



T·R·E·E·

Transforming Rural Experience in Education™

A hopeful approach to healthier, more equitable rural schools.

COBSCOOK COMMUNITY LEARNING CENTER
10 Commissary Point Rd, Trescott ME 04652
www.thecccl.org
207-733-2233

SNAPSHOT

TREE, a division of Cobscook Community Learning Center (CCLC), is a collaborative educational initiative in rural Maine to create supportive learning environments where all children, especially those challenged by adversity, stress, and trauma, can succeed and thrive.

The 4-year in-school pilot of TREE began in January, 2018 and directly serves 310 students and 51 teachers and staff in three rural elementary schools. Additionally, TREE provides professional development and training annually to an average of 2000 educators and professionals serving youth throughout Maine and New England.

TREE's Core Claims:

1. Chronic adversity, stress, and trauma are not just individual mental health issues for which families are solely responsible. These are also systemic conditions disproportionately affecting certain populations and geographic areas.
2. Student success and community vitality in challenged regions is best restored through thoughtful, informed, and committed action on the part of all members of a rural community in partnership with students, teachers, and families.
3. A genuinely trauma-informed culture is best achieved through engaging youth as full and active partners in school and community transformation.

LEADERSHIP

- Brittany Ray, TREE Program Director
- Laura Thomas and Ashley Cirone, TREE Resource Coaches
- Research Practice Partnership Team: Brittany Ray, M.S.; Catharine Biddle, Ph. D.; Lyn Mikel Brown, Ed. D.; Sarah Strickland; Mark Tappan, Ed. D.
- Alan Furth, Co-Founder and Development Director, CCLC.

OBJECTIVE

Transforming Rural Experience in Education (TREE) is a targeted, collaborative, place-based response to the educational challenges that often face rural schools, especially those in high-poverty areas. TREE's aim is to foster resilience and improve the wellbeing of young people — as well as that of their families and communities — by addressing the predictable and recurring barriers to healthy youth development and learning that exist in high poverty rural schools.

TREE: A Model for Rural America

TREE is a regional educational initiative with critical national relevance. America's rural communities are experiencing tremendous challenges. Many rural schools across this country, particularly those in the most isolated areas, are struggling to serve children and families facing adversity, stress, and trauma, without the wide range of mental health, social service, and nonprofit resources available in urban areas.

Many of America's 13 million rural students are losing out on opportunities to succeed and thrive, in school and beyond. TREE believes we can and must do better to support student learning in rural America, so that all children can live healthy, productive lives.

In spite of the challenging realities of rural education, and the fact that 40% of the nation's school districts are in rural areas, rural needs and issues have been largely underrepresented in the



national education dialogue.¹ Rural schools often must implement policy that was designed for urban and suburban schools without consideration for their unique context and needs.

TREE seeks to redress this inequity. By calling on the strengths, knowledge, and creative problem-solving potential of grassroots relationships to support student success, TREE seeks to provide an adaptable model that can benefit rural schools around the country, creating deep and lasting change in teaching and learning for all children.

A Hopeful Approach to School & Community Vitality

TREE maintains that by expanding and deepening existing relationships, we have the collective resources to build resilience and create healthier ecologies for young people, so that every individual has an equal chance of leading a successful and fulfilling life.

TREE is informed by innovations in educational theory, research, and practice from around the U.S., while arising from the unique context and needs of Washington County, Maine, with its 29 K-8 schools and 3,000 students. TREE draws on multi-disciplinary

research in the science of learning and development that provides new insights about how children develop, how they learn, and how families, schools, and communities can support and encourage their success.^{2, 3}

Without proper relational supports, the effects of adversity, stress, and trauma often associated with poverty have a significant and long-lasting impact on children's neurobiological development, limiting their ability to self-regulate, form relationships, concentrate, and learn.⁴ Repeated experiences of adversity, stress, and trauma — sometimes called Adverse Childhood Experiences, or ACEs — can make it hard for a child to show up at school with a “learning-ready brain.” In fact, children who have ACEs scores of 4 or more (out of 10) are 32 times more likely to have learning or behavior problems in school than children who have low ACEs scores.⁵

Breakthroughs in the science of resilience point to effective ways of responding to these challenges. Children and youth who feel physically and emotionally safe and engaged in supportive and authentic relationships with adults and with peers, for example, are more resilient and better able to cope with the impacts of trauma.⁶ Healthy, relationship-rich family and school environments not only buffer the impact of toxic stress, but also support the development of the whole child.⁷

Relationship-rich environments include adults who enable hope by offering children power and control, engaging with them in the struggle to challenge hurt and injustice, and helping them to identify conditions and experiences within which they can and will thrive.

Program director Brittany Ray and the Research Practice Partnership Team conducted hours of focus group conversations in schools throughout Washington County, listening to and learning from school administrators, teachers, students, parents, and community partners. These conversations were fundamental to developing the TREE approach, which recognizes that what rural schools most need to support the success of all students are the tools and resources to:



1. MEET BASIC NEEDS



Mental Health & Wellness



Material Resources

2. SUPPORT THE WHOLE CHILD




Empower Students



Promote social, emotional, cognitive, and ethical development

3. IMPROVE INSTRUCTION & LEADERSHIP



Instructional Strategies



Capacity and Leadership Practices



Professional Development

By working with students, schools, families, and communities to build capacity in these three fundamental areas, TREE helps create safe, empowering, and effective educational environments where students, teachers, and administrators have the resources they need to support the academic success of all students.

Three innovative elements of the TREE approach are particularly applicable to a rural context (see next page).

1. RESEARCH PRACTICE PARTNERSHIP

TREE is a multi-year, ongoing collaboration involving academic researchers, on-the-ground practitioners, and community members. The Research-Practice Partnership Team (RPPT) is TREE program director Brittany Ray; TREE resource coaches Ashley Cirone and Laura Thomas; Catharine Biddle, Ph. D., University of Maine; Lyn Mikel Brown, Ed. D. and Mark Tappan, Ed. D., Colby College; and Sarah Strickland, CCLC Board President. This team continues to refine the model design to ensure that TREE methods are informed by best practices in educational theory, research, and practice and the specific needs of Washington County.

2. RESOURCE COACH

TREE's resource coaches are absolutely instrumental to successful program implementation. They are individuals who are known and trusted in their communities. They act as a bridge between the RPPT, our partner schools, and the wider community, ensuring that all aspects of the TREE program are integrated smoothly, sensitively, and efficiently into the life of the school. They work with other community members and agencies to coordinate resources so that children have enough food, warm winter clothing, and footwear. They serve as the go-to contact for parents and teachers wishing to refer a child for mental health supports. They offer professional development to educators and community members. They work directly with teachers in classrooms, providing coaching in student-empowered, whole-child, trauma-informed practices and strategies. The resource coach also helps to repair relationships between faculty/staff and students, and between schools and caregivers, when necessary. We are seeing parents who have not set foot in their kids' school for years showing up and becoming part of the life of the school again.



3. MENTAL HEALTH PROVIDER

TREE's mental health providers offer services in each school to children and families who otherwise would not have access to such supports. TREE mental health services are available to students who do not have MaineCare or insurance, thus filling a critical gap in services. In addition, transportation barriers are eliminated because services are available on site, during the school day. TREE mental health providers also consult when needed with coaches, teachers, administrators, and parents.

With these supports, TREE is helping entire families reconnect with their schools and communities as places of value; places where their children are being well-served and cared for, and where all are welcome.

TURNAROUND FOR CHILDREN MODEL

From the start, TREE has been inspired by TURNAROUND FOR CHILDREN, www.turnaroundusa.org, a nonprofit organization that partners with the lowest performing, high-poverty urban schools to address the obstacles to teaching and learning that stem from poverty.

Turnaround also draws insights from cutting-edge developmental and educational research to create a foundation for school improvement that includes supporting students, training teachers, and strengthening school leadership. Their goal is to increase the competency, skill, and motivation of all the adults in a school in order to address the cognitive, social, and emotional development of their students.



ABOUT CCLC

Cobscook Community Learning Center (CCLC) is a grassroots organization with a mission to create responsive educational opportunities that strengthen personal, community, and global well-being. The CCLC was founded in 1999 by community members responding to challenges facing the region, including high rates of suicide, substance abuse, and school dropouts. The founders recognized the deeply intertwined geographic, economic, social, and personal conditions of our lives and believed improvements in educational experience were essential for the community's survival and revitalization.

From its early days as a community action research initiative, the CCLC has evolved through organizational stages to its current structure with a strong governance board, staff of 13, three program divisions, and \$1.8M annual budget. Now entering its 3rd decade, the CCLC's objective remains the same: to create collaborative solutions to address disparities in educational quality, access, and outcomes in Washington County while drawing from and contributing to improvements in rural education nationwide. In launching TREE, we are building on already well-established partnerships throughout the country in a concerted effort to mitigate the effects of poverty on learning for our most vulnerable students.

CCLC's deep partnerships and proven track record as a provider of effective and transformative educational programs make us uniquely well prepared to convene the highly collaborative TREE initiative, creating healthier and more equitable schools that in turn foster healthier and more equitable communities.



UNDERSTANDING THE CHALLENGE

Washington County in easternmost Maine is the second most rural county in the country's most rural state, with a population of just over 31,000, including 1,397 Passamaquoddy tribal members. Historically, the region exported raw materials, such as timber and fish, and attracted skilled laborers. Today, however, very little manufacturing exists, and living wage work in the traditional resource-based economy has sharply declined.

Washington County communities face significant economic, social, public health, and educational challenges exacerbated by chronic poverty. The county ranks last in Maine on most health measures.

The effects of chronic adversity, stress, and trauma are evident in performance measures of Maine schools generally, and Washington County schools in particular. The 2017-2018 Maine Educational Assessments indicated

that in our mostly rural state, 63% of Maine students did not meet state standards for math, and 50% of Maine students did not meet the standards for literacy.

In the three TREE pilot schools, an average of 67% of students do not meet the standards in math, and an average of 57% for literacy. Perhaps even more telling is the fact that statewide, 17% of students qualify for special education, while in TREE pilot schools the percentage of students eligible for special education services is 26%.

Another indicator of stress and trauma in students is a pattern of absenteeism. Chronic absenteeism rates (defined here as 15 days or more per year) in TREE partner schools are strikingly high: 20% at Milbridge Elementary, and 24% at Jonesport and Charlotte Elementary, compared to a statewide average of 15%.

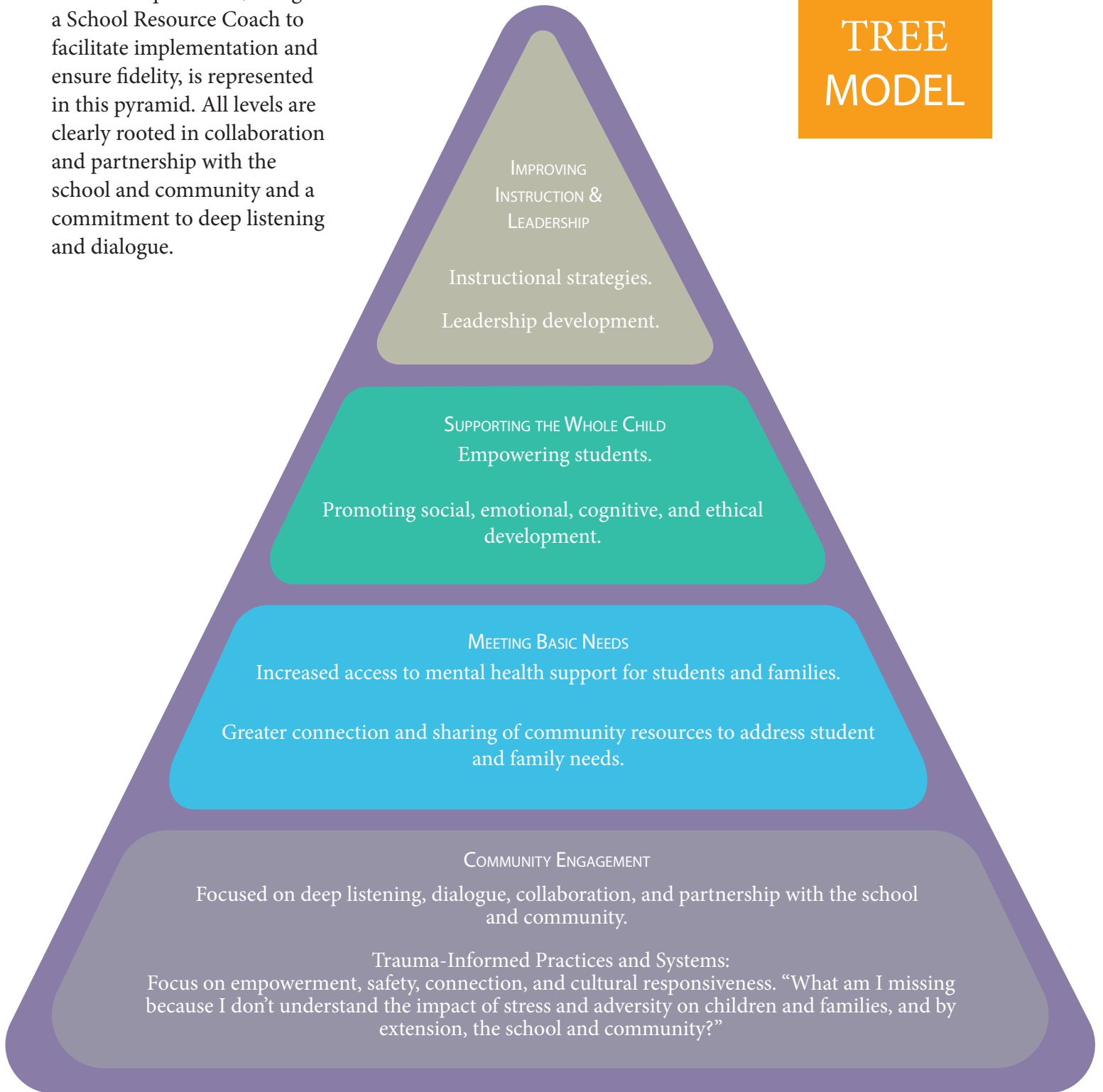
Graphic Below Sources: American Community Survey, 2015; Maine KIDS COUNT Data Center, Annie E. Casey Foundation, 2016; TownCharts.com Maine Education Data, 2015; US Centers for Disease Control and Prevention County Health Report, 2016; UW Institute for Health Metrics and Evaluation, 2013, 2016.

WASHINGTON COUNTY FACTS

- An average of one out of four Washington County children under 18 live in poverty.
- Rates are even higher – three out of five children – in TREE partner schools.
- Free and reduced lunch rates in the schools serving the county's two reservations averages over 90%.
- 12% of residents have less than a high school education, the highest percent in Maine.
- Unemployment rates are as high as 60% in some areas of the county.
- Rates of addiction and drug overdose are sharply higher than in other Maine counties.
- The county as a whole has the lowest life expectancy for men in Maine and declining life expectancy for women.
- On the Passamaquoddy tribe's two reservations, the average life expectancy is 50 years.

THE TREE MODEL

TREE's unique model, using a School Resource Coach to facilitate implementation and ensure fidelity, is represented in this pyramid. All levels are clearly rooted in collaboration and partnership with the school and community and a commitment to deep listening and dialogue.



TREE PARTNERS

Biddeford, Maine School District has contracted with TREE to provide all staff training and consult for creating trauma-informed school environments. Biddeford has adopted the TREE coaching model and in the coming year, its two trauma informed coaches will receive training from TREE staff.

Colby College offers undergraduate students the opportunity to work as interns in TREE schools with TREE staff, and to work as research assistants on various aspects of the TREE project, including data collection, data analysis, and dissemination of findings.

Community Caring Collaborative (CCC), is a nationally recognized leader in poverty-informed practice that works with tribal entities, state agencies, county agencies, medical centers and hospitals to create a seamless system of care for at-risk infants and young children and their families across Washington County. TREE is partnering with CCC to share strategies and help establish continuity between home and school.

Downeast Counselors Association, a professional association for counselors in educational settings, mental health agencies, community organizations, employment agencies, rehabilitation programs and private practice.

Maine Outdoor School is dedicated to fostering personal and community resilience through outdoor-based learning experiences in rural Maine. TREE is partnering with MOS to offer weekly experiential learning that is closely aligned with curriculum and student interest.

Mano en Mano, an organization based in Milbridge, ME providing access to essential services, advocacy, and education for Maine immigrants and farmworkers. TREE is partnering with Mano en Mano and Maine Migrant Education to provide trainings, address both overt and covert bias, and create a more welcoming, inclusive, and equitable school climate.

Passamaquoddy tribal leaders from both Sipayik/Pleasant Point and Indian Township. The Passamaquoddy of Sipayik live on the largest Indian reservation in the State, with a population of roughly 800, 60% under the age of 18. TREE has offered a series of trainings for the Passamaquoddy Child Wellness Council.

Pescadero School District, Pescadero, CA. Superintendent Amy Wooliever, inspired by TREE, successfully applied for a \$571,000 California state grant to support safe and healthy students. TREE will provide professional development and consultation supports.

University of Maine Orono College of Education and Human Development offers undergraduate and graduate students the opportunity to work as research assistants on various aspects of the TREE project, including data collection, data analysis, and dissemination of findings. In addition, UMO will be partnering with TREE, beginning in Fall 2019, to offer a Masters in Educational Leadership with a trauma-informed focus to teachers in Washington County.

TREE IN ACTION

2018 – 2021

TRAUMA-INFORMED PRACTICE/COMMUNITY ENGAGEMENT

- Community training in ACES and advocacy, Milbridge and Jonesport.
- Establishing and maintaining school-community partnerships with Maine Outdoor School, Maine Seacoast Mission, Incredible Edible, Milbridge Commons, and others.

MEETING BASIC NEEDS

- Food pantry, clothing closet, transportation assistance, dental care.
- On-site professional mental health services serving ~17% of student population.

SUPPORTING THE WHOLE CHILD

- “Someday” micro-adventures (see Brown & Flaumenhaft, 2019)
- School Climate Leadership Teams
- Mindset Matters coaching
- Zones of Regulation/Brain Breaks/ Calming Zones

IMPROVING INSTRUCTION AND LEADERSHIP

- Emily Daniels, The Regulated Classroom training
- Washington County Cohort in UMaine Educational Leadership Master’s program
- Weekly teacher coaching
- Trauma-informed professional development
- Equity literacy and cultural competency training
- “Moving Stories” training with Dr. Sue Carroll Duffy
- “The Things They Carried” retreat with Dr. Richard Ackerman



OUTCOMES

TREE THEORY OF CHANGE

TREE's student-empowered, whole-child, trauma-informed approach to rural school reform begins by meeting basic needs and expanding mental health supports for students and families. Teachers and administrators learn the fundamentals of trauma-informed practice, methods to empower students, and approaches that support the development of the whole child. TREE coaches work with teachers to scaffold genuine student empowerment in and outside the classroom, including opportunities for shared leadership and decision-making, meaningful participation in community building and school-climate change, and involvement in civic engagement efforts.

Working in partnership with peers and adults increases all students' sense of autonomy and control; fosters self-efficacy and competence; and promotes equity, safety, trust, and belonging, thus supporting development across multiple dimensions (including social, emotional, cognitive, and ethical). These factors, in turn, increase academic achievement for all students, which leads, ultimately, to success in school and in life.

As result of the TREE initiative, we expect to see the following school- and community-wide outcomes:

- Increased resources to meet basic needs.
- Timely access to mental health services for students and families.
- Increased opportunities for student voice and empowerment.
- Improved school climate and increased student sense of belonging, motivation, and efficacy.
- Increased social, emotional, and ethical development.

- Reduced suspensions, severe incidents, and chronic absenteeism.
- Reduced special education enrollment and associated costs.
- Reduced occupational burnout for teachers and staff.
- Increased multigenerational understanding of adversity, stress, and trauma.
- Increased collaboration among teachers, students, caregivers, and community.
- Increased academic success for all students.



ONE FAMILY'S STORY

During TREE's first year of in-school application, resource coaches have facilitated several significant breakthroughs in long-term alienation between parents and teachers, resulting in improved outcomes for students. One student was a frequent visitor to the principal's office, and many tense meetings had taken place with his parents about his challenging behavior. The TREE resource coach met with the on-site mental health provider and together they arranged a meeting with the parents in which the teacher referred only to positive attributes of the student. In follow-up sessions with the counselor, the student learned to recognize his triggers and signal the teacher when he needed to take a break—putting on headphones, changing his seating, or sitting on his hands. He did not need to leave the classroom once in the final two months of the '17/18 school year, and last fall, his parents attended back-to-school night for the first time in years.

In one pilot school receiving the full array of TREE supports during the 2017-2018 school year, the percentage of students meeting or exceeding state standards increased by 23% (from 40% to 49%) in literacy, and by 38% (from 29% to 40%) in math.

TREE IMPACT

Students in TREE's three pilot schools in rural Maine now have access to in-school mental health care. 46 students (17% of the total student population) are currently receiving mental health support. Wait times have been reduced from an average of 12-18 months to see a counselor before TREE, to a month or less.

In addition to individual counseling, TREE mental health coaches are providing three essential mental health supportive services that have not previously been available to schools and families:

- One-on-one mental health counseling and supports for teachers.
- Facilitation of meetings between parents and teachers when needed.
- Classroom observations to help teachers develop the most positive supports and learning environments for all students.

In partnership with a number of local agencies and organizations, TREE is providing food, clothing (including winter coats and boots), personal hygiene products, transportation assistance, and dental screening for needy students and their families.

TREE schools promote student voice and empowerment via student-initiated activities and outdoor micro-adventures. The Student Leadership Team at Milbridge Elementary conducted a school climate survey and assessed the results with the help of supportive adults. They reported their findings to school administration, and their recommendation to increase recess time was accepted. They continue to move other student-initiated projects forward.

EVALUATION

The TREE Research Practice Partnership Team is responsible for the implementation and evaluation of the TREE process using an approach based in developmental evaluation.

In a developmental evaluation approach, relationships are of primary importance. Traditional evaluators are often positioned outside of the project implementation team. In developmental evaluation, researchers are embedded within the implementation team and focus on designing measures that will give actionable feedback in real time that can be used to rapidly prototype the design of the program. Regular conversation occurs between the evaluators about the data that they are getting and the program team about their implementation experiences.

Based on these conversations, the RPPT makes responsive decisions to adjust what is happening on the ground.

The developmental approach is particularly suitable for TREE because program design is still emergent, and the context for the program is highly changeable. Rural schools require an approach to design that places the most importance on enhancing and deepening relationships because of the many top-down, externally-driven school reform efforts that have been enacted upon them in the past.

TREE's developmental evaluation strategy utilizes a mixed methods approach:

- Quantitative data is collected using standard instruments and surveys that assess developmental strengths, including social, emotional, cognitive, and ethical capacities; school climate; and teacher/caregiver attitudes on trauma-informed care.
 - Additional quantitative data includes grades and test scores, as well as attendance, disciplinary, and special education records.
 - Qualitative data comes from interviews, focus groups, observations, field notes, and work journals. Interviews are solicited from all faculty and staff, and focus groups are conducted with youth in grades 3-4, 5-6, and 6-8.
- We also interview parents, including an oversampling of low-income and caregivers of color to understand specifically how the program is working for them and their children.
 - Interviews with school and district leadership allow insights into how the program fits with their vision, coalesces with other concurrent programs, and supports or inhibits organizational and community goals.
 - Repeated observations of program activities further enrich insights into TREE's implementation process, and weekly meetings with program staff are centered around discussions of the daily opportunities and challenges of the work. Detailed notes on these meetings are kept and included in the implementation evaluation data analysis.
 - Monthly written and verbal check-ins with mental health providers provide valuable data on progress and challenges. Data is collected regarding the number of students/families using services and the length of time on the waitlist.

TREE FUNDING PARTNERS

2019 – 2021

Silicon Valley Community Foundation, Anonymous

Charles G. Wright Endowment for Humanity

Elmina B. Sewall Foundation

Dietel Partners, Anonymous

Jane's Trust

Quillin/Hastings Fund, Silicon Valley Community Foundation

Gilroy, Estate

Robbins-de Beaumont Foundation

The Boston Foundation, Anonymous

Morton-Kelly Charitable Trust

Maine Community Foundation, Anonymous & Belvedere Fund

Strypmonde Foundation

Couch Family Foundation

TREE PROJECT EVALUATION CHART

TREE DOMAINS	DOMAIN FOCUS AREA	MEASURE OF SUCCESS	INSTRUMENT / METHOD
I. Community Engagement	Community and school attitudes towards trauma and poverty	<ul style="list-style-type: none"> Increased awareness of ACEs Increased use of trauma-informed language and concepts 	<ul style="list-style-type: none"> Attitudes Related to Trauma Informed Care Scale (ARTIC) – teachers and parents Structured Classroom Observations Interviews/focus groups with students, teachers, parents, community members
	Community Dialogue	<ul style="list-style-type: none"> Existence of dialogue Stakeholder participation in dialogue Stakeholder satisfaction with dialogue 	<ul style="list-style-type: none"> Number of dialogues held Number of participants in dialogue Exit cards
II. Meeting Basic Needs	Mental Health Provision	<ul style="list-style-type: none"> Decreased wait times for mental health services Increased teacher self-efficacy around working with youth ACEs 	<ul style="list-style-type: none"> Wait time data Interviews with providers Interviews with teachers Interviews with youth
	Basic Needs Provision	<ul style="list-style-type: none"> In-school existence of social services (food pantry, etc.) Use of in-school social services Improvement in services, advocacy, and number of people served b/c of service provider collaborations 	<ul style="list-style-type: none"> Number of school-community partnerships for social services Interviews with community partners Interviews with youth and parents
III. Supporting the Whole Child	Empowering students / Promoting Social, Emotional, Ethical, & Identity Development	<ul style="list-style-type: none"> Increased feelings of youth safety Increased feelings of positivity towards teacher-student relationships Increased feeling of belonging at school Increased feelings of the value of school Decreased behavior referrals Increased attendance Increased opportunities to have control over environment, to experience agency and empowerment Increased student participation/input in school practices and policies 	<ul style="list-style-type: none"> Developmental Assets Profile (DAP) Basic Psychological Needs at School Scale (BPNSS) Safe Measures school climate assessment Institutional (school) data Interviews or focus groups with youth
IV. Improving Instruction & Leadership	Instructional Capacity	<ul style="list-style-type: none"> Increased observation of student-engagement in classroom Increased collaboration between teachers re: instruction 	<ul style="list-style-type: none"> Number of non-evaluative teacher observations per month/year Interviews with teachers / administrators Interviews with youth
	Leadership Development	<ul style="list-style-type: none"> UMaine Cohort of Washington County teacher leaders begins in Fall 2019 Student satisfaction with leadership development program Principal satisfaction with TREE supports 	<ul style="list-style-type: none"> Key assessment coursework data Written reflections / course evaluations Satisfaction survey / interview

TREE RESEARCH AND OUTREACH

JOURNAL ARTICLES

Brown, L.M. & Flaumenhaft, J. (2019). Student-empowered curricular change as trauma-informed practice. *Phi Delta Kappan*. 100 (6), 13-19.

Biddle, C., Mette, I., & Mercado, A. (2018). Partnering with schools for community development: Power imbalances in a rural community collaborative addressing childhood adversity. *Community Development*. <https://doi.org/10.1080/15575330.2018.1429001>

Mette, I., Biddle, C., Brown, L., Cirone, A., Mercado, A., Ray, B., Strickland, S., Thomas, L., & Tappan, M. (2018). The TREE project: How school-community partnerships can drive rural reform efforts. *Journal of Maine Education*. 34, 55-67.

Mette, I., Biddle, C., Congdon, M., & Mercado, A. (forthcoming). Parochialism or pragmatic resistance? Community-engaged leadership of school reform in vulnerable rural ecologies. *Australian and International Journal of Rural Education*.

BOOK CHAPTERS

Biddle, C., Mette, I., Brown, L., Tappan, M., Ray, B. & Strickland, S. (2018). Addressing rural, wicked problems through collaboration: Critical reflections on a school-university- community design process. In R.M. Reardon & J. Leonard (Eds), *Making a positive impact in rural places: Change agency in school-university-community collaboration in education*. Charlotte, NC: Information Age Publishing.

PUBLIC SCHOLARSHIP

Biddle, C. & Mette, I. (2017). Addressing adverse childhood experiences through community-engaged leadership. *Maine Schools in Focus*. Charlotte, NC: Information Age Publishing.

CONFERENCE PRESENTATIONS

Biddle, C., Brown, L., & Tappan, M. (2019). Supporting healing-centered engagement in rural schools and communities: A case-study of the TREE coaching model. Paper presented at the Annual Meeting of the American Educational Research Association. Toronto, Canada.

Brown, L., Tappan, M., & Biddle, C. (2019). Student empowered social emotional learning: From theory to practice. Paper presented at the Annual Meeting of the American Educational Research Association. Toronto, Canada.

Ray, B., Thomas, L. & Cirone, A. (2019). What's voice got to do with it? Student voice is needed. Creating trauma-informed Schools National Conference. Washington, D.C.

Ray, B., Thomas, L. & Cirone, A. (2019). Full day track: ACEs 101: Nothing gets left at the door; The power of the pause; We heard their voices loud and clear: Student voices at the center. Maine Education Association Spring Conference. Farmington, ME.

Ray, B. (2019). Power of the pause: Moving from the downstairs to the upstairs brain. Maine Educational Opportunity Association Annual Conference. Orono, ME.

Cirone, Ashley, Ray, B, Thomas, L. (2019). Addressing absenteeism with a trauma-informed lens. Rural Maine Attendance Summit. Brewer, ME.

- Biddle, C., Brown, L., Tappan, M., Mercado, A., Ray, B. & Thomas, L. (2018). New approaches to adverse childhood experiences and trauma in rural schools. National Rural Education Association Annual Meeting. Denver, CO.
- Biddle, C. & Mette, I. (2018). Deconstructing policy implementation imaginaries: The disconnection between teacher needs and state planning in a rural state. American Education Research Association Annual Meeting. New York, NY.
- Mette, I. & Biddle, C. (2018). The relationship of school-community partnerships in rural reform efforts. American Education Research Association Annual Meeting. New York, NY.
- Ray, B., & Cirone, A. (2018). Nothing gets left at the door: A trauma-informed approach for school and communities. Educate Maine Symposium. Portland, ME.
- Ray, B., Thomas, L. & Cirone, A. (2018). Nothing gets left at the door: A trauma-informed approach for rural school communities. National Rural Education Association Annual Meeting. Denver, CO.
- Ray, B. (2018). Adverse childhood experiences and what it means for the classroom. University of Maine Machias Harvest of Ideas Conference, Machias, ME.
- Ray, B. (2018). Elevating our practice- elevating ALL students. ECET2- Elevating and Celebrating Effective Teaching and Teachers 4th Annual Maine Convening, Waterville, ME.
- Ray, B. (2018). The heart of teaching and learning: Trauma-informed, resilience-focused. PK-12 Teaching and Learning Institute. Presque Isle, ME.
- Ray, B. (2018). ACEs 101: What it means for students in kindergarten, high school, and college. Maine Educational Opportunity Association Annual Conference. Orono, ME.
- Ray, B. (2018). Trauma- informed school supports for all learners. Maine Upward Bound Summit. Orono, ME.
- Ray, B. (2018). Mission statements as self-care. Jobs for Maine Graduates Eastern Maine Conference. Bangor, ME.
- Ray, B. (2018). Trauma- informed school leadership teams. Maine Teach to Lead Summit. Bangor, Maine.
- Brown, L., Tappan, M., Biddle, C., Mette, I. (2017). From adversity to activism: Youth-fueled approaches to voice and engagement. University Council on Education Administration Annual Meeting. Denver, CO.
- Biddle, C. & Mette, I., Congdon, M., Mercado, A. (2017). Community groups as a catalyst for school reform. American Educational Research Association Annual Meeting, San Antonio, TX.
- Ray, B. (2017). Why teachers need to know about adverse childhood experiences. Maine College Access Network Annual Conference, Bangor, ME.
- Ray, B. (2017). Hope and hunger for trauma-informed supports. ECET2- Elevating and Celebrating Effective Teaching and Teachers Annual Maine Convening, Waterville, ME.
- Ray, B. (2017). Adverse childhood experiences and what it means for the classroom. University of Maine Machias Harvest of Ideas Conference, Machias, ME.
- Ray, B. (2017). ACEs: why we all need to know. Island Institute Conference, Belfast, ME.
- Ray, B. (2017). Trauma- informed classrooms. University of New England Trauma-Informed Summit, Biddeford, ME.

Biddle, C. & Mette, I. (2016). School-community partnerships for reform: Lessons from rural and tribal schools. National Rural Education Association Annual Meeting, Columbus OH.

Mette, I. Biddle, C., Mercado, A., Congdon, M., Ackerman, R., Brown, L., Maddaus, J., Tappan, M. (2016). Supporting sustainable and sociocultural approaches in community learning and school reform. University Council of Educational Administration Annual Meeting, Detroit, MI.

Congdon, M., Mercado, A., Mette, I. and Biddle, C (2016). Grassroots community partnerships for rural school reform: Recursive nature of exclusion - It is not an 'Indian Problem'. Annual Conference of the New England Educational Research Organization, Portsmouth, NH.

Blanchard, A., Mette, I. M., Biddle, C., Ackerman, R., & Maddaus, J. (2016). Transforming Rural Experience in Education. Annual Conference of the New England Educational Research Organization, Portsmouth, NH.

INVITED TALKS

Ray, B. (2019). Creating trauma-informed schools and communities by understanding adverse childhood experiences. Distinguished Lecturer Series. University of Maine Presque Isle. Presque Isle, ME.

Ray, B. (2019). Nothing gets left at the door: ACEs in the classroom and community. Bowdoin College. Brunswick, ME.

Ray, B. (2019). Nothing gets left at the door: ACEs in the classroom and community. Passamaquoddy LAUNCH Joint Child Wellness Council. Calais, ME.

Ray, B. (2019). Nothing gets left at the door: Trauma-informed communities. Biddeford Saco Community. Saco, ME.

Ray, B. (2019). Nothing gets left at the door: Trauma-informed school and communities. Fairmount, Vine and Downeast Schools. Bangor, ME.

Ray, B. (2019). Nothing gets left at the door: Trauma-informed school and communities. Granite State Education Corps, Nashua, NH.

Ray, B. (2019). Trauma-informed classrooms for pre-service teachers. College of The Atlantic, Bar Harbor, ME.

Ray, B. (2018). Nothing gets left at the door: Trauma-informed school and communities. Americorps/VISTA. Bangor, ME.

Ray, B. (2018). Nothing gets left at the door: Trauma-informed school and communities. Women's Health Resource Library. Milbridge, ME.

Ray, B. (2018). Systems change for schools: Backing it up. SDG Transformations Forum. Trescott, ME.

Ray, B. (2018). Grab Your Q-TIP: Mission Statements as Self-Care. Passamaquoddy Head Start and Passamaquoddy Language Immersion School. Sipayik Perry, ME.

Ray, B. (2018). ACEs is the starting point: Building strong supports for youth. Healthy Acadia Summer Learning. Machias, ME.

Ray, B. (2018). What is a trauma-informed school and how does a district begin? Biddeford School Dept. and Dayton School Dept. Biddeford, ME.

Ray, B. (2018). What is a trauma-informed school and why should we explore this approach? St George School and Waldoboro Schools. Thomaston, ME.

Ray, B. (2017). Trauma-informed classrooms for pre-service teachers. University of New England Visitor Series, Biddeford, ME.

Ray, B. (2017). Adverse childhood experiences: Community knowledge and action. Island Institute Community Series, Vinalhaven, ME.

Biddle, C., Mette, I. & Mercado, A. (2018). Partnering with schools for community development: Power imbalances in community collaboratives addressing rural poverty. Rural Poverty Fifty Years After the People Left Behind Conference (Rural Policy Research Institute). Washington, D.C.

ARTICLES IN PREPARATION

Brown, L., Tappan, M., Biddle, C., & Ray, B. (in preparation). Student empowered social emotional learning as trauma-informed practice.

Biddle, C. (in preparation). We'll probably all be in trouble for hugging a kid: Rural teacher radicalism in the context of neoliberal school reform.

Tappan, M., Brown, L., Biddle, C., & Ray, B. (in preparation). Toward a student-empowered whole-child trauma-informed approach to educational practice.

PROFESSIONAL DEVELOPMENT IN SCHOOLS

Ray, B. ACEs 101: What teachers need to know about adverse childhood experiences. Narraguagus Jr./Sr. High School, Harrington ME, April 2017; Woodland Elementary School, Woodland, ME, June 2017; Charlotte Elementary, Charlotte, ME, August 2017; Jonesport Elementary, Jonesport, ME, September 2017; Eastport Schools, Eastport, ME, October 2017; Milbridge Elementary, Milbridge, ME, November 2017; Vinalhaven Schools, Vinalhaven, ME, December 2018; Peninsula School, Prospect Harbor, ME, January 2018; Noble High School, North Berwick, ME, January 2018, Biddeford School Leadership Team, Biddeford, ME, January 2018; Princeton Elementary, Princeton, ME, March 2018, St George Community School, St George, ME, May 2018, Waldoboro Miller School, Waldoboro, ME, May 2018, Sipayik Head Start, Pleasant Point, ME, July 2018. Kittery and York School Department, York, ME, August 2018, Biddeford Schools, Biddeford, ME, August 2018, Piscataquis Community High School, Guilford, ME, October 2018, Lebanon Elementary School, Lebanon, ME, November 2018, Waterboro Elementary School, Waterboro, ME, February, 2019.

Ray, B. The importance of the pause. Biddeford School Department, Biddeford, ME, October 2018, Charlotte Elementary School, Charlotte, ME, October 2018, Dayton Elementary School, Dayton, ME, November 2018, Jonesport Elementary School, Jonesport, ME, December 2018, Milbridge Elementary School, Milbridge, ME, December 2018.

Ray, B. Mindset changes needed: Let's flip the question. Eastport Schools, Eastport, ME, November 2017; Woodland Elementary School, Woodland, ME, December 2017; Milbridge Elementary, Milbridge, ME, January 2018; Charlotte Elementary, Charlotte, ME, March 2018; Jonesport Elementary, Jonesport, ME, March 2018; Noble High School, North Berwick, ME, March 2018.

Ray, B. Staying grounded with mission statements. Eastport Schools, Eastport, ME, February 2018; Woodland Elementary School, Woodland, ME, February 2018; Noble High School, North Berwick, ME, March 2018, Biddeford Schools, Biddeford, ME, January 2019, Dayton Elementary, Dayton, ME, January 2019.

PRESS MENTIONS

Fishell, D. (2017). Downeast schools turn to brain science to fix rural education. Bangor Daily News.

FOOTNOTES

- [1] Biddle, C. & Azano, A. (2016). Constructing the “rural school problem”: A century of rurality and rural education research. *Review of Research in Education*, 40(1), 298-325
- [2] Cantor, P., Osher, D., Berg, J., Steyer, L., & Rose, T. (2018). Malleability, plasticity, and individuality: How children learn and develop in context. *Applied Developmental Science*.
- [3] Osher, D., Cantor, P., Berg, J., Steyer, L., & Rose, T. (2018). Drivers of human development: How relationships and context shape learning and development. *Applied Developmental Science*.
- [4] Franke, H. (2014). Toxic stress: Effects, prevention, and treatment. *Children (Basel)* 1, 390-402.
- [5] Burke-Harris, N. (2019). *The deepest well: Healing the long-term effects of childhood adversity*. San Diego, CA: Marriner.
- [6] Center on the Developing Child (2016). *From best practices to break-through impacts: A science-based approach to building a more promising future for young children and families*. Cambridge, MA: Harvard University. Retrieved from www.developingchild.harvard.edu.
- [7] Darling-Hammond, L., & Cook-Harvey, C.M. (2018). *Educating the whole child: Improving school climate to support student success*. Palo Alto, CA: Learning Policy Institute.
- [8] Maine Center for Economic Policy analysis of US Census Bureau, American Community Survey data, 3-year averages constructed by MECEP.

