Expansion Competition Absolute Priority 2 (General) Vanderbilt University S411A220005

Expanding and Scaling the Pyramid Model in Pre-Kindergarten and Kindergarten Classrooms in Districts Across the U.S.

Applicant Name: Vanderbilt University

Project Title: Expanding and Scaling the Pyramid Model in Pre-Kindergarten and Kindergarten

Classrooms to Districts Across the U.S.

Absolute Priorities the Project Addresses:

☑ Absolute Priority 1—Demonstrate a Rationale (Early), Moderate (Mid), Strong (Expansion)

Competitive Preference Priorities the Project Addresses:

☑ Competitive Preference Priority 2-- Addressing the Impact of COVID-19 on Students,

Educators, and

Faculty

Total number of students to be served by the project: 5000 students

Grade level(s) to be served by the project: Pre-K and Kindergarten

Your definition of high-need students: Children with disabilities, children living in poverty, children atrisk for delays or disabilities, children at-risk for being suspended or expelled from school, and children with social-emotional and behavioral concerns related to the impact of COVID-19.

Brief description of proposed project, including project activities: This project is proposing to scale the Pyramid Model for Promoting Social Emotional Competence in Young Children in Pre-Kindergarten (PreK) and Kindergarten (K) classrooms in diverse districts across the country. The Pyramid Model provides tiered practices that teachers implement in their classroom to address the social-emotional and behavioral needs of all children including those with high needs. This project will include a rigorous evaluation of the implementation and impact of the Pyramid Model across eight districts in four states (TN, NC, NE, and CA) with a diverse student sample, using a cluster-randomized trial design that meets What Works Clearinghouse (WWC) standards without reservations. Pre-K and K classrooms will be randomly assigned to participate in the Pyramid Model intervention or a delayed intervention control group. The Pyramid Model intervention will include teacher training and Practice- Based Coaching, delivered by district coaches. Coaches will receive training and ongoing support from research staff to ensure the intervention is implemented with fidelity and to ensure sustainability after the project ends. A key component of this project will be partnering with districts to scale and build the

capacity for sustaining Pyramid Model implementation in PreK and K classrooms beyond their participation in this project. We have developed a plan for working with districts to overcome the barriers to scaling and sustainability. Summary of project objectives and expected outcomes: This project has three overarching goals: (a) develop infrastructure and capacity to remove barriers and support scaling of the Pyramid Model in PreK and K classrooms; (b) work with districts to prepare for, plan, and deliver implementation supports for Pyramid Model implementation in all PreK and K classrooms; and (c) evaluate the impact of implementation of

the Pyramid Model in PreK and K classrooms on children's social-emotional, behavioral, early academic outcomes, and executive function skills in districts across the country and understand how impacts vary by populations and settings. To meet those goals, we will partner with districts across the nation to refine materials related to buy-in, implementation, and sustainability; support districts to identify, train, and support implementation coaches and develop a sustainability plan; and conduct a randomized controlled trial in PreK and K classrooms to assess the efficacy of the intervention as well as measure the cost-effectiveness of implementation. Through this project, we have several expected proximal, short- and long-term outcomes for coaches, teachers, and students. Proximal outcomes include coaches implementing PBC with fidelity and teachers implementing

Pyramid Model practices with fidelity. We expect those proximal outcomes to result in several positive student outcomes related to improved social-emotional competence, decreased challenging behavior, improved academic skills, and improved teacher-child interactions. Finally, we expect our work with districts to result in administrative supports, resources, and processes that ensure sustained use of the Pyramid Model throughout the districts' PreK and K classrooms.

Describe how the proposed project is innovative: With this project we propose to expand the Pyramid Model into Kindergarten, extending the work completed in the 2021-2022 school year as part of the Mid-Phase EIR grant. This project is designed to demonstrate the effectiveness of a classroomwide intervention that can be used across both PreK and K classrooms to promote the social-emotional development of all children and prevent social, emotional, and behavioral delays that interfere with children's learning and development. The model is also aligned across Pre-K and K to ensure a more successful transition for young children into formal schooling. This will be one of the first studies to examine the wide-scale use of a tiered social-emotional intervention model across PreK and Kindergarten. We also intend to demonstrate how the PD model and social-emotional intervention can be scaled, implemented, and sustained in school districts across the country.

Identify other studies and/practice related to the proposed project: The focus of the proposed project is Pyramid Model implementation in PreK and K classrooms. The Pyramid Model and the specific classroom-wide supports and strategies have been implemented in several different districts and early childhood settings and consistently produce positive medium to large impacts on improving student's social-emotional competence, reducing challenging and disruptive behavior, and improving teacher-student relationships – impacts which are associated with improved academic achievement and success (Hemmeter et al., 2021; Hemmeter et al., 2016). Similar positive outcomes have also been reported with two similar interventions that include the use of the promotion and prevention strategies that are embedded in the Pyramid Model (Hamre et al., 2012; Sutherland et al., 2018). Importantly, the proposed project uses a coaching model, Practice-Based Coaching (PBC; Snyder et al., 2022), that leads to sustained and improved teacher practice of a variety of evidence-based practices (e.g.,

Hemmeter et al., 2016; Snyder et al., 2018), and three of the four studies referenced here also used PBC.

Proposed implementation sites: Eight school districts across four states (TN, NE, NC, CA) List all organizations partnering with this project: Vanderbilt University, University of South Florida, SRI International, eight partner school districts across four states (TN, NE, NC, CA)