

AMSTI ACLD PLUs 2021-2022

AMSTI PLU # 14: Visible learning for math and science: A look at high impact strategies (Standard 1 Planning for Continuous Improvement) PLUACLD795—Expires 9/10/22

Description/Abstract: The purpose of this professional study is to equip participants who have administrative certification with a deeper understanding of the research of John Hattie's visible learning for math and science. Participants will learn the following so they can apply the principles of this learning to their work with schools/districts:

1. John Hattie's learning influences and effect size
2. Which effect size strategies have the greatest impact upon student achievement in the areas of math and science
3. Information about the learning cycle and how learning strategies have different effect sizes depending upon when implemented in the learning cycle (surface to deep to transfer learning)
4. Compare and contrast the types of learning strategies with the greatest impact in math and science classrooms to determine if there are any strategies that lend themselves to both content disciplines
5. Observe and collect evidence to analyze the impact of high effect size instructional strategies in math and science classrooms
6. Create a post plan of action to share the most effective math and science learning strategies with others in the school/district

Requirements for this study will include:

a minimum of five, three hour, face to face sessions with a group of peers to include a minimum of two sessions incorporating classroom visits into the session, professional reading, journal entries, and the creation of a post plan of action to share the math and science strategies with others in the school/district.

AMSTI PLU #15: Educator Effectiveness: A leader's impact on teachers, students, and content (Standard 2 Teaching and Learning) PLUACLD796—Expires 9/10/22

Description/Abstract: The purpose of this professional study is to provide an opportunity for instructional leaders to increase/improve knowledge and/or skills in four specific areas: to collect specific, non-judgmental student data during classroom observations; to use specific, non-judgmental student data to determine if content and instruction are aligned with Alabama's standards; to use specific, non-judgmental student data to facilitate dialogue with teachers and/or other stakeholders that results in improved collaboration and instructional practices per the district's Educator Effectiveness plan; and to use specific, non-judgmental teacher data to adjust leadership practices so that classroom instruction results in improved student learning.

Requirements for this study will include: a minimum of five, three hour, face to face sessions with a group of peers (Professional Learning Team), professional reading, journaling, at least one classroom visit incorporating practice with the district's Educator Effectiveness plan, sharing evidence of applied knowledge and skills throughout the study (actions taken on the job between the face to face sessions), and optional use of video to reflect on facilitating dialogue with teachers and/or other stakeholders.

AMSTI PLU # The Art of Teaching through Instructional Coaching (Standard 2 Teaching and Learning) PLUACLD866---- Expires 10/10/23

Description/Abstract: The purpose of this professional study is to provide an opportunity for instructional leaders to increase their knowledge of best instructional strategies focused on student learning outcomes. Teacher actions have an impact on student learning. To best impact student learning, instructional leaders and teachers need to have knowledge of specific teacher actions that will result in students having a clear knowledge of their learning progressions.

This study will center on the New Art and Science of Teaching by Marzano and take an in-depth look at three major overarching categories of teacher actions based on feedback, content, and context. Within these three overarching categories are ten mental states and questions that teachers can ask to best impact student outcomes. These ten mental states have a general framework of 43 instructional elements and associated strategies that assist teachers in maximizing student learning outcomes. This professional learning study will examine 17 of these instructional elements and the accompanying instructional strategies associated with each element.

A second major focus of this professional learning involves leaders learning how to utilize instructional coaching to implement these best instructional practices. Leaders will learn about a student centered coaching approach that focuses on student learning to determine next instructional steps. The next instructional steps involve a coach working with a teacher to practice or implement some of the instructional elements as presented by Marzano.

AMSTI PLU # Leading a High Reliability School (Standard 2 Teaching and Learning) PLUACLD915---- Expires 3/17/24

Description/Abstract: The purpose of this professional study is to introduce LEA and school leaders to some of the indicators and processes of the High Reliability School model by Marzano group. The this professional study will provide an overview of all five levels of the High Reliability School model but take a deep focus on the third level which involves a "Guaranteed and Viable Curriculum"

The requirements of this professional study include

1. Participation in a one day overview session led by a Marzano consultant. (Due to limited LEA capacity with the consultant Regional AMSTI Directors may also offer this one day overview session in their regions.)
2. Participation in 3 follow-up sessions to learn more deeply about offering a guaranteed and viable curriculum and to learn about tools that can be utilized to evaluate for high quality instructional materials.
3. Leading a team in their district or school in evaluating high quality instructional materials for mathematics and sharing with other districts or schools how effective the utilization of the tools was in this process.

No prerequisites are required for this study.

AMSTI PLU # Building Collective Efficacy in Your School (Standard 3 Human Resources Development) PLUACLD936---- Expires 4/10/24

Description/Abstract: The purpose of this professional study is to introduce leaders to collective efficacy and to learn strategies to put collective efficacy in place.

The study will utilize the following book as it's primary focus: *Leading Collective Efficacy: Powerful Stories of Achievement and Equity* by Stefani Hite and Jenni Donohoo (2021).

The requirements of this professional study include the following:

1. Participate in four face-to-face learning sessions up to 3-hours in length.
2. Participate in an asynchronous Google classroom to view more in-depth articles and information to support learning
3. Develop a framework of action steps that will put structures in place in the school environment to promote collective efficacy.
4. Examine possible professional learning community opportunities in the school environment to help improve collective efficacy
5. Reflection and journal activities to document learning and growth over the course of the professional study

AMSTI PLU #19 Leading Coaching in Mathematics Education (Standard 1 Planning for Continuous Improvement) PLUACLD914—Expires 6/10/24

Description/Abstract: The purpose of this professional study is to provide leadership guidance and support to building and district administrators who will be working with school based math coaches (or similar terminology for staff who are coaching math educators).

The requirements for this study include the following:

1. Participation in a 2-day administrator training where the administrator and school based coach will be introduced to the roles and responsibilities of the coach, the administrator, and the district. Administrators will also be introduced to ways to support coaches in their school and/or district.
2. Create and meet with a math school improvement team consisting of the building administrator, math coach, and lead teachers to create a vision for mathematics education in the school. The MSIT will support the administrator and coach in moving math instruction forward in the school.
3. Lead and/or help facilitate a math data meeting to analyze trends and to set goals for improving student learning.
4. Conduct classroom visits to gather evidence on the state of mathematics instruction in the school and to use the evidence to plan support of math instruction in the school.
5. Participate in a final meeting at the end of the year with other administrators to reflect and make plans for continuing work for the future.

Prerequisites for this study do not require prior professional learning sessions. However, this study will be limited to administrators at the school and/or district level who have school based math coaches.

AMSTI PLU # 20 Leading in an AMSTI school--Examining the Best Practices for Math and Science Instruction (Standard 2 Teaching and Learning) PLUACLD937---- Expires 6/10/24

Description/Abstract: The purpose of this professional study is to provide learning of AMSTI methodology and processes for administrators at new AMSTI schools or for new administrators at AMSTI schools who have never been through AMSTI administrator training.

This study will include the following learning:

1. Administrators will learn about instructional shifts classroom teachers make after they attend an AMSTI training.
2. Administrators will learn about the operations of an AMSTI materials center to have a better understanding of the logistics of the initiative.
3. Administrators will learn about the latest research that supports best practices in math and science instruction and look for evidence of these practices in their schools.

Requirements of this professional study will include the following:

1. Attend two days of an AMSTI summer institute or its equivalent (i.e. a fall new hire/compressed training) of which time will be spent with AMSTI leadership visiting training classrooms and looking for evidence of instructional shifts.
2. Attend one half day (3 hours) at an AMSTI materials center.
3. Attend one half day at an AMSTI math school focusing on best practices in mathematics instruction.
4. Attend one half day at an AMSTI science school focusing on best practices in science instruction.
5. Complete a final reflection on the growth as an administrator in looking for evidence of instructional shifts in math/science.
6. Complete a post-plan of action in which they will continue to collect evidence of instructional shifts in math/science and to plan to support teacher growth in these practices.

There are no prerequisites for this study.

This professional study will be available to participants in the Alabama Math Science and Technology Initiative in all eleven of Alabama's In-service Center regions.