



***Mathematical Readiness:  
Early Childhood (PK-3) Teaching and Learning Program***

**Innovation Partnership 2023-2024  
*Continuation with Cohort A for Phase 2***

**INFORMATION AND MEMORANDUM OF AGREEMENT (MOA)**

S<sup>2</sup>TEM Centers SC is an innovation partnership managed by South Carolina's Coalition for Mathematics & Science at Clemson University. Its purposes are to improve instruction and accelerate student learning in Science, Technology, Engineering and Mathematics content areas through innovation, support, and research.

**MOA Deadline: 5:00 p.m. SEPTEMBER 8, 2023**

For questions regarding this program or the MOA, please contact **Tracey Campbell @ (843) 274-4087** [tcampbell@s2temsc.org](mailto:tcampbell@s2temsc.org).

The signed Memorandum of Agreement should be submitted to:  
**South Carolina's Coalition for Mathematics & Science at Clemson University via email to Tracey Campbell** [tcampbell@s2temsc.org](mailto:tcampbell@s2temsc.org) .

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## **Part 1**

### **General Overview**

#### **Renewal of Partnership for Cohort A, Phase 2**

This memorandum of agreement (MOA) contains information that serves as an invitation from S<sup>2</sup>TEM Centers SC and South Carolina’s Coalition for Mathematics and Science (SCCMS) for schools and districts to participate in the *Mathematical Readiness: Early Childhood (PK-3) Teaching and Learning Program* during the 2023-2024 school year. S<sup>2</sup>TEM Centers SC and SCCMS is inviting teachers who participated as part of Cohort A in 2022-2023 to continue the partnership in 2023-2024 as Phase 2 participants.

An MOA signature page must be submitted to South Carolina’s Coalition for Mathematics & Science at Clemson University **via email to Tracey Campbell** [tcampbell@s2temsc.org](mailto:tcampbell@s2temsc.org) .

*NOTE: This program is supported by state-appropriated funds. In the event that sufficient funds are not available, this agreement will be terminated.*

#### **Program Introduction**

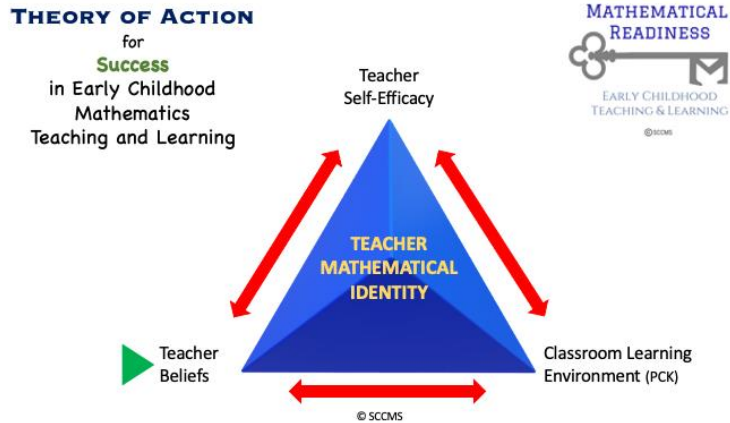
S<sup>2</sup>TEM Centers SC/SCCMS has designed a comprehensive system of scaffolded support for early childhood teachers to support their understanding and application of evidence-based instructional strategies in the mathematics classroom to improve student learning. This partnership is intended to be a *three-year innovation program* (now in Phase 2 for 2023-2024 for Cohort A) designed to engage PK-3<sup>rd</sup> grade teachers in ongoing, face-to-face, and virtual professional learning experiences with embedded instructional coaching support to increase their knowledge of and ability to implement evidence-based practices in mathematics instruction. (Read full program overview at [www.s2temsc.org/mathematicalreadiness](http://www.s2temsc.org/mathematicalreadiness) )\*

*\* To reduce the length of this document for Phase 2 partners, the full overview of the Mathematical Readiness Project is now available electronically on our [S<sup>2</sup>TEM Centers SC website](http://www.s2temsc.org) for reference as needed. The online overview includes the purpose, initial eligibility and references which remain consistent from the prior year of implementation (2022-2023) MOA documentation.*

#### **Program Model**

Research recommends that professional development in early childhood education include learning experiences that are long-term and sustained, connected to classroom practice, and customized to teachers’ needs (Sarama et al., 2018; Sheridan et al, 2019). In addition, it is beneficial for early childhood mathematics educators to experience instructional coaching and structured professional learning communities (Sarama et al., 2018).

The *Mathematical Readiness: Early Childhood (PK-3 Teaching & Learning* Program is intended to be a 3-year professional development program employing six complementary teacher actions of the Professional Teaching and Learning Cycle (Study, Select, Plan, Implement, Analyze, and Adjust). See



[https://sedl.org/txcc/resources/working\\_systemically/ptlc-intro.pdf](https://sedl.org/txcc/resources/working_systemically/ptlc-intro.pdf)

Components of the model for Phase Two include (*dates subject to change*):

- Statewide professional learning experiences (4 full days, tentative Location – Columbia, SC)
  - Fall - two back-to-back days in late Sept. or early Oct. 2023
  - Spring - two back-to-back days in late Jan. or early Feb. 2024
- Instructional coaching by S<sup>2</sup>TEM Centers SC Specialist
  - On-Site Coaching (once/month)
  - Virtual Coaching (once/month)
  - Focused on follow up implementation of professional learning topics
- Online teacher community of practice to share strategies, techniques, and lessons learned and to gain access to additional resources (on-going)
- School Administrator Support
  - Quarterly meetings with the S<sup>2</sup>TEM Centers SC Specialist (required)
  - Observes participating teachers once/semester (with S<sup>2</sup>TEM Centers SC Specialist)
  - Participates in professional learning opportunity (virtually, once per semester) to share information about supporting teacher participants and early childhood mathematics instruction.

A S<sup>2</sup>TEM Centers SC Specialist will work directly with the PK-3<sup>rd</sup> grade teachers to model, observe, assist and provide feedback in understanding and applying evidence-based mathematics instructional strategies in the classroom through facilitated professional development, classroom observations and coaching conversations. The S<sup>2</sup>TEM Centers SC Specialist and participating teachers will collaboratively analyze data from lessons to make informed instructional decisions to accelerate student learning.

*School administrator support is vital* for the success of the program; therefore, the principal of each participating school is expected to participate in specific program components (as noted

above). In addition, school administrators should provide support in planning, observing, reflecting, and attaining resources, as needed, to ensure teacher success in the program.

*District leader support is imperative* for ensuring success of school participation. If there are multiple schools from a district, the district-level leader will be a point of contact for program support and communication with school administrators, teachers, and S<sup>2</sup>TEM Centers SC staff.

### **Program Outcomes**

The *Mathematical Readiness: Early Childhood (PK-3) Teaching and Learning* Program has identified the following outcomes:

- 1) Strong foundational teacher mathematical identity
- 2) Positive teacher mathematical beliefs and perceptions
- 3) Engaged mathematics classroom learning environment, which includes:
  - Teacher knowledge and use of evidence-based mathematics instructional strategies
  - Teacher mathematical content knowledge
- 4) Confident teacher mathematical self-efficacy

*NOTE:* By focusing on these specific outcomes with teachers, according to research, additional outcomes should include: an increase in student learning and achievement in math, an increase in student self-efficacy and beliefs about math; and the development of students' positive mathematical identities. Students will achieve their developmentally appropriate level of the [South Carolina Portrait of a College- and Career- Ready Mathematics Student](#) (SCDOE, 2015, p.10).

*By the end of Phase Two:*

- 1) 90% of participating teachers will demonstrate improved instructional practice
- 2) positive change in teacher beliefs and perceptions about mathematics
- 3) develop sense of collegiality among teachers and build a learning community,

### **Data Collection**

S<sup>2</sup>TEM Centers SC Specialists will collect teacher mathematics practices data using a classroom observation protocol. Together, the specialist and teachers will review the data and cite specific evidence of teacher and/or student behavior during the lesson to determine the effectiveness of teacher use of evidence-based instructional strategies.

Teacher beliefs towards mathematics, in general, and the use of evidence-based mathematical strategies in their classrooms will be measured using pre- and post-surveys. Coaching conversations with the teachers will reveal changes in teacher thinking and behavior as they become more adept in selecting, aligning, and implementing evidence-based mathematics instructional strategies to effectively support student learning.

As part of coaching, evidence of student learning increases in mathematics will be primarily quantitative. S<sup>2</sup>TEM Centers SC Specialists and teachers will review and analyze available classroom data to determine specific learning needs of students and make instructional decisions in implementing evidence-based mathematics instructional strategies to accelerate student learning most effectively.

**Part 2**  
**Data Updates - 2023-2024 School Year – Cohort A, Phase 2**

*All application data from 2022-2023 (Phase 1 for Cohort A) remains on file with SCCMS and will be referenced as needed. A new annual MOA will be required from each school and will include signatures from teacher participants, school principal and a district representative.*

*If any of the following information has changed, please communicate updated information via email to Tracey Campbell [tcampbell@s2temsc.org](mailto:tcampbell@s2temsc.org) when sending the MOA.*

**DISTRICT CONTACT INFORMATION**

- District Name & Address
- District Contact (individual name, position/job title, email, phone)
- District Superintendent (individual name, email, phone)

**SCHOOL CONTACT INFORMATION**

- School Name, Address & Grades Served
- Principal (individual name, email, phone)
- Title I designation (yes/no?)

**PARTICIPATING TEACHER INFORMATION**

- Teacher Info (name, email & phone)
- School:
- Current Teaching Assignment (PK, K, 1, 2, 3):
- Teaching Setting (In-person, Virtual, Hybrid):

*The following information will be requested from participants upon receipt of the 2023-2024 MOA or will be collected by SCCMS via the fall 2023 release of the SC School Report Card.*

**SCHOOL DATA:**

**Total student enrollment (2023-2024):**

**Grade Level Enrollment**

Indicate the number of students enrolled for 2022-2023 in each grade level for PK–3:

PK	K	1	2	3
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**Student Demographics**

Indicate the percentage of total school student enrollment for 2022-2023 represented by each descriptor:

African American: --%	English Learners (Els): --%
American Indian: --%	Disabled: --%
Asian Pacific Islander: --%	Economically Disadvantaged: --%
Caucasian: --%	
Hispanic: -- %	

**Part 3**  
**Memorandum of Agreement - 2023-2024 School Year – Cohort A, Phase 2**

**SCCMS reserves the right to terminate this partnership if it is determined that the teacher(s), school and/or district are not in compliance with the terms identified in the Memorandum of Agreement.**

**I. Financial Obligations**

*a. S<sup>2</sup>TEM Centers SC/SCCMS Financial Obligations\**

- i. S<sup>2</sup>TEM Centers SC/SCCMS will provide support for overnight travel expenses (including lodging and meals during sessions) associated with the participation of the teachers in four (4) days of professional development. Days will be scheduled as two (2) multiday sessions with two (2) back-to-back days in the Fall (Sept. or Oct.) of 2023 and two (2) back-to-back days in early (Jan. or Feb.) 2024, exact dates TBD by 9/15/23, expected location: Columbia, SC
- ii. S<sup>2</sup>TEM Centers SC/SCCMS will provide support to the *S<sup>2</sup>TEM Centers SC Specialist* for all travel and training materials expenses associated with statewide training and on-site support.

*\* S<sup>2</sup>TEM Centers SC/SCCMS financial contributions estimated @ \$5,000 per participant.*

*b. District and/or School Financial Obligations*

- i. The district and/or school will support teacher release time for whole group learning and any other release time mutually determined to be necessary during the school year.
- ii. The district and/or school will provide funding for teacher substitutes for four (4) days of professional learning sessions.
- iii. The district and/or school will provide support for necessary travel expenses (mileage and meals not provided) associated with the participation of the teachers and school/district administrators for four (4) days of professional development. (Expected location: Columbia, SC)
- iv. The district and/or school will provide any instructional materials mutually determined to be necessary.

**II. Roles and Responsibilities**

*a. S<sup>2</sup>TEM Centers SC Specialist Roles and Responsibilities*

- Develops effective strategies for evidence-based mathematics instruction.
- Delivers on-site professional development as an instructional coach for participating teachers in partnering schools once per month per seven (7) months.
- Provides virtual support to participating teachers once per month for seven (7) months.

- Develops and implements four (4) days (split into two two-day sessions) of statewide professional learning sessions for participating teachers.
  - Observes and records data of participating teachers/students during mathematics classroom lessons.
  - Meets quarterly with school administrator (and district leader, as applicable).
- b. Participating Teacher(s) Roles and Responsibilities*
- Engages in Professional Teaching and Learning Cycle actions (Study, Select, Plan, Implement, Analyze and Adjust) focused on implementing evidence-based mathematics instructional strategies.
  - Participates in four (4) days of statewide professional learning. Participating teachers may earn *up to 20* professional development hours.
  - Participates in instructional coaching conversations with the S<sup>2</sup>TEM Centers SC Specialist once per month for seven (7) months in person and once per month for seven (7) months virtually.
  - Shares strategies, resources, and instructional materials in a virtual, asynchronous learning community.
  - If invited, serves as a mentor to new program participants in Cohort B.
- c. School Administrator Roles and Responsibilities*
- Observes and reviews participating teachers' performance in the use of evidence-based mathematics instructional strategies not less than once per semester with the S<sup>2</sup>TEM Centers SC Specialist.
  - Provides computer and internet access to be used by the participating teachers for access to the online learning community.
  - Provides the participating teachers with adequate opportunities during the school day for coaching support with the S<sup>2</sup>TEM Centers SC Specialist.
  - Participates in quarterly school team meetings with S<sup>2</sup>TEM Centers SC Specialist.
  - Ensures that documentation of permission to take digital videos and still images of students, teachers, principals, and district instructional leaders are current and up to date for use by S<sup>2</sup>TEM Centers SC/SCCMS as deemed necessary. Informs S<sup>2</sup>TEM Centers SC Staff of any changes regarding the permission documentation.
  - Provides access to data necessary to assess the effectiveness of the program.
- d. District Leadership Roles and Responsibilities*
- All Districts:
    - Ensures participating teachers attend required professional learning sessions.
    - Ensures that school leaders provide support to participating teachers with regards to responsibilities noted above.
    - Provides access to data necessary to assess the effectiveness of the program.
  - Additionally, District Applicants – must assign a district leader who:



- Participates in quarterly team meetings with school principal and S<sup>2</sup>TEM Centers SC Specialist; and
  - Collaborates with participating schools and the S<sup>2</sup>TEM Centers SC Specialist to support on-site coaching sessions.
- e. *S<sup>2</sup>TEM Centers SC/SCCMS Roles and Responsibilities*
- Provides timely and accurate information to the participating teachers, school, and district.
  - Monitors and assesses the effective engagement of the S<sup>2</sup>TEM Centers SC Specialist.
  - Provides the training, leadership, and coordination needed for the S<sup>2</sup>TEM Centers SC Specialist to develop the instructional capacity of the participating teachers.
  - Monitors data and reports to the participating teachers, school, and district on the effectiveness of the program.

### **III. Termination of the Agreement**

- a. *Funding Unavailable* - This program is supported by state-appropriated funds. In the event that sufficient funds are not available, this agreement will be terminated.
- b. *Termination by the School or District* – The school or district may terminate this agreement if the participating teacher(s) are reassigned to another school, subject area or grade level or are otherwise employed. The school or district may also terminate this agreement if SCCMS or the S<sup>2</sup>TEM Centers SC Specialist does not fulfill the roles and responsibilities designated in this agreement.
- c. *Termination by SCCMS* - SCCMS may terminate this agreement if the participating teacher(s) school and/or district are not in compliance with the terms identified in this Memorandum of Agreement.
- d. *Notice of termination* shall become effective on the date specified on the notice letter.

### **IV. Amendments**

This agreement constitutes the whole agreement between the parties, and no prior representatives, negotiation, or agreements by any party shall affect the construction and operation of this agreement. This agreement may be amended only by a written instrument signed by all parties.

**NOTE: This program is supported by state-appropriated funds. In the event that sufficient funds are not available, this agreement will be terminated.**

**Part 4**  
**Signature Page - Data Collection - 2023-2024 School Year – Cohort A, Phase 2**

**AFFIRMATION OF MEMORANDUM OF AGREEMENT**

*I hereby affirm that all my statements in this application are true and accurate. Additionally, I have read and will comply with the terms of this agreement.*

Signatures and Dates needed from:

District Instructional Leader \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_

School Principal \_\_\_\_\_ Date: \_\_\_\_\_

SCCMS Signature \_\_\_\_\_ Date: \_\_\_\_\_

List of Participating Teachers:

_____	_____
_____	_____
_____	_____
_____	_____

**Submit the completed MOA Signature page by 5:00 p.m. FRIDAY, September 8, 2023, to South Carolina’s Coalition for Mathematics & Science via [S<sup>2</sup>TEM Centers SC](#) Website.**

**Note: If applying as a district on behalf of multiple schools, each school requires a separate MOA page.**

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