Han and Weiss 2005). School administration will continuously support our teachers throughout the implementation of this project to sustain their enthusiasm for the program and its goals, and to address any push-back from teachers regarding the program delivery, as described in the *Implementation Overview* section. The use of teachers for program delivery makes sustainability more feasible, as initial high costs for planning, prepping and training and initial supplies will cease after year 1 of the project.

Quarterly CAB meetings will be held at the Marshall County Public Library to keep the community partners updated and engaged with project progress. CAB members will offer their expertise in troubleshooting potential challenges that may arise throughout the project period and identity helpful resources and partners for supporting the project.

Through a partnership with the Kentucky Center for School Safety, the Kentucky Department of Education offers schools resources for programs that promote healthy social and emotional climates. The Kentucky Department of Education, recognizing the importance of children's social and emotional development for their mental and physical health, supports the provision of SEL programs in Kentucky schools. If the project is successful, the dissemination of positive results of implementation, fidelity, and intended program outcomes may increase the likelihood of the Kentucky Department of Education allocating funds to extend the program's reach to all Marshall County schools, and to neighboring school districts.

## Evaluation

#### **Performance Measures**

Instruments to assess implementation, process, student outcomes, and parents and teacher opinions are provided by Positive Action, Inc., in collaboration with Dr. Brian Flay, University of Illinois at Chicago. Following state and federal data collection guidelines, surveys will collect information on age, gender, and race/ethnicity, which will allow us to determine the level of program effectiveness and reach amongst all demographic populations in the three school settings. Pre-surveys, process surveys, post surveys and teacher and parent opinion surveys will be administered by the Project Coordinator and school administration at various intervals throughout the grant period.

#### **Process Evaluation**

Our process evaluation reports consist of the Weekly Implementation Report (to be completed by teachers weekly), the Unit Implementation Report (to be completed by teachers at the end of each unit), the End of Year Teacher Evaluation Survey, and the Student Process Survey. See appendices for full process evaluation forms.

The Weekly Implementation Report is a 7-item survey that will be completed by teachers at the end of each week and assess how and to what extent PA lessons and activities were delivered. The Unit Implementation Report (UIP) is a 26-item report that will be completed by teachers at the end of each of the 6 units of the program, which will occur about every 5 weeks. Both of these reports will identify successes and challenges of delivering Positive Action to students and will allow the Principal, the Project Coordinator, CAB, and Positive Action, Inc. staff to provide technical support to teachers who are having difficulties with implementation and identify areas for improvement.

Process evaluations will also occur yearly using a separate set of measures. The Positive Action End-of-Year Teacher Process Evaluation (TPE) Survey will be administered at the end of the school year to teachers to gather reports about their level of implementation of the program, their attitudes towards it, and their perceptions of its helpfulness in changing student behavior. The End-of-Year Field Coordinator Process Evaluation Survey will be completed by the Project Coordinator at the end of each school year. Teacher and parent opinion surveys will be administered at the beginning and end of each school year as part of the yearly process surveys. The Student Process Survey (SPS) will also be administered at the end of each school year to assess student perceptions of amount of exposure (dosage) to PA lessons and activities and student attitudes about the PA program overall. These items, combined with teacher ratings of student behavior or student answers to the Student Outcomes Surveys (below), will be used to compare classrooms with high versus low levels of implementations of the program and may also be used to compare students with positive versus negative attitudes toward the program.

The project evaluator will create quarterly process reports detailing levels of student participation, quality assurance of program, and fidelity to the original program, and will distribute these reports to the Principals, Coordinator, and Director. If fidelity is found to be insufficient at any of the schools, the Coordinator will arrange additional online booster trainings for teachers. Data from process evaluations will inform necessary directional changes for program delivery in each setting.

#### **Outcome Evaluation**

While the measurement of intended long-term impacts are beyond the scope of this project, change in the following short- and medium-term outcomes will be measured over the course of this 3-year project: School Climate, Attitudes Towards Self, Attitudes Towards Others, Social-Normative Beliefs, Social-Emotional and Character Development, reduced bullying and violence, and reduced disciplinary problems. The goal of this project is to improve these outcomes in our student population. School Climate refers to individuals' perceptions of the school setting as a space for learning and interacting with peers and authority figures. It includes feelings of school pride, inclusivity and safeness. Attitudes towards self and others reflect individual positive or negative feelings towards oneself and towards others. Social-normative beliefs include individuals' perceptions of social normative pressures to perform or not perform a behavior. Social-Emotional and Character Development refers to the development of character traits, behaviors and relationships. Student Outcomes Surveys will measure these outcomes using scales described in Table 2. These surveys will be administered in at the beginning and end of each school year. To measure change in rates of bullying and violence and disciplinary problems, at baseline we will gather existing school-level data reporting disciplinary actions and reasons for these actions. At the end of the project period, we will gather data reported from the final year of the project and compare change from baseline.

Construct	Student Survey Scales	Number of Items	Example Items (measured on 4-point scale)	Reliability Coefficient alphas: w1/w2/w3/w4/w5/
School Climate	Student Attachment to School (Cook et al., 1995)	4	"I feel like I belong to this school" "I wish I were in a different school"	<b>w6/ w7/w8/tt</b> .74 / .81 / .84 / .89 / .82 / .86 / .87 / .85 / .80 .68 / .79 / .84 / .86 / .86 / .84 / .85 / .85 /78

 Table 2: Outcome Measures

	Student Attachment to Teacher (Cook et al., 1995) Feelings of Safety (New Measure)	9	"Most of my teachers treat me fairly" "I feel afraid that someone will tease me at school" "I feel afraid that someone will hurt me at school"	.62 / .70 / .70 / .74
Attitudes Towards Self	Positive Feelings Scale (new items)	8	"I feel good about who I am"	.82 / .86 / .86
Attitudes Towards Others	Children Empathy Questionnaire (Funk et al., 2003)	16	"When I see a kid who is upset it really bothers me" "I understand how other kids feel"	.79 / .86 / .86 / .88 / .86. / .87 / .89 / .87
Social- Normative Beliefs	Normative Beliefs about Aggression (Huesmann & Guerra, 1997)	8	"If you're angry it is OK to say mean things to other people"	.81 / .89 / .91 / .92 / .90. / .92 / .91 / .92
	Belief in the Moral Order – Positive Values (Arthur et al., 2002) Belief in the Moral	6	"It is important to do good things for the group, even when you want something different for yourself"	.69 / .74 / .72 / .76 / .81 / .76 / .82 / .82 / .55
	Order – Negative Values (Arthur et al., 2002)	5	<i>"It is OK to beat up people if they start a fight"</i>	.59 / .64 / .71 / .74 / .72 / .76 / .75 / .80 /.62
Social- Emotional and Character Development	Social-Emotional and Character Development Scale (Ji et al., 2013)	28	"I am nice to kids who are different than me" "I admit my mistakes" "I make myself a better person"	.6192

In addition to self-report Student Outcomes Surveys, the Positive Action Student Behavior Rating Scale will be administered to teachers prior to the start of the intervention to gather baseline information about teacher perception of students' behavior to better assess the accuracy of students' self-reports. Teachers will individually rate each student in the classroom using a randomly assigned ID number. The same survey will be also administered at the end of each school year to measure change in student outcomes. The Project Evaluator, with the aid of the 2 graduate assistants, will be responsible for performing simple statistical tests to report pre and posttest outcomes survey data yearly. At the end of the 3<sup>rd</sup> and final year, our contracted biostatistician will perform final statistical analyses to determine overall program success.

#### Data Collection and Privacy

To ensure confidentiality, an ID numbering scheme will be used to assign identification codes for students. These codes can be used consistently across data collection to confidentially link each students' pretest and posttest results to better analyze change across project years. The code will consist of letters and numbers; students will use the second letter of their first name, the last letter of their last name, and their birth date and month. Data will be collected and promptly entered into REDCap, a secure web-based, HIPAA compliant data collection tool.

## Parental Consent

Parental consent for students' participation in the Positive Action program will not be obtained, as the program's curriculum is school-wide and opting out of exposure to the Positive Action program is not possible. However, parental consent will be obtained before the students may complete surveys for research purposes. On the first day of school, various back-to-school forms are sent home with students for parents and guardians. A Parental Consent Form to allow students to complete research surveys will be added to the forms for parents to review, sign and return to school with their children. Students also reserve the right to opt out of any survey at any time.

## Key Challenges

The continuous collection and management of data from approximately 2,500 students and staff involved in this project could become a potential obstacle. If collection and management of data become overwhelming for the designated staff members to fulfill the Project Coordinator is available to assist when and where assistance is needed. Additionally, two graduate assistants, working full time, 20 hours each a week, will be managing data and entering it promptly into the online REDCap database, to which the project evaluator will have constant access for reviewing. These measures will ensure a streamlined data collection, management, and evaluation process.

## **Capacity and Experience of the Marshall County Board of Education**

The philosophy of the Marshall County District Board of Education is comprised of three components: our vision, our mission, and our beliefs. Our vision is to be the premier school district in Kentucky. Our mission is to inspire a lifelong passion for learning in all students to help them become thoughtful contributors within a global society. We believe that in order to grow and thrive, individuals need caring relationships and nurturing environments. As such, it is in our very best interest to provide positive school climates which enhance the social and emotional well-being of our students.

The Marshall County Board of Education (MCBE) has experience implementing largescale initiatives in our district, which serves nearly 5,000 students. Our "Deeper Learning" initiative aims to prepare students for college, career, and life success through various instructional approaches that promote self-directed learning, collaboration, and critical thinking and problem solving. We currently partner with the University of Kentucky's Next Generation Leadership Academy and the Kentucky Department of Education's Innovation Leadership Network to implement Deeper Learning initiatives. Deeper Learning has been implemented in Sharpe Elementary School, Calvert City Elementary School, and South Marshall Elementary School - reaching approximately 1,000 of our students. In addition, we have experience in providing a number of successful district-wide academic and health support programs and services for our students and their families. We maintain strong community engagement and have partnered with multiple local organizations and stakeholders who have pledged to support and assist in the implementation and sustainability of the proposed project.

The Board provides a high quality, personalized, and evidence-based program for professional development and staff trainings, demonstrating our ability to provide training and assistance to implement large-scale, evidence-based programs such as the proposed Positive Action program. MCBE is also responsible for preparing and submitting reports on all aspects of our school services and progress using our Certified Evaluation Plan (CEP). The CEP outlines procedures and provides forms needed to evaluate personnel and meets all the requirements of the Kentucky Framework for Personnel Evaluation. An evaluation committee develops and submits the plan to the local board of education for approval as well as to the KDE for final approval prior to implementation. We carry out faculty performance evaluations, process evaluations, and student learning and achievement evaluations using materials and procedures provided by the Kentucky Board of Education, illustrating our capacity for performance monitoring and evaluating. The data from these assessments are used to better diagnosis strengths and areas of growth or improvement for our schools and where to make changes as needed.

To ensure inclusion in all MCBE activities, programs and services, we have a strict nondiscrimination policy statement: "The Marshall County Board of Education does not discriminate on the basis of sex in the educational programs or activities that it operates and is required by Title IX of the educational amendments of 1972 (P.L. 92- 318), not to discriminate in such a manner. Further, the Board of Education does not discriminate on the basis of handicap, in treatment, admission or access to, or employment in, its programs or activities as required by the Rehabilitation Act of 1973 (P.L. 93-112), as amended, Section 504, nor does the Board of Education discriminate on the basis of race, color, national origin, as required by Title VI of the Civil Rights Act of 1964, nor does the Board of Education discriminate on the basis of sex, age, religion or marital status in the educational programs or activities it operates."

The Board manages numerous local, state and federal funds to deliver and maintain all district activities in our preschool school programs, six elementary schools, three middle schools, and one high school. Additionally, we are responsible for compiling and submitting monthly and annual district financial reports to the Legislative Research Commission and the Kentucky Department of Education. Over the years, the Board has consistently managed to stay within its allocated budget. We believe this demonstrates our capacity for managing all funds required to deliver the proposed program in three of our schools: Calvert Elementary School, North Marshall Middle School, and Marshall County High School.

#### **Project Management**

## **Project Director**

Will Thorne will serve as our Project Director. Mr. Thorne currently serves as the Director of Alternative Programs for the Marshall County School District. As Director of Alternative Programs, he has experience managing multiple special programs and services across the school district and will use this expertise in his position as Project Director of Positive Action. As Program Director, Mr. Thorne will be responsible for overseeing all aspects of the project planning, implementation and evaluation for the duration of the 3-year grant period. With the help of the Coordinator, he will ensure that all staff responsible for implementing the program receive training prior to full scale implementation. He will provide support to the Project Coordinator and all faculty/staff involved with the project to ensure that all project milestones are being met. He will organize bi-monthly meetings with Key Project Personnel (Director, Coordinator, Evaluator, and Principal from each school) and the quarterly meetings with the Community Advisory Board. The Director will also be responsible for disseminating program evaluation results to all community stakeholders and partners as they are received from the Program Evaluator.

## **Project Coordinator**

Meredith Bell will serve as the Positive Action Project Coordinator. Ms. Smith currently serves as the Family Resource Youth Services Centers (FRYSC) District Coordinator. As FRYSC District Coordinator, she has extensive experience providing health service and referrals to community agencies to best fit the needs of Marshall County students and their families, including substance abuse, family crisis, and mental health services. Ms. Bell's experience coordinating services and partnering with multiple community agencies as the FRYSC Coordinator align well with the role of the PA Project Coordinator. As PA Coordinator, she will serve as liaison between key project personnel and between the Elementary, Middle and High schools. She will work directly with the Project Director to conduct Community Advisory Board meetings and maintain communication with partners through the provision of quarterly progress reports. Ms. Bell will report weekly to each school and meet with each principal to provide necessary support to facilitate successful program operations. At these meetings, principals and the Coordinator will identify areas where professional development is needed. Additional support may be provided and if necessary, online booster trainings will be administered. In the case of staff turnover, PA provides an adapted online training in lieu of the standard on-site

training. Ms. Bell will work closely with other personnel such as the Program Evaluator, Graduate Assistant, and Positive Action Consultant to ensure program success.

## **Program Evaluator**

The program evaluator, TBN, will be responsible for monitoring program fidelity and yearly outcomes results. S/he will work with graduate assistants on managing and monitoring data and will assist the Project Director and Project Coordinator in writing quarterly and annual reports that will guide directional changes for program delivery throughout the 3-year project.

## Biostatistician

A biostatistician from Western Kentucky University, TBN, will be contracted in Year 1 to review our performance measures prior to program implementation. We will additionally require his/her services in Year 3 of the grant to provide final outcome analyses at the close of the project period.

#### **Other Key Personnel**

Through our partnership with Western Kentucky University, we will also acquire the services of two graduate assistants to assist with data management and to aid the Project Director and Coordinator. Throughout the duration of the project, the graduate assistants will be responsible for entering the process and outcome survey information into REDCap, a web-based, HIPAA compliant data collection tool. The graduate assistants will assist the Project Director and Project Coordinator with organizing CAB meetings, communicating with project partners, and troubleshooting possible implementation challenges. While graduate assistants are welcomed to attend project and CAB meetings in person, due to the distance between the University and Marshall County, the assistants may attend meetings and consult with other project personnel via Zoom video conferencing software.

## **Partnerships and Collaboration**

The MCBE is dedicated to the success and well-being of its students and recognizes that partnerships with community and state partners are vital for project success. All partners have documented their joint support and commitment to the project for the entirety of the project period.

We have partnered extensively with the University of Kentucky's Next Generation Academy and the Kentucky Department of Education Innovation Network to advance new models of education to best prepare students for success, as described in the Capacity of Applicant Organization section. We will continue to partner with the University of Kentucky and the Kentucky Board of Education as we implement the Positive Action Program for assistance with the publication and dissemination of the results of this project.

MCBE has partnered with Western Kentucky University (WKU), from which our biostatistician, program evaluator, and two graduate assistants will be obtained. These individuals will be vital to all aspects of this project. WKU will also assist in the dissemination and publication of results at the end of the project period.

In the aftermath of the Marshall County High School shooting, Four Rivers Behavioral Health of neighboring McCracken County provided grief counseling services for students and faculty. The not-for-profit behavioral health agency for the Western Kentucky region, has agreed to contract out a mental health provider to provide services once a week for students and to assist with student behavioral health referrals if additional needs are recognized throughout the duration of the project.

Since the January 2018 shooting at Marshall County High School, the Paducah Public School District, whose own Heath High School suffered a school shooting in 1997, has shown generous support for the Marshall County School District. Dr. Bruhn, Chairman of the Paducah Board of Education has also agreed to Partner with the MCBE. In the fall of 2017, the Paducah Board of Education successfully implemented the Positive Action program in 3 elementary schools, reporting positive results with student attitudes and behaviors within just one year. Because of its expertise in implementing Positive Action, PBE will provide invaluable consultation and support for the implementation and evaluation of Positive Action in Marshall County Schools.

To gain traction at the policy level, we have partnered with the Kentucky Education Association, which has an established influence in Kentucky state legislation concerning public school education. Our Kentucky Education Association District President Robin White will serve as liaison between MCBE and the Kentucky Education Association. Further, the federallydesignated Kentucky Office of Rural Health has expressed commitment to the support of the health and well-being of rural Kentuckians through the promotion of access to rural health services and has agreed to assist with the publication and dissemination of project results.

To maintain community reach and engagement we remain partners with Marshall County Public Library Branch Manager Terry Black, the organizer of the Community Needs Assessment previously described in this proposal. We are also partnered with the Mayors of Benton and Calvert City to increase the potential for investment in school-based social-emotional development programs.

## **Budget Narrative**

A. Salaries and Wages

Position Title	Effort	Salary	Salary Requested	Fringe	Total
Project Director	30.00%	\$65,000	\$19,500	\$5,998	\$25,245
Project Coordinator	100.00%	\$55,000	\$55,000	\$17,868	\$72,868
Program Evaluator	25.00%	\$54,000	\$13,500	\$4,414	\$17,914
Graduate Assistant	100.00%	\$16,000	\$16,000	\$9,580	\$25,580
Graduate Assistant	100.00%	\$16,000	\$16,000	\$9,580	\$25,580
Total					\$167,187

Year 2					
Position Title	Effort	Salary	Salary Requested	Fringe	Total
Project Director	20.00%	\$66,950	\$13,390	\$4,118	\$17,508
Project Coordinator	100.00%	\$56,650	\$56,650	\$18,404	\$75,054
Project Evaluator	25.00%	\$55,620	\$13,905	\$4,546	\$18,451
Graduate Assistant	100.00%	\$16,480	\$16,480	\$9,867	\$26,347
Graduate Assistant	100.00%	\$16,480	\$16,480	\$9,867	\$26,347
Total					\$163,707

Year 3					
Position Title         Effort         Salary         Salary         Fringe         Total           Requested         Requested         Reduction         Rescuested         Rescuest					
Project Director	20.00%	\$68,959	\$13,792	\$4,242	\$18,034

Project Coordinator	100.00%	\$58,350	\$58,350	\$18,956	\$77,305
Project Evaluator	25.00%	\$57,289	\$14,322	\$4,683	\$19,005
Graduate Assistant	100.00%	\$16,974	\$16,974	\$10,163	\$27,138
Graduate Assistant	100.00%	\$16,974	\$16,974	\$10,163	\$27,138
Total					\$168,620

**Project Director** – Will Thorne, MCBE's Director of Alternative Programs, will serve as Project Director. He will devote 65% of his efforts in Year 1, preparing, organizing and ensuring the successful full-scale implementation of Positive Action in the three designated school settings. In years 2 and 3 of the grant, he will devote 50% of his efforts towards the project. He will work closely with the Project Coordinator managing all aspects of the project.

**Project Coordinator** – Meredith Bell, our District FRYSC Coordinator, will serve as Project Coordinator. She will devote 70% of her efforts coordinating all aspects of our project for the duration of the grant period. She will manage and monitor all aspects of project implementation and work closely with the Director and Evaluator to ensure successful implementation.

**<u>Program Evaluator</u>** – The Program Evaluator will be hired from Western Kentucky University and will contribute 25% effort on this project. S/he will work with graduate assistants monitoring and reporting process and outcome data throughout the 3-year grant.

<u>Graduate Assistants</u> - The graduate assistants will work 20 hours a week (100% effort for graduate students) on this project throughout the grant period. Their primary responsibilities will be entering project data into REDCap and working closely with the Director and Coordinator, aiding in organizing CAB meetings, communication with partners through quarterly newsletter updates, data collection and dissemination of evaluation results.

Benefit	MCBE Staff	WKU Hire	WKU Graduate
			Students
Retirement	10%	10%	NA
Social Security	Social Security 7.65%		7.65%
Other Fringe	2.55%	2.72%	1.20%
Total Percent 20.2%		20.37%	8.85%
PLUS Prorated Amount of	Health and Life Insuranc	e. Multi-year projects shou	ld project a 3% increase in
insurance per year. Amou	nts shown below are for the	e '18-'19 year.	
Employee	\$500/mo	\$500/mo	\$2,300/year
	\$6,000/yr	\$6,000/yr	(estimated)

# **Fringe Benefits Calculations**

Employee & Children	\$659/mo	\$659/mo	NA
	\$7,908/yr	\$7,908/yr	
Employee & Spouse	\$795/mo	\$795/mo	NA
	\$9,540/yr	\$9,540/yr	
Employee & Family	\$936/mo	\$936/mo	NA
	\$11,232/yr	\$11,232/yr	

# B. Travel

	Year 1	Year 2	Year 3	Total
Annual Director's	\$1,200	\$1,200	\$1,200	\$3,600
Meeting (Washington, DC)				
Annual Regional Training	-	\$3,200	\$3,200	\$6,400
Kentucky Public Health Association Conference (Covington, KY)	-	-	\$400	\$400
Mileage	\$450	\$900	\$1,260	\$2,610
Total	\$1,650	\$5,300	\$6,060	\$13,010

For our Project Director to attend an annual Director's Meeting, \$250 is requested for roundtrip airfare from Cincinnati, OH to Washington, D.C., \$600 for lodging, and \$450 for food. In total, we request \$1,200 each year for the director's Meeting. In Years 2 and 3, two of our project staff will attend a Regional Training, also in Washington, D.C. To accommodate the provision of two staff members to this meeting, we request \$500 for airfare, \$1,200 for lodging, and \$1,350 for food. In total, we request \$3,200 each year for the Regional Training Meeting. In Year 3, we will send our graduate assistants to the Kentucky Public Health Association Conference in Covington, Kentucky. We request \$400 dollars to cover conference registration fees.

Mileage includes the driving distance (approximately 335 miles) between Marshall County and the Cincinnati Airport for the annual Director's Meeting and the annual Regional Trainings in Washington, D.C., and the distance between Marshall County and the Kentucky Public Health Association Conference in Covington, Kentucky (approximately 310 miles) in year 3. Mileage is calculated at a standard rate of \$0.58 per mile.

# C. Supplies

Item Requested	Number Needed	Unit Cost	Year 1 Amount	Year 2 Amount	Year 3 Amount	Total
Elementary Climate Development Kit for Principal	1	\$460	\$460	-	-	\$460
Elementary Climate Development Refresher Kit	1	\$350	-	\$350	\$350	\$700
Secondary Climate Development Kit	2	\$450	\$900	-	-	\$900
Secondary Climate Development Refresher Kit	1	\$175	-	\$175	\$175	\$350
Elementary Classroom Kit	21	\$400	\$8,400	-	-	\$8,400
Elementary Classroom Refresher Kits	21	\$150	-	\$3,150	\$3,150	\$6,300
Secondary Classroom Kits	118	\$500	\$59,000	-	-	\$59,000
Secondary Classroom Refresher Kits	118	\$125	-	\$14,750	\$14,750	\$29,500
Counselor Kit	3	\$200	\$600	-	-	\$600

Counselor Refresher Kits	3	\$25	-	\$75	\$75	\$150
On-site training per day	2	\$3,000	\$6,000	-	-	\$6,000
Online Booster trainings for teachers	2	\$500	-	\$500	\$500	\$1,000
Food for Faculty PA meetings (4 meetings per year)	150	\$12	\$7,200	\$7,200	\$7,200	\$21,600
Food for CAB meetings (4 meetings per year)	20	\$15	\$1,200	\$1,200	\$1,200	\$3,600
Total	-	-	\$74,910	\$19,000	\$19,000	\$113,360

The provision of Positive Action Kits in Year 1 and refresher materials in Years 2 and 3 are the primary cost for supplies. Unit costs of Kits reflect full price, however discounted rates are applied when supplies are purchased in bulk. Additional costs include trainings and food for CAB and faculty meetings.

# D. Contractual

	Year 1	Year 2	Year 3	Total
Mental Health Provider	\$7,560	\$7,786	\$8,020	\$23,366
Biostatistician from WKU	\$3,680	-	\$5,520	\$9,200
Total	\$11,240	\$7,786	\$13,540	\$32,566

<u>Mental Health Provider</u> – We will contract the services of one Licensed Mental Health Provider (MHP) from Four Rivers Behavioral Health in Paducah. Salary for an MHP in this region averages \$70,500 per year plus a 3% yearly wage increase. Hourly wage is estimated at \$35 per hour. The MHP will work at Marshall County High School 6 hours per week, for 36 weeks each year.

**Biostatistician** – We will contract the services of a biostatistician from WKU in the first two months of the grant to review our performance measures. We have budgeted 80 work hours for this task. In the last month of the grant, we will again contract the services of a biostatistician from WKU to perform final statistical analysis on program outcomes. For this service, we have budgeted 120 work hours. With an average salary of \$95,000 plus a 3% yearly wage increase, hourly wage is estimated to be \$46 per hour.

Item	Year 1	Year 2	Year 3	Total
GA Tuition	\$26,000	\$27,300	\$28,664	\$81,964
GA Health Insurance	\$4,400	\$4,620	\$4,850	\$13,870
Teacher/Administrator Incentives for Training (\$100 x 145)	\$14,500	-	-	\$14,500
Partner Incentives	\$1,000	\$1,000	\$1,000	\$3,000
Schools Incentives	\$5,000	\$5,000	\$5,000	\$15,000
Total	\$50,900	\$37,920	\$39,514	\$128,332

## E. Other

Tuition and health insurance for the two graduate assistants is requested for all 3 years of the grant based on the University's projected tuition and insurance rates for in-state students. Teachers and school administrators will each receive \$100 for the completion of training prior to the full-scale implementation of Positive Action in the three schools. This incentive will aid in teacher buy-in and promote the proper implementation of program curriculum. We have budgeted \$1,000 each year for community and partner incentives – these incentives will be determined throughout the grant period. Each school will receive a \$5,000 a year incentive for participating in the project to promote the implementation of the Positive Action program.

# References

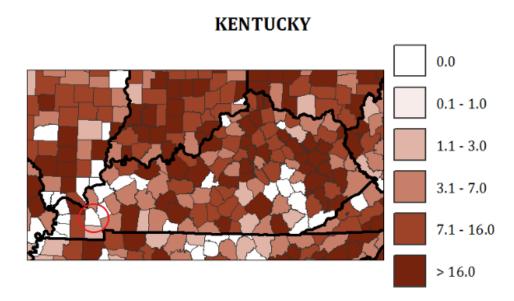
- School-Based Mental Health Services. National Association of School Psychologists (NASP). (2016). Retrieved December 10, 2019, from https://www.nasponline.org/resources-and-publications/resources/mentalhealth/school-psychology-and-mental-health/school-based-mental-health-services
- Gleason, M. M., Goldson, E., & Yogman, M. W. (2016, December 01). Addressing Early Childhood Emotional and Behavioral Problems. American Academy of Pediatrics. Retrieved from https://pediatrics.aappublications.org/content/138/6/e20163025
- 3. *Youth Risk Behavior Surveillance United States, 2017.* Centers for Disease Control and Prevention; 2018.
- 4. Suicide. National Institute of Mental Health (NIMH). (2018). Retrieved from https://www.nimh.nih.gov/health/statistics/suicide.shtml#part\_154969
- Study Links Mental Health Issues to Youth Violence. (2011, March 28). Retrieved from https://www.utdallas.edu/news/2011/9/2-12501\_Study-Links-Mental-Health-Issues-to-Youth-Violence\_article.html
- Clark, P. M. (2017, August 23). Suicide Prevention Programming, Support Available to Schools. Kentucky Department of Education. 2017. Retrieved from https://www.kentuckyteacher.org/subjects/health-and-physicaleducation/2017/08/suicide-prevention-programming-support-available-to-schools/
- Suicide Prevention and Awareness. Kentucky Department of Education (2019, February 26). Retrieved from https://education.ky.gov/school/sdfs/Pages/Suicide-Prevention-and-Awareness.aspx
- Florell, D., & Salins, P. (2018, November 27). Getting Kentucky Youth Help with Depression, Mental health. Retrieved from https://www.richmondregister.com/community/getting-kentucky-youth-help-withdepression-mental-health/article\_4b8661f5-5c2b-558e-8d71-b1c3565e951e.html
- 9. Morbidity and Mortality Weekly Report (MMWR). CDC. 2017. Retrieved from https://www.cdc.gov/mmwr/volumes/66/ss/ss6608a1.htm
- Robinson, L. R., Holbrook, J. R., Bitsko, R. H., Hartwig, S. A., Kaminski, J. W., Ghandour, R. M., ... Boyle, C. A. (2017). Differences in Health Care, Family, and Community Factors Associated with Mental, Behavioral, and Developmental Disorders Among Children Aged 2-8 Years in Rural and Urban Areas - United States, 2011-2012. Morbidity and mortality weekly report. Surveillance summaries (Washington, D.C.: 2002), 66(8), 1–11. doi:10.15585/mmwr.ss6608a1
- 11. Rural Health Information Hub. (2018). Retrieved March 10, 2019, from https://www.ruralhealthinfo.org/topics/mental-health

- 12. Cummings J.R., Wen H., Druss B.G. Improving Access to Mental Health Services for Youth in the United States. *JAMA*. 2013;309(6):553-554.
- 13. Kelleher, K. J., & Gardener, W. (2017, April). Out of Sight, Out of Mind Behavioral and Developmental Care for Rural Children | NEJM. Retrieved from https://www.nejm.org/doi/full/10.1056/NEJMp1700713
- 14. U.S. Census Bureau QuickFacts: Marshall County, Kentucky. United States Census Bureau. 2018. Retrieved from https://www.census.gov/quickfacts/fact/table/marshallcountykentucky/INC910217#INC9 10217
- 15. HPSA Find. Health Resources & Services Administration (HRSA). (2017). Retrieved December 10, 2019, from https://data.hrsa.gov/tools/shortage-area/hpsa-find
- 16. Behavioral health services in Kentucky | CDC. (2019). Retrieved December 10, 2019, from https://www.cdc.gov/childrensmentalhealth/stateprofiles-providers/kentucky/index.html
- District Detail for Marshall County. National Center for Education Statistics (NCES). (2018). Retrieved from https://nces.ed.gov/ccd/districtsearch/district\_detail.asp?start=0&ID2=2103810
- Schulte-Körne, G. (2016, March). Mental Health Problems in a School Setting in Children and Adolescents. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4850518
- 19. Fazel, M., Hoagwood, K., Stephan, S., & Ford, T. (2014, October). Mental health interventions in schools: Mental health interventions in schools in high-income countries. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4477835/
- 20. Eiraldi, R., Wolk, C. B., Locke, J., & Beidas, R. (2015). Clearing Hurdles: The Challenges of Implementation of Mental Health Evidence-Based Practices in Under-resourced Schools. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4553241/
- 21. Why Schools? | Adolescent and School Health | CDC. (2018). Retrieved March 10, 2019, from https://www.cdc.gov/healthyyouth/about/why\_schools.htm
- 22. Flay, B. R. (2014). Measurement of Social-Emotional and Character Development (SECD) in young children, and the mediating effects of SECD on outcomes of the Positive Action program. Retrieved December 10, 2019, from https://www.positiveaction.net/downloads/flay-oxford-paper.pdf.
- 23. Syvertsen, A. K., Flanagan, C. A., & Stout, M. D. (2009, February 01). Code of Silence: Students' Perceptions of School Climate and Willingness to Intervene in a Peer's Dangerous Plan. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2745177/

- 24. Snyder FJ, Vuchinich S, Acock A, Washburn IJ, Flay BR. Improving Elementary School Quality Through the Use of a Social-Emotional and Character Development Program: A Matched-Pair, Cluster-Randomized, Controlled Trial in Hawai'i. *Journal of School Health.* 2012;82(1):1-4.
- 25. Guo S., Wu, Q., Smokowski, P. R., Bacallao, M., Evans, C. B. R., & Cotter, K. L. (2015). A longitudinal evaluation of the Positive Action Program in a low-income, racially diverse, rural county: Effects on self-esteem, school hassles, aggression, and internalizing symptoms. *Journal of Youth and Adolescence*, 44, 2337-2358.
- 26. Lewis KM, Schure MB, Bavarian N, et al. Problem Behavior and Urban, Low-Income Youth: A Randomized Controlled Trial of Positive Action in Chicago. *American Journal* of Preventive Medicine. 2013;44(6):1-8.

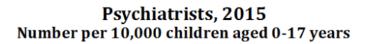
#### Appendix

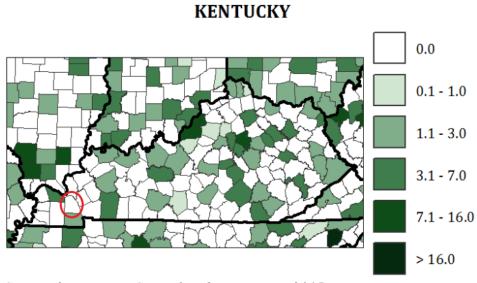
Map 1. CDC Map of LSWs by Kentucky Counties (Marshall County circled in red)



#### Licensed Social Workers, 2015 Number per 10,000 children aged 0-17 years

Map 2. Map of Psychiatrists by Kentucky Counties (Marshall County circled in red)

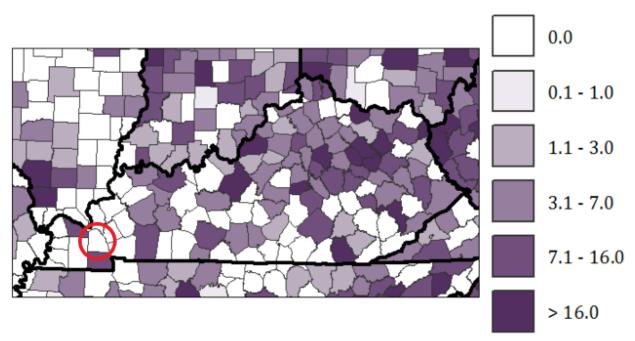




Centers for Disease Control and Prevention, 2015

Map 3. Map of Psychologists by Kentucky Counties (Marshall County circled in red)

# Psychologists, 2015 Number per 10,000 children aged 0-17 years



# **KENTUCKY**

Centers for Disease Control and Prevention, 2015

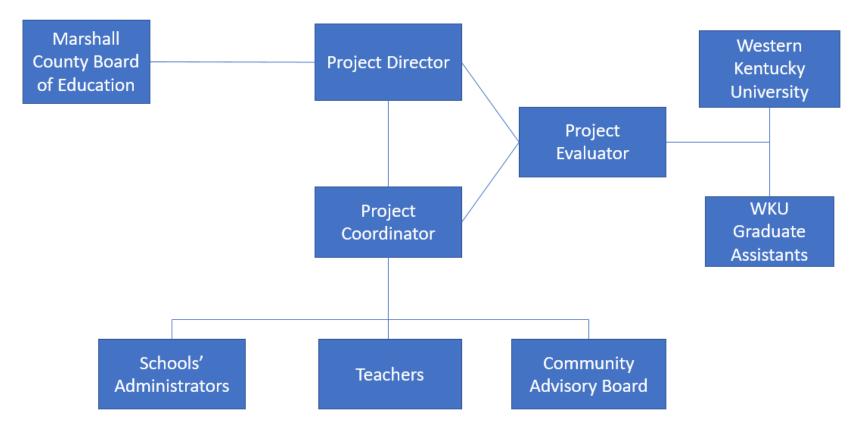
# Figure 1. Logic Model

Tananata	$\neg$	Outputs	$\vdash$		Outcomes	
Inputs	Ц	Activities		Short	Medium	Long
Community Needs Assessment	,	Training Implement PA		Improved school- climate	Fewer disciplinary problems	Improved grades and test scores
School Administration		curriculum		Improved attitudes towards self and	Reduced bullying and violence	Reduced substance use Improved mental health
Teachers		Administer and collect process and outcome measures		others Improved social		Decreased stigma
Students		Evaluation of program		normative beliefs		towards mental health
Positive Action curriculum		implementation and outcomes across 3 years		Improved social- emotional character development		Improved referral system
Community Advisory Board and Partners		Dissemination of results across 3 years				
Grant funds						

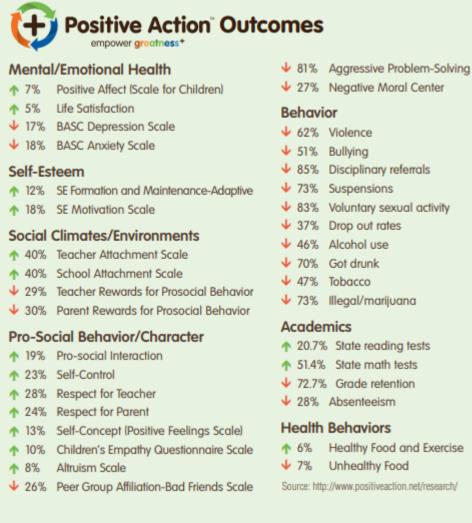
# Figure 2. Gantt Chart

						YE	EAR 1											YE	EAR 2											YE	AR 3						Pos	t Fund	ding Pe	eriod
	J	J	А	S	0	N	D	J	F	м	А	м	J	J	А	S	0	N	D	J	F	м	А	м	J	J	А	s	0	N	D	J	F	м	А	м	J	J	А	S
Preparation																																								
CAB Meeting	х																																							
Teacher Meeting		х																																						
Purchase Materials	х																																							
Training			х																																					
Implementation																																								
Full-Scale Implementation			х																																					
CAB meetings					х					х			х			х						х			х															
Faculty/PA staff meetings			х		х		x	x		х		х			х		х		х	х		х		х			х		х		х	х		х		х				
Process Data Collection					х		х		х			х																												
Outcome Data Collection			х									х			х									х			х									х				
Dissemination of Results													х												х												х	х	х	

#### Figure 3. Project Management



#### **Image 1.** Positive Action Outcomes



- ↑ 6% Healthy Food and Exercise
- Source: http://www.positiveaction.net/research/

#### Positiveaction.net

# Image 2. PA Weekly Implementation Report

School name:		Week	ending d	ate:		_	Option: Yoursel	
Teacher/Classroom #: Less	son # you en	ded on t	his week	::			Left col. tells you	below
1. How many PA lessons did you teach this week?	۲	1	2	3	(4)	⑤ or +	X1 max 4	
2. How many of these lessons were you able to teach at the same time of day this week?	۲	1	2	3	4	⑤ or +	X1 max 4	
2a. What time was this?		4	3	2	1	0		
		First thing	Mid AM	Late AM	Early PM	Late PM	X1	
2b. On average, how many minutes did you spend on ea	ach of these		۲	1	2	3		
lessons?			0-10	11-15	16-20	21+	X1	
3. How much did you adapt lessons this week to make the for your students?	m more appr	opriate	۲		(2)	(3)	1 pt for	
			None	A little	Some	A lot	more than none.	
3a. If so, which lessons?							0	0
I. This week, were you aware of teaching any of the Core Standards in your PA lessons?	Curriculum		٥	No	2	Yes	X1	
4a. Optional: Briefly tell us what standards they were							0	0
5. This week, did you use any PA concepts to help you tea Areas?	ach Core Cur	riculum	۲	No	2	Yes	X1	
							0	0

3. How much did you adapt lessons this week to make them								
for your students?	more appr	opriate	() None	) A little	2 Some	③ A lot	1 pt for more than none.	
3a. If so, which lessons?							0	0
4. This week, were you aware of teaching any of the Core Constandards in your PA lessons?	urriculum		0	No	2	Yes	X1	
4a. Optional: Briefly tell us what standards they were							0	0
5. This week, did you use any PA concepts to help you teach Areas?	n Core Curr	riculum	0	No	2	Yes	X1	
5a. Optional: Briefly tell us in which curriculum areas.					_		0	0
Tabulate your "Instruction" Score (sum of items 1-5). S	cores rang	ge from 0	-20; as	core of 16	or more i	s great.	→	
6. This week, how many of the following did you do:								
a. How many Words of the Week cards did you give out (K-6 only)?	۲	0	2	3	٩	(5)	X1	
a. How many Words of the Week cards did you give out	0	() ()	2 2		(4) (4)	(5) (5)	X1 X1	
a. How many Words of the Week cards did you give out (K-6 only)?				3		-		
<ul><li>a. How many Words of the Week cards did you give out (K-6 only)?</li><li>b. How many PA Stickers did you give out (K-4 only)?</li></ul>	0	1	2	3 3 3	(4)	6	X1	
<ul><li>a. How many Words of the Week cards did you give out (K-6 only)?</li><li>b. How many PA Stickers did you give out (K-4 only)?</li><li>c. How many PA Tokens did you give out (K-6 only)?</li></ul>	© © © 0-5	① ① ① 6-10	2 2 2 11-1	3 3 3 5 16-20	<ul> <li>4</li> <li>4</li> <li>4</li> <li>21-25</li> </ul>	© © © 26+	X1 X1 X1	
<ul> <li>a. How many Words of the Week cards did you give out (K-6 only)?</li> <li>b. How many PA Stickers did you give out (K-4 only)?</li> <li>c. How many PA Tokens did you give out (K-6 only)?</li> <li>d. How many notes did you read from the ICU Box?</li> </ul>	© © 0-5 - 6d). Sco	(1) (1) (1) 6-10 res rang	2 2 11-1! e from	3 3 5 16-20 0-20, dep	(4) (4) (21-25 pending of	5 5 26+	X1 X1 X1 rade. →	

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Image 3. Unit Implementation Report (Excerpts)

A. Backgroun	d Inforn	nation										
1. School nan	ne:											
2. Your name	:											
3. Classroom	numbe	r or ID: _										
4. Grade leve K	l you tea 1	ach: 2	3	4	5	6	7	8	9	10	11	12
K	1	2	3	4	(5)	6	7	(8)	9	۵	(8)	©
5. For which F	PA Unit	is this re	eport?		1	2	3	4	6	6	7	
Date Unit end	led:											
6. MONTH:	7	8	9	10	11	12	1	2	3	4	5	6
	7	8	(9)	۸	₿	©	1	2	3	4	6	6
7. DA	Y, first	digit:		۲	1	2	3					
DAY,	second	digit:	۲	1	2	3	4	5	6	0	(8)	(9)
B. Curriculum	Deliver	Y										
8. On the ave	rage we	ek durir	ng this U	nit, how	many le	ssons di	d you te	ach?				
					1	2	3	4	s wł	nere <u>5 =</u>	5 or mo	re
9. On average	e, how r	nany mi	nutes die	d you spe	end on t	hese les	sons?	5-10	11-15	16-20	21-25	>25
									(2)	3	(4)	(5)

14. How much did you adapt lessons to ma	ake them more appropriate fo None	r you students by ADD A Little Som	
	۲	1 2	3
15. If any, please briefly tell us WHAT you	added to WHICH lessons and	d WHY.	
16. How much significant material or conce			
	None A Little		A Lot
	0	1 2	3
17. If any, please briefly tell us WHAT you	omitted from WHICH lessons	and WHY.	
18. What was your favorite lesson or activit	ty from this Unit?		
19. During this UNIT, were you aware of te PA lessons?	aching any of your District's of	or State's Core Curricu	lum Standards in your
	<b>NO</b> (1)	YES 😢	
	that analy?		
20. If yes, which areas (fill in circle for all Reading Writing Language Arts M		es Health PE	Art Music

c. School-wide Activities						
23. During the average week for this UNIT, how many	None	1	2	3	4	5 or more
a. "Words Of the Week" or "Buzz Words" cards did you give out	?0	1	2	3	4	6
b. PA Stickers did you give out?	۲	1	2	3	4	6
c. PA Tokens (elementary only) did you give out?	٥	1	2	3	4	6
d. PA Notes did you read from the ICU or SOS box?	۲	0	2	3	4	6
e. Days did you write Positive Notes?	۲	1	2	3	4	6
f. Days did you use PA Music?	٥	1	2	3	4	6
g. PA Certificates of Recognition did you fill out?	٥	1	2	3	4	6
h. Parents did you talk to about the PA program?	٥	1	2	3	4	6
i. PA ideas did you infuse into curriculum areas?	۲	1	2	3	4	6
24. During this UNIT, have the following PA activities been done	e at your No		? s, once	Yes	, more t	han once
a. Positive Action assemblies?	٥		1		2	
b. PA Newsletter to parents?	۲		1		2	
<ul><li>25. If so, did you participate in these activities?</li><li>c. Positive Action assemblies?</li></ul>	0		1		2	
d. PA Newsletter to parents?	0		1		(2)	

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