USDOE NHEP 2020 Ka Paʻalana Narrative

Project Name: Ka Paʻalana Homeless Family Education Program (Ka Paʻalana)

A. NEED FOR PROJECT

1. Magnitude of Need.

The Source of the Crisis: Native Hawaiian Historical Trauma. Historical Trauma is

cumulative emotional and psychological wounding over the lifespan and across generations,

emanating from massive group trauma experiences,[1] such as catastrophic foreign contact disease,

colonization, banned religion, loss of land, and destruction of cultural practices.[2] The effects of

trauma inflicted on people because of their race, creed, and ethnicity linger in the souls of their

descendants. As a result, many people in these communities experience higher rates of mental

and physical illness, and substance abuse. The persistent cycle of trauma destroys families and

communities and threatens the vibrancy of entire cultures.[3] The following timeline traces Native

Hawaiian historical trauma:

1778	Native Hawaiian population 683,000 when Captain Cook arrived in Hawaiʻi.[4]
1820	Native Hawaiian religious practices prohibited. Hula (traditional dance), Kahuna (healing cultural practices) and other cultural practices all deemed illegal.[5]
1893	Native Hawaiian Kingdom overthrown.
1896	Native Hawaiian language banned from public/ private educational institutions.
1898	Hawaiʻi annexed into the United States as a territory.
1920	Native Hawaiian population numbered only 24,000 (U.S. Census).

Over the 142-year period of colonization, the Native Hawaiian race was reduced by

659,000, decimated to only 3.5% of its original population. Native Hawaiians were stripped of

their religion, educational practices, language, and sovereign right to their land. The historical trauma inflicted on the Native Hawaiian people is tragic and a reason for deep mourning. This is not just a chapter in a history book, however. Latest research indicates trauma is transgenerational;[6] in other words, the historical trauma of the past 200 years continues to impact Native Hawaiians today. This devastating impact is seen in the world's largest Native Hawaiian community, situated on the Leeward Coast of Oʻahu and home to about 49,000 people; and in the world's second highest concentration of Native Hawaiians in Keaukaha on Hawaiʻi Island.[7]

Historical Trauma has flowed into the lives of Native Hawaiian families on the Leeward Coast of Oʻahu and released a flood of challenges: poverty and homelessness, poor school readiness, and family dysfunction and trauma that together perpetuate the vicious cycle of "generational poverty" (poverty that exists for more than two generations, as defined in *Bridges out of Poverty*).

Poverty and Homelessness. The Native Hawaiian community on the Leeward Coast of Oʻahu lives in substantial poverty. The US Census Bureau reported for 2013–2017 that while 10.3% of the Hawaiʻi state population lives in poverty, 23.3% of Leeward Coast of Oʻahu residents experience significant poverty.[8] Sadly, the percentage of Leeward Coast children living below the poverty line is more than double the Statewide percentage (31.6% compared to 12.9% statewide)[9] and about 20% of the Leeward Coast's homeless are children ages 0 to 5.[10] At Leeward Coast elementary schools, 85% of the students are eligible for free or reduced lunch.[11] Although comprising only 10% of the state's population, people of Native Hawaiian ancestry make up the largest ethnic group using the state's homeless services (26.9%).[12]

Poor School Readiness. Academic performance of Leeward Coast students trails that of students in the rest of the state. Chronic absenteeism rates for Leeward Coast elementary schools averaged 29.5% compared to the Oʻahu average of 11.8%.[13] According to the State of Hawaiʻi

Department of Education, during the 2018-2019 School Year, only one-quarter of Leeward Coast elementary school students met state minimum proficiency standards in Math (26.3%), and nearly half (45%) of 3rd graders were not reading at grade level. A recent longitudinal study linking third grade reading proficiency, poverty, and high school graduation rates found that "one in six children who are not reading proficiently in third grade do not graduate from high school on time, a rate *four times greater* than that for proficient readers."[14] This effect is observed in the two Leeward Coast high schools, which have the highest percentage of economically disadvantaged students on Oʻahu (82%, 80%), the lowest proficiency rates on the island in all three assessment areas of Mathematics (21%, 22%), Science (11%, 26%), and English Language Arts/Literacy (28%, 29%),[15] and the lowest graduation rate in the state, with 1 out of 4 students failing to graduate in 2016.[16]

Family dysfunction and trauma. Native Hawaiian families on the Leeward Coast experience alarming levels of family dysfunction and trauma. Forty percent of Oʻahu's incarcerated men are Native Hawaiian, 60% of those from the Leeward Coast.[17] This community also has the highest number of Child Protective Services (CPS) cases on Oʻahu, the highest percentage of children in foster care, and the highest number of police responses to domestic violence cases.[18] The most recent statistical report on Child Abuse and Neglect in Hawaiʻi (CANH) reveals that child maltreatment on the Leeward Coast was one of the highest reported in the County, with 90% of perpetrators being the child's parent.[19] This is especially disturbing since maltreatment of a child by the child's primary caregiver may be the most damaging of all traumatic experiences.[20] CANH also reported that Native Hawaiian children disproportionately accounted for almost half (42%) of confirmed child victims of maltreatment in Hawaiʻi. [21] The 2018 Office of Hawaiian Affairs health report "Haumea" reveals a pattern of elevated levels of self-destructive behavior among Native Hawaiian adolescents as shown in the table below.[22]

	non-Native Hawaiian	Native Hawaiian
Percent of Middle School students w/ eating disorder	15.3%	22.2%
Percent of High School students who hurt themselves	21.1%	27.7%
Percent of High School students who attempted suicide	9.0%	14.1%

The combined forces of these three negative realities (poverty and homelessness, poor school readiness, and family dysfunction and trauma) has resulted in adults ill-equipped to support their children's development, and children unprepared for school and life.

The community of **Keaukaha** on Hawai'i Island represents the second highest concentration of Native Hawaiians in the world, and is the most populated Hawaiian Homestead outside of the island of O'ahu.[23] The demographics and needs in Keaukaha are almost identical to those of the Leeward Coast of O'ahu, and similarly demonstrate the devastating effects of Historical Trauma. Hawai'i County has the highest percentage of children living below the poverty level (23.4%),[24] with Native Hawaiians comprising 31.6% of those accessing homeless services on the island.[25] Less than half of Native Hawaiian students at Keaukaha Elementary meet standards in English (40%), and Math (37%), and nearly half (41%) of its 3rd graders do not read at grade level.[26] Finally, Hawai'i County ranks second highest in the State in number of child victims of maltreatment (362).[27] Although the primary focus of this project is the Leeward Coast of O'ahu, Ka Pa'alana will also provide staff training and implement newly developed curriculum at its Keaukaha site on Hawai'i Island.

2. Gaps in Services.

Ka Pa'alana's demonstrated success. For the past 13 years, Ka Pa'alana's Homeless Family Education Program has filled significant gaps in services on O'ahu's Leeward Coast and has successfully met the needs of over 6,000 homeless/at-risk Native Hawaiian children ages 0-5, and over 6,000 caregivers. On average, 69% of Native Hawaiian children who have participated in the Ka Pa'alana program consistently demonstrate school readiness in literacy as

measured by the Hawaii State School Readiness Assessment (GPRA measure), 62% of the children have raised their stanine by at least 1 point in the Peabody Picture Vocabulary Test, and 78% have appropriately performed developmental milestones (Ages and Stages Questionnaire) and have continued to improve developmentally. Over the past four years, Ka Pa'alana's Adult Education Program has prepared over 225 adults for work through the creation of resumés, job searches, job fairs and job interview training. Over 50% of those who participated in employment training/opportunities through adult education have obtained permanent employment. In the past 13 years, Ka Pa'alana has also employed 14 former participants.

Need for new Trauma-Informed Care Component. While Ka Pa'alana has had documented success meeting the needs of Native Hawaiian homeless families, the program has recognized that to more effectively address **family dysfunction and trauma** and break the vicious cycle of generational poverty for Native Hawaiians, it needs to go further "upstream" and address the source of **historical trauma**, a critical factor underlying the struggles of indigenous groups.[28] Adding a Trauma-Informed Care component to its current curriculum will help break this cycle and build wellness and resiliency for homeless Native Hawaiian families and communities.

Traditional preschool programs are not designed to respond to such trauma and *family* dysfunction. A 2-generation (2-gen) approach that addresses needs and creates opportunities for *both* children and their parents together is clearly required.[29] Currently there are NO Early Childhood Education programs on the Leeward Coast or in Keaukaha that are designed to respond to the needs of historical trauma.

Lack of affordable, quality preschools and adult education. Although traditional preschools are available on the Leeward Coast, they are unaffordable for families living in poverty, especially quality preschools that could best support disadvantaged children. The cost of

a 10-month National Association for the Education of Young Children (NAEYC) accredited preschool in Hawaiʻi averages $9,000 - $15,000 per participant. Head Start/Early Head Start are free early childhood education programs; however, according to Chris Jackson, Hawaiʻi Headstart State Coordinator, "All Leeward Coast Head Start programs are maxed out, with lengthy wait-lists." The University of Hawaiʻi Center on the Family also reports, "The ratio for licensed childcare for children ages 0-3 on the Leeward Coast is 48:1." The cost of parenting classes averages $150/session, and adult workforce preparation averages $100/session. The combination of preschool and parent/adult education can total more than $21,000 per participant per year.

The need to continue—and improve—Ka Paʻalana's services. Aside from Ka Paʻalana there are <u>NO </u>programs that meet homeless families' basic and educational needs for the whole family. Currently, there are <u>NO </u>other Comprehensive Family Education services on Leeward Coast beaches.

<u>Ka Paʻalana will respond to the Historical trauma of Native Hawaiians and bridge a gap in services by incorporating a Trauma-informed Care approach into all its services, and by creating and incorporating a Trauma-informed Care component into its existing STEAM-based, Native Hawaiian culture-focused preschool and caregiver curricula.</u>

B. <u>QUALITY OF PROJECT DESIGN</u>

1. Project is appropriate to and will successfully address target population's needs.

Ka Paʻalana was created to address the issues of **poverty and homelessness** and **poor school readiness** in the vulnerable population of homeless/at-risk families with young children. Ka Paʻalana's mobile services are strategically located to provide walk-in access, and all services, including nutritious snacks and meals, are provided at no charge. For the past 13 years, Ka Paʻalana has addressed the educational needs of over 6,000 homeless/at-risk families through

a highly successful two-tiered delivery of services: Tier 1– a first-contact mobile preschool and homeless outreach program known as **Mālama Mobile**, which operates at Leeward Coast beaches; Tier 2– **a comprehensive family education program** that operates in emergency shelters, transitional shelters, and low-income housing. Funding from this proposal will allow Ka Paʻalana to provide its two-tiered programming at six key sites along the Leeward Coast of Oʻahu ██ ████████████████████████████; and ██████████████████████ in Keaukaha on Hawaiʻi Island. Ka Paʻalana represents an intentional, comprehensive approach to address the following **Absolute Priorities: 1) Beginning reading and literacy; 2) Needs of at-risk children and youth;** and **4) Use of Hawaiian language in instruction.**

Tier One: Mālama Mobile. The authors of *Bridges Out of Poverty*, a nationally recognized "handbook" for working with homeless populations, emphasize that establishing relationships based on mutual respect is a critical first step when working with at-risk groups. In *Bridges*, Dr. James Comer states, "no significant learning occurs without a significant relationship."[30] Embracing this **social coherence theory**, Ka Paʻalana developed an innovative approach to build relationships with the at-risk Native Hawaiian community. Called **Mālama Mobile**, this "first contact" mobile outreach has been instrumental in breaking the cultural barrier put up by many homeless families who often resist assistance from government agencies. Many social service agencies rely on the "If you build it, they will come" strategy, which is less effective with guarded populations like the Native Hawaiian community. Instead, Mālama Mobile meets people where they are—literally—and earns their trust.

Arriving at beaches in vans loaded with supplies, Ka Paʻalana staff (predominantly Native Hawaiian and from the Leeward Coast) approach families and develop trust by providing basic necessities (canned foods, diapers, toiletries). Once trust is gained, staff conduct tent home visits

and invite families with young children to participate in Ka Paʻalana's mobile preschool, which operates right at the beach park. Early childhood education staff provide literacy-rich activities that give parents first-hand experience of the importance of early childhood education **(Absolute Priority 1)**. The early educational needs of homeless participants are met because the school itself is mobile and moves with the target community **(Absolute Priority 2)**.

Mālama Mobile staff also assist families to move into shelters by providing information and helping with transition documents. To date, through its Mālama Mobile outreach, Ka Paʻalana has transitioned over 260 Native Hawaiian families from the beach into shelters, provided them high-quality early childhood and family education, and distributed over 80 tons of food.

Tier Two: Comprehensive Family Education Programming. While Mālama Mobile provides critical introductory support, its reach is limited, and thus Ka Paʻalana staff strive to move families into area emergency and transitional shelters, and from there, into public housing. At these locations staff carry out the second tier of the Ka Paʻalana strategy: comprehensive family education programming. Through Tier 2, Ka Paʻalana responds to **poor school readiness** by providing a nationally accredited Science, Technology, Engineering, Arts, Math (STEAM)-based preschool, that both involves and teaches parents to be their child's first and most important teacher **(Absolute Priority 1)**.

2. Demonstration of Rationale (Logic Model Informed by Research).

NCFL Family Education Model. Ka Paʻalana's Comprehensive Family Education Program is patterned after the National Center for Families Learning (NCFL) family education model, a worldwide leader in meeting the most urgent educational needs of disadvantaged families. The NCFL model integrates four vital family education components into one program:

Early Childhood Education (ECE)	This component addresses children's academic needs and goals, provides a time for teachers to focus on children's school readiness skills, and allows children to engage in age appropriate activities that meet early learning standards.
Adult Education (AE)	Caregivers receive lessons in financial planning, goal setting, health and wellness, and career building. This improves caregivers economic self-sufficiency, English language literacy, and increases their employability.
Parent Education (PE)	Parent classes focus on child development, positive parenting techniques, STEAM concepts, understanding how children learn to read and write, and how parents can interact with and support their child's growth and education.
Parent and Child Together (PACT) Time	In PACT time, parents become more confident and begin to positively engage with their child in preschool, strengthening the parent-child bond. Program staff model positive interactions, and parents practice concepts learned in Parent Education.

This NCFL family education approach is rooted in the Social Coherence Theory (discussed above), Executive Function research, and Culture-Based Education research, all of which demonstrate the rationale for logic model objectives, and address **Absolute Priority 1) Beginning reading and literacy; 2) Needs of at-risk children and youth**; and **4) Use of Hawaiian language.**

Research on **Executive Function** has shown that "Children's executive function skills provide the link between early school achievement and social, emotional, and moral development…. Scientists who study executive function skills refer to them as the 'biological foundation for school readiness.'"[31] Preschool children with delayed executive function development continue to make errors related to emerging abilities, not because of absence of abilities, but because they lack the awareness to know when and how to use particular strategies in particular contexts.[32] Furthermore, executive function skills are at their peak and fully developed at age 20-29. Unfortunately, for adults suffering from the effects of generational poverty and trauma, executive function skills lag far behind that of the average adult.[33]

The Executive Function theory validates the use of the parent/child preschool approach in Ka Paʻalana programming. By helping to build executive function skills, Ka Paʻalana develops

the social, emotional and moral development of the young child AND caregiver through intentionally planned activities and strategies that build mental flexibility and inhibitory control.

Culture-based Education: According to the Native Hawaiian Cultural Influences in Education Study, culture-based educational strategies positively impact student outcomes, particularly of Native Hawaiian students, and result in socio-emotional well-being, and improvements in math and reading test scores for all students, particularly for those with low socio-emotional development.[34] The Hawaiian language and culture **(Absolute Priority 4)** is perpetuated in bi-monthly themes for the early childhood curriculum, and serve as a base for parent and adult education classes. For example, the unique Native Hawaiian culture is seen in the many uses of ti plants in everyday life: medicine (to bring down fevers), clothing (rain capes and sandals), hula (skirts and lei), cooking (steaming fish, flavoring food in the imu, wrapping laulau, holding poi or pa'i 'ai), and thatching (bundles, called pe'a, used to cover the roof and sides of a house). Children participate in cultural practices their caregivers might have grown up with, like wrapping laulau (a ti leaf bundle of taro leaves and meat), while teachers and staff integrate content standards like sequencing, one-to-one correspondence, number recognition, and physical science. Ka Pa'alana staff teach the Hawaiian language to their families and instruct caregivers and children in the richness of the Hawaiian culture.

Adverse Childhood Experiences (ACEs) Study. A joint study between the Centers for Disease Control and Prevention and Kaiser Permanente involving over 17,000 participants revealed an extremely consistent correlation between Adverse Childhood Experiences (ACEs), such as abuse or addiction, and negative health and well-being outcomes over the course of life.[35] The study also showed that parents with high ACE scores most often have children with high ACE scores, as the pattern of childhood abuse and neglect is perpetuated from one generation to the next.[36] Subsequent studies involving ACEs and Native populations have shown

significantly worse conditions compared to the original study participants.[37] An internal survey (see Appendix 1- Ka Paʻalana Program ACE Survey Findings) of Native Hawaiian adult Ka Paʻalana participants revealed ACE scores double the average of the original CDC/Kaiser study participants', meaning that at-risk Native Hawaiian adults are 200% more likely than their non-native counterparts to develop negative health and well-being outcomes, and to pass on these negative health behaviors and trauma to their children. The following statistics reveal the staggering impact of ACEs on children's education. Students with 3 or more ACEs are more than 2.5 times more likely to fail a grade,[38] are significantly more likely to perform below grade level, and be labeled as special education, suspended, expelled, or to drop out of school.[39] It's worth noting that the ACE Study did not take Historical Trauma into account, or include this as one of the surveyed adverse childhood experiences.

The **Community Resilience Initiative (CRI)**, the first community-wide initiative to emphasize resilience through an understanding of the ACE Study and the neuroscience on toxic stress and brain architecture, developed training consistent with practices of the Federal Government's Substance Abuse and Mental Health Services Administration (SAMHSA). SAMHSA defines Trauma-Informed Care (TIC) as *the practice of training the workforce that works with clients who have suffered from trauma and providing science-based knowledge and strategies so that the professionals do not traumatize or retraumatize their clients*. This understanding allows a shift in perspective from, "What's wrong with you?" to a therapeutic view of, "What happened to you?" The key to disrupting the cycle of intergenerational trauma is building resiliency. "Scientific research points to the presence of a stable, caring adult in a child's life as the key to building the skills of resilience,"[40] or more memorably, "One caring adult can trump all ACEs."

⬛⬛⬛⬛⬛, a certified CRI Trauma-Informed Trainer, will work directly with Ka

Paʻalana's Community Outreach Manager, ██████████, to provide TIC training for Ka

Paʻalana staff, and TIC curriculum development for the program.

Logic Model for Ka Paʻalana proposal: *Detailed Evaluation Plan is included in Section F.*

PROGRAM OBJECTIVES	PROGRAM ACTIVITIES	PROCESS EVALUATION	INTERMEDIATE OUTCOME	IMPACT OUTCOME

1. **Support** the education and outreach needs of homeless Native Hawaiian (NH) families through "first contact" Malama Mobile outreach services.	• 240 homeless Native Hawaiians (120 children ages 0-5; 120 caregivers) provided with vital outreach & educational services
	• Assessments, referrals, in-home activities
	• Goal setting
	• "Grab & go" folders to assist transition into shelters, & field trips
		• Quickbase-intake & attendance data
		• Performance Assessment Checklist – assess status of each project task & timelines
		• Program Satisfaction Survey (from caregivers)
			Objectives 1 & 2 are expected to have common outcomes & measures:
			Increase socio-emotional development of children
			    ASQ-SE - social-emotional assessment
			Increase school readiness of children
			    ASQ – assessments across areas of communication, gross motor, fine motor, problem solving & personal-social
				The overall goal of Ka Paʻalana is to break the cycle of generational poverty through an integrated family education program founded upon timeless Native Hawaiian culture and values that responds to the historical trauma of the Native Hawaiian family.

2. **Increase** the socio-emotional development and school readiness of homeless/ at-risk Native Hawaiian children by enhancing its STEAM curriculum with: a) a computer science component, and b) a Trauma-informed Care component.	• Create and incorporate into an existing STEAM-based, NH culture-infused, preschool curriculum, a Computer Science component, and a TIC component • Field trips • 1050 NH children ages 0-5 served • 300 home visits provided to serve children ages 0-5 & their caregivers	• Quickbase-intake & attendance data • Performance Assessment Checklist • Program Satisfaction Survey (from caregivers) • Field Trip Evaluation Form • Home Visit Log	PPVT– measures child's receptive vocabulary & scholastic aptitude HSSRA– assesses readiness for school; meets the USDOE GPRA reporting requirement for % of participating NH children who demonstrate school readiness in literacy Qualitative Evaluation - site visits & interviews with caregivers, staff & stakeholders	

3. **Improve** wellness and parenting skills of homeless/ at-risk Native Hawaiian caregivers by developing &	• Create & implement an intensive NH caregiver curriculum that incorporates Trauma-informed Care principles and practices	• Quickbase - intake & attendance data
		• Adult/Parent Ed. Class Eval. Form
		• Parent & Child Folders
		• Performance
			Increase involvement in children's education
			    Parent Involvement in Child's School Scale
			Improve child rearing practices
			    Parental Attitudes Scale
			Improve overall health	

| implementing an intensive Native Hawaiian caregiver curriculum that incorporates Trauma-informed Care principles and practices. | • Annual Family Health Fair, field trips
• 1050 Native Hawaiian caregivers served | Assessment Checklist
• Program Satisfaction Survey
• Trauma-informed Reset Plan
• Reflection journal | GAIN Physical Health scale
Increase cultural knowledge
Cultural Experience Scale
Increase knowledge about trauma-informed care principles
Brain Science test
Increase mindfulness
Mindfulness Questionnaire | |

Objective 1. Support the education and outreach needs of homeless Native Hawaiian families through the "first contact" Mālama Mobile outreach services (as described above).

Objective 2. Increase the socio-emotional development and school readiness of homeless/at-risk Native Hawaiian children, enhancing its STEAM (science, technology, engineering, arts, and math) preschool curriculum by adding two components: a) a computer science component, and b) a Trauma-Informed Care component.

a) Computer Science Component. (Competitive Preference Priority 1: promoting Science, Technology, Engineering, or Math education, with a particular focus on computer science) Although Ka Pa'alana's STEAM-based preschool curriculum already develops computational thinking and problem-solving, if funding is secured, Ka Pa'alana will be able to create and incorporate a computer science component into its existing preschool curriculum by developing basic coding skills through interactive robots, simple step memory recognition, as well as engineering and designing two and three-dimensional maps. (Lesson plan - Appendix 2.)

Research among 4- to 7-year-old children has shown robotics to be an ideal tool for this age group because building and programming robots engages young children in "computational thinking—solving problems algorithmically and developing a sense of technological fluency."[41] Research has also found that young children programming with hands-on robotics kits develops their "sequencing, logical reasoning, and problem solving skills," and that even "children as

young as 4 years old can master powerful ideas from computational thinking and early engineering."[42] In fact, research suggests that spatial scaling and distance coding (skills involved in using a map) are abilities present even at 3 years of age.[43]

b) Trauma-Informed Care Preschool Component. If funding is secured, Ka Pa'alana will be able to create and incorporate a TIC component into its STEAM-based, Native Hawaiian culture-infused preschool curriculum. Currently, NO preschool in Hawai'i has a TIC component. Research has shown that "children in low-income families often are exposed to a greater number of ACEs and environmental factors that delay or compromise their development and place them at a disadvantage for healthy growth and school readiness."[44] Providing support as early as possible to children experiencing adversity is critical to changing their life trajectory.[45]

Ka Pa'alana's TIC preschool component will meet the developmental needs of children academically, socially, and emotionally. Through comprehensive learning opportunities children will grow in resilience. They will develop skills in building healthy relationships with one another and nurturing adults. They will feel safe and connected to their environment and have a deep sense of self by connecting to their past and history. A key piece of research used to develop this unit is the Benevolent Childhood Experience Scale (BCES),[46] which measures experiences that build child resilience through a series of questions. If the questions are answered affirmatively it reveals resilience and the likelihood of the child successfully overcoming ACEs. Ka Pa'alana's curriculum, classroom routines, and policies are all designed to help provide these benevolent childhood experiences. In every aspect of our curriculum from creation to delivery, this Trauma Informed Care approach will be at the forefront.

Objective 3. Improve the wellness and parenting skills of homeless/at-risk Native Hawaiian caregivers by developing and implementing an intensive Native Hawaiian caregiver

curriculum that incorporates Trauma-informed Care principles and practices.

Ka Pa'alana's current caregiver curriculum already includes a wide range of skill-building units: parent strategies to support children's academic growth, positive child discipline, financial literacy, Hawaiian culture, health and wellness, and job skills. In this project Ka Pa'alana will add a TIC curriculum and approach that aligns with current research and best practice, which is strengths-based, trauma responsive, emphasizes safety, and provides opportunities for rebuilding a sense of control and empowerment.[47]

Ka Pa'alana's two-tiered delivery of family education programming has increased school readiness of 6,000 children, prepared over 6,000 adults for parenting and employment, and provided the academic foundation for families to break out of the cycle of generational poverty. Serving the most fragile population that the Native Hawaiian Education Act was intended to serve— homeless Native Hawaiian families with young children— Ka Pa'alana is clearly a comprehensive effort to improve the economic stability, health, and school readiness of these vulnerable children and families. Funding for this project will allow Ka Pa'alana staff to be trained in the therapeutic TIC approach, and implement TIC curricula in its two-tiered delivery of services—Malama Mobile Outreach and Comprehensive Family Education programming—to foster resilience and academic growth in response to the historical trauma of Native Hawaiians at six key sites along the Leeward Coast of O'ahu, and Keaukaha on Hawai'i Island.

C. QUALITY OF PROJECT SERVICES

1. Strategies to ensure equal access for participants.

The Ka Pa'alana program was intentionally designed to overcome barriers related to access and to target members of groups that have traditionally been underrepresented. Through Mālama Mobile, Ka Pa'alana staff approach potential program participants *where they dwell*, whether in

tents on the beach or in area shelters. Ka Pa'alana's Comprehensive Family Education programming is also intentionally located in Emergency and Transitional Shelters, and Low-income housing complexes to provide our target population walk-in access. Furthermore, although the program focuses on homeless/at-risk Native Hawaiian families and children on the Leeward Coast and Keaukaha, anyone in the community is welcome to participate. In addition, all sites meet ADA requirements for accessibility, and the program partners with community organizations to provide translation and/or other accessibility needs as they arise.

2. Project Services reflect up-to-date Research and Effective Practice

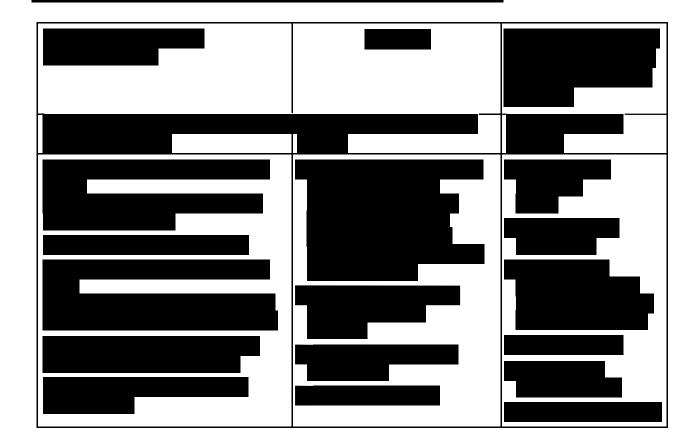**NAEYC Accreditation reflects highest standards in Early Education.** In 2013 Ka Pa'alana became the first preschool of its kind—Family Child Interaction Learning (FCIL) program serving homeless families—to receive full accreditation from the National Association for the Education of Young Children (NAEYC), the most prestigious accrediting body for early learning programs in the nation. Receiving NAEYC accreditation means that Ka Pa'alana's early learning curriculum, staff qualifications, and programming meet the most stringent accreditation standards in the nation. The program receives regular updates on best practices and latest developments in pedagogy and research through the Hawai'i Association for the Education of Young Children, the Hawai'i NAEYC affiliate. Ka Pa'alana also employs, the only two nationally-certified family literacy trainers (through NCFL) dedicated to working with homeless families. In addition, Ka Pa'alana was directly involved in creating 2-generation curriculum to support the Hawai'i Early Learning and Development Standards (HELDS),[48] a set of research-based, rigorous standards that identify expectations of knowledge and behavior for children through a chronological continuum. Its approach to education as well as highly qualified staffing ensures that Ka Pa'alana will improve learner outcomes because lesson plans are in alignment with HELDS and the instruction and environment are aligned with NAEYC standards.

      STEAM Curriculum. Early math and science skill acquisition has been linked to positive academic outcomes in such areas as literacy, science, and technology, as well as overall academic success.[49] Using a STEAM curricular approach (an inquiry-based approach to teaching and learning) to teach Native Hawaiian culture and other topics will ensure that children and caregivers are benefitting from both. The following chart provides a sample of the preschool Curriculum delivered through a STEAM curricular approach:

Unit: Lo'i/Taro Patch

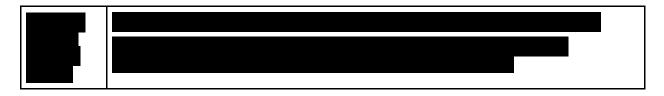|	Science	Technology	Engineering	Arts	Math
Content Standard Strand: Life Science	Keiki will learn names for each part of kalo (taro) plant. Parents will learn and share with each other how each part of plant is prepared for eating. Keiki and parents will take a field trip to a lo'i.	Keiki will use iPads to do virtual tour of lo'i before actual field trip. Keiki will use tools to explore a real kalo plant, (measuring tape, microscopes). Parents will take field trip to lo'i before keiki and create virtual field trip that keiki will watch in class.	Keiki will simulate lo'i using wooden blocks, pretend kalo; replicate irrigation system w/ prepared pipes. Parents will research types of lo'i, create pretend kalo, prepare pipes for lo'i. Keiki will create map of lo'i from water source to kalo w/ help of teacher, peers. (computer science: early coding skills).	Keiki create family kalo plants, connect each family member to a leaf on the plant. Keiki will learn names of each family member in Hawaiian. Parents will create their own family kalo plants while doing family genealogy research.	Keiki will sort pretend kalo leaf cutouts by shades and sizes. Keiki will experiment with how many cups of dirt, water it takes to make mud, as in a lo'i. Keiki will create patterns w/ help of peers/ teachers w/ kalo leaves of different shades and sizes, replicate pattern using short term memory (computer science: early coding skills). Parents will watch videos on varieties of kalo, how parts are used.
Assess-ment	Keiki will identify different parts of kalo plant during field trip to lo'i. Parents will make, share dishes using different parts of kalo plant.	Keiki will predict what they will see on field trip to lo'i. Parents gain understanding how lo'i works, how kalo is planted, harvested.	Keiki will replicate lo'i shapes using wooden blocks, fake plants, transport water from point A to B, as in lo'i irrigation system. Parents will learn carpentry skills, measuring, cutting pipes w/ tape measure, cutting tools.	Keiki will name different people in her family, determine what size kalo leaf to use per person, small leaves for children, large leaves for adults. Parents will trace genealogy at least 2-3 generations.	Keiki will seriate kalo leaf cutouts by size and shade. Keiki will make mud by counting cups of mud and water used, demonstrating one-to-one correspondence. Parents will create posters for charting varieties, uses of kalo.

Trauma-Informed Care (TIC) Preschool Curriculum. One of the TIC Preschool units, "Pilina" (Relationships) will contain three subthemes: a) "Piko'ī" (Past) relationships in my life, history and culture, b) Piko'ō (Present) relationships with teachers, environment, friends, family and community, c) Piko'ā (Future) relationships with those who come after me who will be impacted by my decisions. Each lesson will use the Benevolent Childhood Experiences Scale (BCES) to assess successful implementation. ████████████████████████████

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Trauma-Informed Care (TIC) Caregiver Curriculum. The goal of TIC is to address the root causes of trauma by providing positive coping strategies and thereby building wellness and resilience for victims of trauma.[50] A TIC module will be developed and incorporated into the caregiver curriculum to build resilience to trauma. The module will educate caregivers in how

the brain responds when trauma is introduced at an early age, providing a foundation of knowledge upon which parents can build nurturing interactions with their children. According to the Centers for Disease Control and Prevention, "Safe, stable, and nurturing relationships between children and their caregivers…are **fundamental** to the healthy development of the brain and, consequently, the development of physical, emotional, social, behavioral, and intellectual capacities"[51] of young children. Staff will help participants create a personalized Trauma-Informed Reset Plan that will help caregivers understand their triggers and warning signs, and provide a path to modulate from a state of anger to a calmer, more manageable state, thereby better regulating their emotions. A Reflection Journal will also be used by caregivers to assist with processing trauma, help caregivers understand their behavior, and adopt a healthier response when conflict arises.

Ka Pa'alana staff will be fully trained in the Community Resilience Initiative (CRI) TIC approach. The key to the CRI approach is that participants feel "safe and connected;" therefore staff will gain sensitivity to not re-traumatize participants. There will be numerous points where, "please participate as you feel comfortable" will be expressed, and prior to covering sensitive concepts staff will provide an overview of topics, so participants can opt out if needed. Within the first year of the grant, Ka Pa'alana will identify key Native Hawaiian therapists so referral services can be offered to participants. ███████████████████████████

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3. Likely Impact of Ka Paʻalana Services

The likely impact of Ka Paʻalana's services for its participants are summarized in a 2019 meta-analysis study by the Learning Policy Institute which compiled and analyzed findings from major research studies on the efficacy of early education programs:[52]

Academic Benefits	● Students who attend preschool programs are more prepared for school and less likely to be identified as having special needs or to be held back in elementary school than children who did not.[53] ● Studies show clear positive effects on children's literacy and mathematics skills.[54] ● One study followed students through mid-30s and found they were more likely to attend and complete college.[55]
Social Benefits	● People who attend preschool are more productive in school, work, and society generally - with higher levels of education and earning, less involvement in delinquency and crime, and fewer chronic health problems.[56] ● Kids who enter intensive preschool programs are less likely to be arrested, more likely to graduate, and less likely to struggle with substance abuse as adults.[57] ● Studies of high-quality programs that have followed students into adulthood find up to $17 returned in social benefits for every dollar invested.[58]

Positive Impact of TIC interventions. Recent research shows that children with 2 or more ACEs who learn to stay calm and in control when faced with challenges are over three times more likely to be engaged in school compared to children who have not learned these skills (71.4% vs. 19.2%).[59] Studies also show the importance of providing caregivers with TIC skills and training. Children with 2 or more ACEs are nearly six times more likely to have learned this resilience skill when *parents* do very well in sharing ideas about things that matter with their child versus those who do not do well in sharing.[60] Research also demonstrates the efficacy of family-based TIC programs in preventing and responding to ACEs. "Several systematic reviews and meta-analyses have found family-based programs to be effective at preventing or reducing a wide range of behavioral problems among children. These evidence-based programs have such
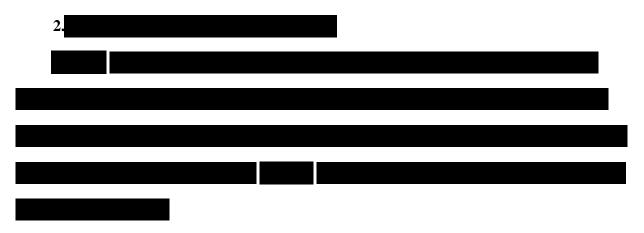
effects because they promote a wide range of effective parent behaviors and diminish child maltreatment and harsh, inconsistent discipline.[61]
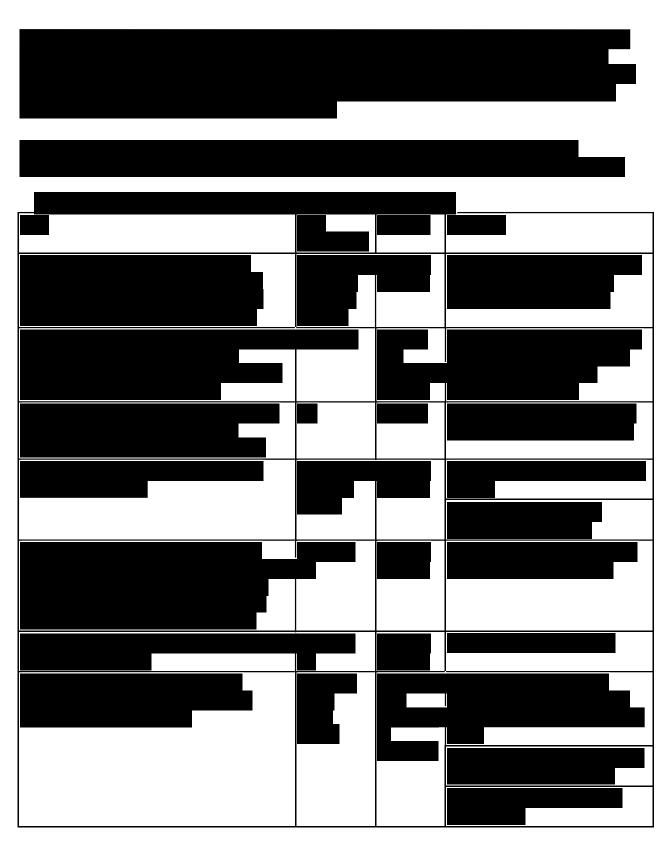
D. QUALITY OF PROJECT PERSONNEL

1. Ka Pa'alana encourages applications for employment from the underrepresented.
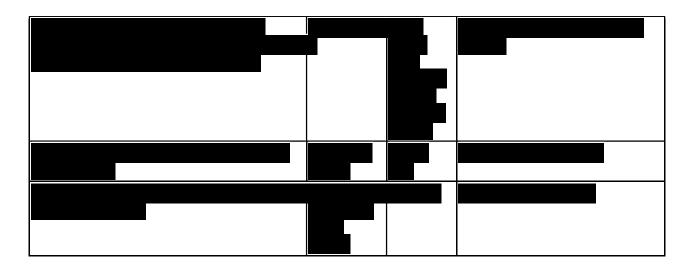
Firmly believing that the most effective teachers of homeless families and children are those from the community in which they serve, Ka Pa'alana has always encouraged applicants of Native Hawaiian ancestry from the Leeward Coast. As a result, although this group of people has traditionally been underrepresented in professional positions, more than 60% of Ka Pa'alana's staff have been Native Hawaiians from the Leeward Coast. Many have either experienced home-lessness or come with first-hand experience working with at-risk populations. To date, Ka Pa'alana has employed 14 former program participants. Most have pursued higher education and found work in other labor areas (e.g., social work, community health) in the community. Two are currently still employed as preschool teachers, and one recently graduated with a Bachelor's Degree in Early Childhood Education. Ka Pa'alana staff receive more than 250 hours of professional development each year through workshops, in-services and conferences that focus on early learning and development, and effective pedagogy.

The following description of key project staff will establish that they are highly qualified and possess the necessary experience to successfully implement this project.

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F. QUALITY OF PROJECT EVALUATION

An experienced evaluation team will conduct comprehensive project evaluation of the Ka

Pa'alana Program. The process evaluation effort will monitor implementation activities. As

indicated in the Logic Model, a web-based database called Quickbase will capture intake

demographic and attendance data for each component of the program. Various evaluation forms

will be used to assess satisfaction with educational classes, field trips, program staff and overall services. These process data will be collected on an on-going basis.

As an important part of process evaluation, a Performance Assessment Checklist based on tasks listed for each objective as provided in Section (e) *Quality of management plan* will be developed. Using this checklist, the status of achieving each task will be documented on an annual basis along with challenges with implementing/completing any task.

Also as outlined in the Logic Model, specific indicators are proposed to measure the expected outcomes. The evaluation methodology for this project utilizes a single group design with multiple follow-ups to effectively assess project objectives.

Objectives 1 and 2 are expected to have common outcomes. To assess the socio-emotional development of the participating children, a standardized tool called Ages & Stages Questionnaire - Social-Emotional[62] will be used. It is conducted by trained Ka Pa'alana Assessment Specialists by interviewing the caregivers.

To assess children's school readiness, the following standardized tools will be utilized:

Ages & Stages Questionnaire (ASQ)	is used to identify children with developmental delays.[63] It assesses 5 areas and is completed by caregivers with Assessment Specialists assistance. For both ASQ & ASQ-SE, the pretest is compared against most recent follow-up.
Peabody Picture Vocabulary Test (PPVT)	measures a child's receptive vocabulary and is a strong predictor of later school performance.[64] It is conducted by trained Assessment Specialists for each child and is assessed upon enrollment as pretest and about four months later as posttest.
Hawai'i State School Readiness Assessment	HSSRA assesses readiness for school.[65] Conducted at the end of the school year to show if the children are ready for Kindergarten. It meets GPRA requirement for percent of Native Hawaiian children who demonstrate school readiness in literacy.

The combination of these tools include measures of problem solving, math, and critical thinking that are building blocks to computer related skills. In addition, the use of these standardized and widely recognized tools provides valid and reliable performance data.

For Objective 3, to assess health and parenting skills, the following measures will be utilized:

Global Appraisal of Individual Needs	Physical Health scale of the GAIN-Q measures the general health of the caregiver and utilization of treatment.[66]
Parental Involvement in Child's School Work Scale	tracks caregivers' involvement in their child's education[67] as research consistently shows parental involvement in early childhood education significantly increases scholastic achievement.[68]
Parental Attitudes Scale	primarily assesses parents' progress in child-rearing practices,[64] but with the emphasis on trauma informed care, it also assesses self-regulation of emotions.
The Cultural Experience Scale	was developed by the KP staff to assess how the caregivers' knowledge of Native Hawaiian culture has increased as a result of attending the program.
The Mindfulness Questionnaire	was put together by taking questions from existing mindfulness inventories.[69] It is hoped that teaching mindfulness to these participants will help them to regulate their thoughts and feelings and consequently their behaviors.
Brain Science Test	will be developed to assess changes before and after training in caregiver knowledge about how the brain develops and how exposure to toxic stress can affect the physical and psychological development of an individual.

To assess changes over time, pretest data will be compared with posttest or 3 and 6 month follow-ups for all outcomes data. Primary analysis used to determine if the difference between outcome measure pretest and posttest was meaningful or not is the General Linear Model (GLM). The GLM is a conservative analysis and is less likely to falsely suggest significance between two or more mean scores. The evaluation effort will be enhanced by *qualitative* information through site visits and focus groups with participants that will complement the understanding of quantitative data.

The biannual evaluation findings report will summarize the findings, which will also be shared with project staff to discuss how such findings can be utilized to further improve the program. These biannual reports will provide status on how the project is meeting the specific indicators for its goals and objectives as part of GPRA reporting as well as provide detailed description of the methodology that would enable replication in other potential settings.