Table of Contents

a. Need for the project i. The magnitude of the need. As a result of colonization, many Native Hawaiian (NH) families face social, emotional, and economic challenges. While we have made some progress, many of our NH children enter kindergarten unprepared for school. Families struggle daily with the challenges of raising children and providing them with physical, educational and emotional support. NH children are the keepers of our culture, speakers of our language and leaders of our future, a future that is in peril. We have the highest poverty rate of any subgroup in Hawaiʻi at 15.5 percent, compared to 7.7 percent in the state as a whole. [i] NH families experience a poverty rate of 12.6 percent while poverty rate of female householders with children under 18 is a staggering 31.7 percent. [ii] Academic issues persist for NH children throughout their K-12 career. According to the Hawaiian Department of Education, NH children perform behind all other groups in annual state standardized testing. In SY17-18, only 38 percent of NH students tested proficient in reading compared to 54.1 percent of all students. In mathematics, NH students were 26.3 percent proficient compared to 41.9 percent of all students.[iii] The percentage of NHs that fail to achieve a high school degree or equivalency or higher is 11.5%, and only 21.5% of NH obtain a Bachelor's degree compared to 33% of the nation as a whole. [iv] Additionally, NH children are over-represented in special education with increased rates of learning disabilities, emotional impairment, and behavioral differences. The data shows that risk begins at birth for NH, with late or no prenatal care and high rates of births by women who are unmarried or teenage parents. Young NH children are more likely to live in a single-parent family household than any other major ethnic group in the state. The proportion of young NH children in single-parent family households (40.4%) was 12.7 percentage points higher than the statewide average (27.7%), and more than twice the rate among young Japanese and non-Hispanic White children. Furthermore, 9% of the total 0-3 population were identified in need of special assistance, the highest identified in the

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nation". [v] ***Unprepared for school success.*** The latest published results of the Hawaiʻi State School Readiness Assessment shows areas of increasing concern for our communities. *Kindergarten teachers in predominantly NH schools report that* <u>more than half</u> *the children entering their classrooms are* **not** *prepared for school success*. Many of those who enter kindergarten not ready to learn will fall further behind their peers, and the achievement gap only widens.[vi]

A key contributing factor is a lack of preschool experience. According to the Annie E. Casey Kids Count Data Center, NH children birth-five are missing out on high-quality education during this vital stage of development. Only 55% of NH three and four-year-olds were enrolled in preschool programs from 2013-2015.[vii] Affordability is a major consideration, but the availability of spaces is also a notable factor. According to the Hawaiʻi Early Learning Needs Assessment (2017) [viii], there was an overall shortage of childcare seats in our state. "**Even at full capacity, our licensed childcare centers and registered family childcare homes could serve only one-quarter of our young keiki. There was an especially critical shortage for infants and toddlers.**" This all points to the overwhelming need to address the disparities faced by NH children by providing families with educational opportunities for their children in the early years.

ii. Gaps or weaknesses will be addressed. Keiki O Ka ʻĀina's (*KOKA*) *Pūpūkāhi i Holomua Project* is a research-based answer to a serious, community-identified problem: **NH children enter kindergarten unprepared for school success.** The Project addresses this gap by providing critical support to young NH children and their families through a team approach that integrates successful, proven programs to provide <u>culture-based family engagement early education that</u> <u>uses a collective Hawaiian framework and model</u>. The **Project Goal: to increase the number of NH children who enter school ready to learn and to amplify family engagement in children's education for success.** ██████████████████████

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Numbers the project serves: In three years, the Project will serve ████████████████████.

Table 1: Project _Pūpūkāhi i Holomua_ – Eight Core Services to Address the Gap
Ages 3-5 Home Instruction for Parents of Preschool Youngsters ████████████████ ██████   HIPPY is a research-based home visiting program for 2-5 years working with parent(s) as their child's first teacher. Research-based materials, curriculum, and books are designed to strengthen children's cognitive skills, early literacy skills, social/emotional and physical development. KOKA has been awarded the highest Stellar Status. Race is a major focus of both HIPPY and PAT.
Ages 0-5 Parents As Teachers (PAT) - ██████████████████████. PAT is a research-based program for families of infants and toddlers based on early literacy and brain development. The Journal of Primary Prevention added to evidence that PAT leads to both school readiness and academic achievement. KOKA has received the Lite Losos Award for Excellence.
Ages 2.5 - 5 Kulia I Ka Nuʻu - ██████████████████. Kūlia I Ka Nuʻu is a Hawaiian language Montessori preschool curriculum developed through NHEP funding to prepare parents to give children a jump-start on school success. Integrating Hawaiian culture and language, the program empowers parents as teachers in literacy, math, social studies, and science. KOKA has implemented Kūlia for over 15 years.
Ages 0-5 Parent Participation Preschool (PPP)- █████████████████████. PPP provides engagement and culture-based education for parents/children as they learn together through exploration and lessons in a Preschool setting. It provides opportunities for parents/caregivers to interact in activities focused on core kindergarten readiness skills-building in an environment that provides learning experiences in all developmental domains. This program helps parents getting ready to send their children to kindergarten.
Ages 0-5 Center-based Dual Language Preschool Programs - ████████████████████████. The change to the Kindergarten eligibility age in Hawaiʻi left an estimated 6,500 children annually ineligible to attend kindergarten. There is an urgent need for quality programs for these children. KOKA also provides such a preschool plus an Infant/Toddler Program at Kamehameha Schools Educational Learning Center in Māʻili. Both have waitlists and 97% NH attendance.
Ages 0 -21 Supporting Teen Parents and their Babies — █████████████████████. A cohort of teen mothers will be recruited from all described programs to increase adult interaction to support school readiness in NH children prenatal–5. Home visiting will be provided for these very at-risk young moms.

Ages 0 -17 Supporting Families affected by Incarceration - ███████████████████████████. This program serves NH children with a parent in prison, their caregivers, and the incarcerated parent to provide family strengthening support so that these families may become resilient to their situation. Parenting classes for the incarcerated parent help them with parenting skills as they realize they are their child's first teacher.

Pūpūkāhi i Holomua is translated as **Unite in Order to Progress**. ██████████████

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b. Quality of the project design i. The project is appropriate and will address the target

population: ████████████████████████████████████

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High-quality culture-based education Family Learning Centers: ████████████

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██. In 2014, the DOE

announced a family and community engagement framework to expand opportunities for shared

responsibility with families and the broader community to build the capacity for student

achievement and school improvement. ██████████████████████

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██████████████████████████████████. A recent report from the National Academy of Sciences

states, "at the heart of the effort to promote quality early childhood programs…is a substantial

investment in the education and training of those who work with young children". ████████

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████████████████████████████████████ **_Objective 1_**. Establish and coordinate nine

Family Learning Centers (FLC), two preschools, and one Infant Toddler Center providing a

seamless system of services on Oʻahu, Maui, and Hawaiʻi for NH communities.

The 9 communities are Honolulu, Kalihi, ʻEwa, Kānéʻohe, Kapolei, Wailuku, Kona,

Waimanalo, Pālolo and Māʻili. The Project has 8 Core Services *(detailed in Table 1, pp 5).* All

activities of these early education and family support programs are intentionally planned to provide

children with experiences they need to enter school ready to learn. **_Objective 2_**. Increase the quality

of parent strengths and skills through participation focused on child development, cultural

connectedness, and positive family interaction. Strong theory suggests family involvement and

engagement in their child's education leads to many positive outcomes, including increased school

attendance, increased academic achievement, and increased graduation rates. The U.S. DOE also

recognizes this and recently released its "Family and School Engagement Framework" to support

families, schools, and states in "building capacity for student achievement and school

improvement." [xi] By engaging families early in their child's life, our project sets the stage for

continued family engagement throughout their child's academic career. One of the responsibilities

of the Project's ʻOhana Resource Specialist is to form relationships with the elementary schools in the nine targeted communities to pave a smoother path for families as they transition from preschool to elementary years. ***Objective 3**. Increase the identification, timely referrals, and services for children with special needs.* "Special needs students in the islands, many of whom have mild learning disabilities or behavioral issues, perform abysmally on state tests overall and are well behind their peers on the mainland."[xii]

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███ ***Objective 4.***

Support the unique cultural and educational needs of Hawaiian families by replicating a family engagement culture-based education framework. Culture, language, and social factors are recognized as having a significant impact on learning. Culture is a major, if not the primary factor affecting the development of cognitive style.[xiv] Upon entering schools, students attempt to gather and process incoming information via strategies that have been rewarded previously in similar situations. [xv] If their culturally determined processing procedures are incompatible with the required cognitive style of the task, dysfunction can result. Given that culturally different students

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are most often taught information in a Euro-American context and presentational style that is frequently opposed to the preferred manner of learning,[xvi] it is of no surprise that minority culture students, in this case, NH children, commonly fail to learn. ███████████████████

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ii. The extent to which the project demonstrates a rationale. ████████████████

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████████████████████████████ There is a clear need for a Family Engagement Culture-Based Education Family Engagement (FE/CBE) framework and evidence-based programs. ██

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███ ██ **Evaluation findings:** Longitudinal studies of early education programs for children living in poverty show early education makes a difference. Long-term benefits carry into adulthood and include reduced rates of special education classification, grade retention, welfare dependence, participation in criminal activity, and increased rates of high school graduation. ██ ███████████████████████

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Validation of credibility *KOKA is recognized as a leader in NH education.* In 2006, the HIDOE, the Office of Hawaiian Affairs, and the Kamehameha Schools launched the Na Lau Lama Initiative, a statewide collaboration to improve the educational outcomes of NH learners. DOE teachers and administrators were encouraged to learn about and apply successful and promising practices from 4 named sources in the State. KOKA was one of these 4 named sources, described as an organization that "*develops and implements Hawaiian culture in its community site-based programs and specialized services for parents and preschool children ages 0-5.*" This recognition

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Pūpūkāhi i Holomua Project Logic Model		
Inputs	**Activities**	**Outcomes**
███████	███████ ███████	███████ ███████ ███████
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███████ ████	*service delivery*	███ *t*

is an indication of KOKA's ability to yield findings that may be utilized by other agencies.

Accreditation. ███████████████

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This Project addresses all 4 areas of the Absolute Priority: ████████████████

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(Priority d) We have three measures to ensure its presence: ████████

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Competitive Priority 1: STEM with a Focus on Computer Science-Young children are characterized by genuine curiosity and desire for learning. To master new knowledge about the world, they need hands-on experiences. By building on their natural inclination to design and construct things, and to take things apart to see how they work, it is possible to introduce powerful concepts and skills in computer science, engineering, and robotics. Instead of teaching children about specific programming languages and hardware, schools must prepare children to think with creativity, complexity, and logic. The key to building a computer science-literate society is teaching our children computational thinking skills, starting in early childhood. The K-12 Computer Science Framework in consultation with the Computational Thinking Task Force of the Computer Science Teachers Association describes computational thinking as the thought processes involved in solving problems, specifically problems that can be expressed as steps or algorithms that can be carried out by a computer.[xxiii] *Computational thinking is understood to be a combination of four skill categories:* **1- Pattern recognition 2- Algorithms** (a set of steps that solve a problem) **3- Decomposition** (an analytical process that involves

breaking something down into smaller parts) **4-Abstraction** (something that exists only as an idea). Young children must be ready for computational thinking and other STEM skills, and our project provides the foundations for 3 of these skills through hands-on experiences in our PPP, Preschools, HIPPY and *Kulia I Ka Nu`u.* (Children need to be older before moving to abstractions)

Competitive Preference 2: Flexible and Affordable Paths to Knowledge and Skills-KOKA has been a leader in recruiting, training and hiring from the community that we serve. █████

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c. Quality of project services i. Strategies ensure equal access for participants. The *KOKA* mission is to educate children, strengthen families, enrich communities, and perpetuate culture by offering a wide variety of services that support increased well-being of NHs. This Project, conducted with a preference for NH children, their parents, and preschool educators, serves participants regardless of race, color, national origin, gender, age or disability. KOKA Family Learning Centers eliminates all barriers to service access. We operate in community schools, churches, and centers so our sites meet or exceed all ADA requirements and are reflective of the diversity of our communities. No one is refused access to programs due to disabilities. All of our programs are inclusive and we run an infant/toddler center for children with special needs. We can make individual accommodations

for special needs due to the flexibility of the various curricula we use and instructional strategies employed. The proposed project has been developed and will be implemented in partnership with DOE schools and we will work with at-risk and special needs children. Special training is offered to staff that highlights the needs students with disabilities may have. They are already well trained in individualizing instruction to meet individual learner needs. Additionally, *KOKA*, targeted school districts, and partner organizations all have anti-discrimination policies. The attached GEPA statement describes specific practices and policies that *KOKA* follows to ensure equal access to opportunities, employment, and participation to members of all groups. █████

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ii. Services provide up-to-date knowledge and effective practice. The Project has established a specified goal and objectives, which are aligned to theory and research on Hawaiian children and families. *Pūpūkāhi i Holomua* is part of a comprehensive effort in the Hawaiian community to improve teaching and learning. It supports academic standards, encourages parental involvement, is supported by strong theory, and is in alignment with the purposes of the NHEP. ***Early Childhood Education Theory:*** The Project is based upon the educational theory of Constructivism. Learning based on constructivist principles will allow learners (in this case children and their parents) to acquire knowledge rather than force them to function as recipients of instruction. Such approaches are regarded by many educational leaders as a suitable theoretical framework for the early learning environment of the future.[xxiv] Longitudinal studies of early education programs for children living in poverty show early education matters.[xxv] Long-term benefits carry into adulthood and include reduced rates of special education classification, grade retention, welfare dependence, decreased

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participation in criminal activity, and increased rates of high school graduation, and more than double the odds of enrollment in four-year colleges. [xxvi] "Children attending high-quality preschool enter kindergarten with better pre-reading skills and stronger basic math skills than those who do not," says NIEER Director W. Steven Barnett, PhD. Leading brain researchers have found that the brain experiences its most rapid growth between the ages of birth to age 5[xxvii], long before the first day of kindergarten. ***Family Engagement Theory:*** Philanthropist like the W.K. Kellogg Foundation has also turned its attention to family engagement, stating, "Until recently early childhood education was neglecting one of the most critical elements for success – family engagement." Dr. Karen L. Mapp, faculty of Harvard Graduate School of Education, and consultant on family engagement to the United States Department of Education, offers the following definition of Family Engagement: Family Engagement is any way that a child's adult caretakers (parents, grandparents, etc.) effectively supports learning and healthy development. Family engagement theory suggests that, "When there is a strong program-family partnership in place, families are engaged, which ultimately benefits the children." [xxviii] In a thorough review of studies on the impact of family, school and community involvement on student achievement, Henderson and Mapp (2002) point out several key findings. [xxix] They have found consistent, positive and convincing evidence that families have a major influence on their children's achievement in school and through life. In their report, they state, *"When we combine these recent studies with earlier research, we see strong and steadily growing evidence that families can improve their children's academic performance in school. Families also have a major impact on other key outcomes, such as attendance and behavior that affect achievement. Children at risk of failure or poor performance can profit from the extra support that engaged families and communities provide."* KOKA has always sought to deliver programs with the greatest impact and

use methods that are based on the latest research on best practices. The findings on the impact of family engagement have confirmed the organization's direction in this Project. Dr. Mapp has highlighted the following impacts of family engagement: Faster literacy acquisition, earning higher grades and test scores, enroll in higher-level programs, promoted more and earn more credits, adapt better to school and attend more regularly, have better social skills and behavior, graduate and go on to higher education.

This Project is dedicated to █████████████████████████████
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suggests that culturally responsive educational strategies help students to feel engaged and connected to what they are learning.[xxx] In a recent Kamehameha Schools article entitled, "Culture-based Education and Its Relationship to Student Outcomes", the authors point out several theories, such as Culturally Relevant/ Responsive Education.[xxxi] According to Grace and Serna (2013), "A growing body of research has found links between the use of culture-based strategies in the education of NHs and positive student outcomes that include motivation to learn, engagement, empowerment, self-concept, and socio-emotional well-being. These outcomes, in turn, positively affect achievement."[xxxii] Kanaʻiaupuni and Ledward (2013) wrote "Cultural Relevance is critical to educational success for many reasons. It is, in a sense, <u>the cognitive glue that makes learning stick</u>".[xxxiii] To quote Dr. Jessica Ball from her research in Indigenous young children's language development: "A particularly effective investment in this area consists of supports for parents and other caregivers to engage in responsive language-mediated interactions with infants and young children at home". The Project recognizes the value of cultural relevance in program delivery for NH: "…young children of indigenous backgrounds benefit from and indeed, are entitled to early childhood education programs that treat cultures as *a framework* verses ingredient. …cultural values and knowledge need to drive how early childhood education is delivered.[xxxiv]

Fostering Resilience: Research has shown that the risk for adverse behaviors and school failure increases as the number of risk factors like trauma increases (e.g., perinatal stress, growing up in chronic poverty, parental alcoholism). Werner and Smith's well-known study on resiliency found several protective factors among high-risk individuals who grew into successful adults[xxxv]. These

protective factors included an emotionally supportive family member and educational stimulation during early childhood; feelings of security as part of a family during adolescence; and caring adults outside of the family. Werner and Smith speak of the "extraordinary importance of the early childhood years in laying the foundation for resilience." They note the importance of a parent or caregiver's sensitivity and responsiveness to an infant's needs – which lead to a foundation of trust. Our project provides quality, evidence-based early childhood education programs within a family engagement culture-based framework and model. It nurtures the relationship between caregiver and child, provides the educational stimulation that young children need, and supports family members so that they, in turn, can support their children and be the person to introduce family strengthening through cultural practices to the rest of the family.

iii. The impact services on the intended recipients of those services. As detailed in criteria b. (2)(ii), project rationale, herein, *KOKA* has made a tremendous impact not only on the recipients of its project services, but also the NH community as a whole, organizations, the state of Hawaiʻi and beyond.

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d. Quality of project personnel i. The extent to which the applicant encourages applications from diverse persons. [REDACTED]

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ii. Qualifications of key project personnel. ███████████████

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e. Quality of management plan i. The adequacy of the plan to achieve project objectives.

For over 25 years we have successfully served the needs of NH throughout Hawaiʻi. ████████

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████████████████████ The Project will use its Logic Model (pp.10) and the Timeline (below)

to monitor the Project in meeting its stated objectives.

Objective 1: Establish and coordinate nine Family Learning Centers (FLC), two preschools, one with an Infant Toddler Center to provide a seamless system of services on 3 islands (O'ahu, Maui, and Hawai'i) for NH communities in Hawai'i. Competitive Preference Priorities 1,2,3,4			
Actions	Criteria for Evaluating Results Measure	Primary **bolded**	Timeline
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████████████	████████████████	████	████
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████████████	████████████████	████	████

Obj. 2: To increase the quality of parent strengths and skills through participation focused on child development, cultural connectedness, and positive family interaction.

Obj. 3: Increase the identification, timely referrals and services for children with special needs.

Obj. 4: Support the unique cultural and educational needs of Hawaiian families by replicating a family engagement culture-based education framework

ii. Mechanisms for ensuring high-quality products and services: *KOKA* utilizes several mechanisms to ensure the project is on track in meeting its community commitment. It has strong, comprehensive policies that address reporting, communication, and management. ▮

██████   *Reporting.* ███████████████████████████████████

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f. Quality of the project evaluation i. Methods are valid and reliable. *KOKA* is well-positioned to implement and evaluate the effectiveness of activities and services in addressing the needs of social and emotional learning within NH communities through an Outcome Evaluation. ██

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Table 3: Outcome Evaluation			
Objective	**Activity**	**Outcomes**	**Annual Measures**
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[i] http://ohadatabook.com/DB2013 html (Viewed January 15, 2020).

[ii] Ibid.

[iii] Hawaiʻi DOE. (2018a). Smarter Balanced Assessment. Hawaiʻi State Assessment. Retrieved from http://www.hawaiipublicschools.org/TeachingAndLearning/Testing/StateAssessment/Pages/home.aspx

iv U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates (January 15, 2020).

v Early Care and Education in Hawai'i, put forth by the Good Beginning Alliance, 2005

vi Nelson, CA (2000) *From Neurons to Neighborhoods: The Science of Early Childhood Development,* Jack P Shonkoff and Deborah A. Phillips, (Eds.), Washington D.C., National Academy Press.

vii https://datacenter kidscount.org/data/line/8045-children-age-3-to-5-enrolled-in-nursery-school-preschool-or-kindergarten?loc=1&loct=1#2/13/false/1491/asc/4218/15459 (Viewed January 30, 2020).

viii DeBaryshe, B.D., Bird, O., Stern, I., & Zysman, D. (2017). Hawai'i early learning needs assessment. Honolulu: University of Hawai'i Center on the Family.

ix Kamehameha School Research Division: Ka Huakai http://www.ksbe.edu/_assets/spi/pdfs/kh/Ka_Huakai_2014.pdf (Viewed January 16, 2020).

x Kana'iaupuni, S., B. Ledward, and U. Jensen. *Culture-Based Education and Its Relationship to Student Outcomes.* Honolulu: Kamehameha Schools, Research & Evaluation, 2010

xi http://www.ed.gov/blog/2014/04/department-of-education-releases-new-parent-and-community-engagement-framework/

xii *Left Out and Lagging*, December 14, 2010, Honolulu Star Advertiser article

xiii Journal of Health and Social Behavior: *Parental Stress with Special Needs Children*, 2009

xiv Brodzinsky, 1985; Education Letter, 1988; Garcia & Malkin, 1993; Shade & New, 1993

xv Anderson, 1988; Jenkins, 1982; Smith, 1993

xvi Dean, Salend & Taylor, 1993

xvii Culture-Based Education and Its Relationship to Student Outcomes: Kana'iaupuni, S., Ledward, B., and U. Jensen (2010).

xviii Lasting Benefits of Preschool Programs. Office of Ed. Research and Improvement, U.S. DOE; Gornby. (Winter 1995).

xix WINHEC Accreditation Authority (2018). *WINHEC Accreditation Handbook* Retrieved from: http://winhec.org/wp-content/uploads/2016/06/Accreditation

xx Cooper, T. C. (1987). Foreign language study and SAT-verbal scores. *Modern Language Journal, 71*(4), 381-387. from ERIC database.

xxi Ibid.

xxii Hawaii's 2016 STEM Report Card https://www.usinnovation.org/state/pdf_cvd/ASTRA-STEM-on-Hill-Hawaii2016.pdfAccessed June, 2017

xxiii https://k12cs.org/computational-thinking/ (Viewed on January 17, 2020)

xxiv Rüschoff, Bernd, and Andreas Lund. *New Technologies and Language Learning: theoretical considerations and practical solutions*. na, 2003.

xxv High/Scope Perry Preschool Project (Lifetime Effects: The High/Scope Perry Preschool Study Through Age 40 (pp. 194–215), by Lawrence J. Schweinhart, Jeanne Montie, www.cehd.umn.edu/icd/research/cls

xxvi *Benefits of Preschool Programs*. Office of Ed Research and Improvement, U.S.DOE; Gornby 1995

xxvii Nelson, CA (2000) *From Neurons to Neighborhoods: The Science of Early Childhood Development,* Jack P Shonkoff and Deborah A. Phillips, (Eds.), Washington D.C., National Academy Press.

xxviii Halgunseth, L. *Family Engagement, Diverse Families and Early Childhood Education Programs*, Young Children, September 2009

xxix Henderson, A. T. and Mapp, K. L., *A New Wave of Evidence – The Impact of School, Family and Community Connections on Student Achievement*, 2002, Southwest Educational Development Laboratory

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