# UNIVERSITY OF MASSACHUSETTS BOSTON CENTER OF SCIENCE AND MATH IN CONTEXT (COSMIC)

# WIPRO SEF

# YEAR 13

# QUARTERLY REPORT September 2025



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#### **EXECUTIVE SUMMARY**

For over a decade, the Wipro Science Education Fellowship (SEF) has provided funding and support to science teachers and school districts across the country. The program has national reach with sites in California, Florida, Massachusetts, Missouri, New Jersey, New York, and Texas serving almost 750,000 total students (approximately 1.5% of US pre-K – 12 students). The original phases of the program focused on developing a cadre of science teacher leaders who lead from their classrooms. As the second decade of the program begins a new layer of leadership is being added by engaging more purposefully with school formal district leadership (administration). The goal is to enable district transformation through teacher leadership.

Across the country, our different university sites are presently in Year 3 of the four-year Innovation Phase of Wipro SEF. At some sites, there are individual projects, school projects and cross district projects. At other sites, there have been new cohorts of Fellows working on the classic Wipro SEF program while, in others, science teachers are working with math teachers to enhance STEM (science, technology, engineering, math) education.

The program continues to be strong across the country and is facilitating some amazing work by the Fellows and involving many new teachers, thereby expanding the impact of our work.

Keywords: Teacher leadership, collaboration, district transformation, learning communities

#### Introduction

#### **Wipro SEF Program Overview**

The Wipro Science Education Fellowship (SEF) is a four-year STEM district transformation program. Cohorts of K-12 teachers participate in a rolling two-year professional development experience designed to improve individual teacher practice, foster teacher leadership opportunities, and create a district corps of teacher leaders. Professional development for fellows is led by a university in partnership with the local school district. The program was developed at the Center of Science and Mathematics in Context (COSMIC) at UMass Boston and is now in 7 universities and ~35 partner school districts throughout the United States.

#### **Year One: Thinking About Teaching**

### **Monthly Fellows Meetings**

Fellows from approximately five different school districts gather once a month at the host university to engage in professional development in the areas of instruction, reflective practice, adult learning, and leadership.

### Collaborative Coaching and Learning of Science (CCLS) groups

Fellows engage in research-based, structured inquiry into their own teaching and growth. Fellows meet in CCLS teams to share videos of themselves teaching in their classroom as well as sharing student work to learn from each other, to reflect on science content and pedagogy, and to improve their teaching of science. These small professional learning communities determine their own schedules, courses of study, and the lessons they will all be videotaping and observing with support and guidance from their university partner.

#### Year Two: Implementing the Individualized Growth Plan System (GPS)

Each fellow develops and carries out an individualized growth plan that has a clear vision and identifiable benchmarks. The 100-hour plan focuses on ways to improve the teacher's own instruction and leadership and is developed in collaboration with a university advisor, the district science coordinator and the fellow's principal. The yearlong project includes the fellow leading professional development for other teachers in their school district and culminates with a report and presentation of a poster at the end of year conference.

#### A District Corps of Teacher Leaders

Over a rollout of three successive cohorts of fellows, each participating school district will have as many as 12 fellows who have participated in the extensive 2-year Wipro SEF program. These fellows serve as a leadership group for district science and engineering initiatives. This critical mass of teacher leaders sets the stage for district transformation.

#### Phase II and Phase III - Innovation Phase

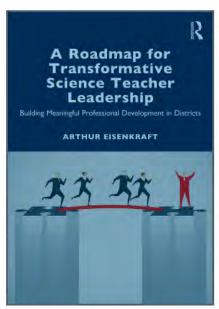
After Fellows complete the two-year "foundation" program, District science coordinators work with their university partners in exploring ways in which to build on the Fellows experiences, projects and leadership skills in order to support district transformation. Through various and varied initiatives, Fellows engage with other teachers in their districts. Simultaneously, administrators are made more aware of the resources that the Wipro SEF program has seeded in their schools and districts. This phase of funding is also intended to encourage district incentives to support future work that will continue after this Wipro external funding concludes.

#### Detailed information about the Wipro SEF program

For those wishing to learn more about the Wipro SEF program, please visit our website, where you will find videos, newsletters and past reports.

#### https://wiprostemprogram.com/

A detailed description and overview of Wipro SEF and an "operations manual" of how to replicate the program in other districts and/or at other universities can be found in our recently published book.



Feb 2025: 220pp 13 B/W illustrations Pb: 978-1-032-79119-7 **\$44.99 \$35.99** Hb: 978-1-032-79120-3 **\$180 \$144** 

For more information visit: www.routledge.com/9781032791197

# A Roadmap for Transformative Science Teacher Leadership

Building Meaningful Professional Development in Districts

#### Arthur Eisenkraft

This book is a comprehensive guide to an effective Science Education Fellowship (SEF) program. Spanning over ten years and involving hundreds of teachers, district science coordinators, and university faculty, the Wipro SEF program has empowered teachers to become leaders who drive meaningful, sustainable change in their schools and districts without leaving the classroom.

Offering an in-depth look at the SEF program's structure, from its foundation in teacher leadership development to its innovative adaptations across seven universities and 35 school districts; the book presents a roadmap for implementing similar programs in other school districts, targeting teacher retention, teacher development, and fostering student growth. Readers will find detailed explanations of key program components, and the vital roles of district science coordinators and higher education institutions. Through a mix of theoretical insights, practical strategies, and testimonials from program participants, the book provides a comprehensive model for educators, administrators, and university leaders who aspire to replicate or adapt the SEF program in their own contexts.

Ideal for both educators and school administrators, this book will allow you to gain valuable insights into building and sustaining a program that empowers teacher leaders, drives district-wide transformation, and ultimately improves student outcomes in science education.

#### HOW TO READ THIS REPORT

This report captures the work of the Wipro SEF program from June 15, 2025 through September 15, 2025. We are in the third year of the Innovation Phase (Phase II/Phase III) of the Wipro SEF where all sites are now moving beyond the Foundation Wipro SEF program (Wipro SEF Classic).

The chart below summarizes the activities of this quarter and the activities that took place in this school year. Each site's report includes an overview of the activities that have taken place this quarter. Use the table of contents to locate a site's report. For a quick look at how the program is influencing individual Fellows please refer to the vignettes in the sections entitled "Featured Fellows." Throughout the report, you will find remarkable stories of Wipro Fellows supporting their students as teachers and supporting other teachers as teacher leaders.

Year	CA	FL	MA	МО	NJ	NY	TX
	University	Universit y of South Florida	University of Massachusetts Boston	University of Missouri	State	Merc y Colleg e	University of North Texas Dallas
2019- 2020	Year 2	Year 2	Phase II & Lead Institution	Year 2	Phase II	Phase II	Year 3
2020- 2021	Year 3	Year 3	Phase II & Lead Institution	Year 3	Phase II	Phase II	Year 4
2021- 2022	Year 4	Year 4	Phase II & Lead Institution	Year 4	Fundi ng ended	Phase II	Phase II
2022- 2023	Phase II		Phase III & Lead Institution	Phase II	Phase III	Phase III	Phase III
2023- 2024				Innovation Phase	Innovation Phase	Innovati on Phase	Innovation Phase
2023- 2024	Innovation Phase	Innovation Phase	Innovation Phase & Lead Institution	Innovation Phase	Innovation Phase	Innovati on Phase	
2024- 2025	Innovation Phase	Innovation Phase	Innovation Phase & Lead Institution	Innovation Phase	Innovation Phase	Innovati on Phase	

Table of Wipro SEF sites

	Cohort 1	Cohort 2	Cohort 3	Past cohorts, teachers new to Wipro SEF, and some administrators
Year 0	Recruitment			
Year 1	Collaborative coaching and learning in Science (CCLS)	Recruitment		
Year 2	Growth Plan System (GPS)	CCLS	Recruitment	
Year 3		GPS	CCLS	
Year 4			GPS	
Innovation Phase (Phase II &III)				Activities proposed by individual sites.

Key to yearly activities

# BY THE NUMBERS

Metrics/Site	MA	CA	FL	MO	NJ	NY	TX
# of Participating	5	5	3	9	4	5	5
Districts							
Total Students in	74,000	97,288	400,013	34900	31486	33,580	83160
Districts							
# of DSCs involved	10	5+3 Wipro	5	13	7	1	11
since the inception		Teacher					
of Wipro SF		Leaders					
# of Teacher	58	96	50	79	13	105	101
Leaders (Fellows)							
# of Teachers		88	25	5	31		numerous
Engaged by Fellows							
# of Projects	68	75	16 Phase	50	17	37	185
·			2, 50 GPS				
			Phase 1				
# of Principals	0	30	12		5	20	25?
"involved"							
# of University	5	2	3	5	3		1
Faculty Involved							
# of Graduate	3	2	1	2	3		
Students Involved							
# of Undergraduate	0	0	0		1		
Students Involved							
# of Publications	19	4	40	10	22	37	50+
Programs/grants	0	2	0		0	1	
Initiated as a Result							
of Wipro							
Involvement							
# of Family or	0	2	10	2	8	9	10
Community Events							
Led by Fellows							
# of Parent or	0		4000	250	214		TBA
Community					families		
Members Engaged							
Teacher Leaders in	90	90 %	70	75%	100%		90-95%
Classroom after 3 +							
years							
Highlights of Wipro							
SEF	1						

Table of Wipro SEF Impact

#### **UPCOMING MEETINGS AND MILESTONES**

Mercy University Site Conference – October 17-18, 2025, Mercy University, NY
Association for Teacher Leadership and Scholarship – October 17-18, Las Vegas, NV
Science Teachers Association of Texas (CAST) – November 13-15, Dallas, TX
National Science Teaching Association (NSTA) – November 13-15, Minneapolis, MN.
National Science Teaching Association (NSTA) – April 16-18, Anaheim, CA

#### **EXECUTIVE SUMMARY FOR EACH SITE**

#### **Executive Summary Statement - CA**

The Wipro Science Education Fellowship (SEF) Innovation Phase at the CA site is positioning itself as a key contributor to district transformation by fostering teacher leadership in science. Central to our mission is addressing persistent inequities in science education, ensuring that all students have access to high-quality, engaging, and equitable science learning experiences. By providing focused professional development, individualized mentoring, and opportunities for cross-site collaboration, the CA site aims to elevate science teaching to meet the high standards of the Next Generation Science Standards (NGSS). This approach empowers teachers to lead district-wide change while transforming instructional practices across multiple levels.

The three components for the CA site include the traditional Wipro Science Education Fellowship Program for teacher leaders, the Wipro School Leaders Program, and individual district team support. For the Wipro SEF Program, professional learning sessions are focused on fostering teacher agency and promoting student-centered practices that align with the Next Generation Science Standards (NGSS) and address district-wide needs. Teachers will also be equipped to provide equitable opportunities in science education for all students, regardless of their cultural and linguistic backgrounds. For the Wipro School Leaders Program, this year's emphasis is on supporting instructional coaches to better understand how to practice leadership and elevate the quality of science instruction in their district contexts. For work with district teams, the CA Leadership Team continues to collaborate with district coordinators to plan ways to leverage the expertise of Wipro fellows in furthering their district science goals.

In this past quarter, the CA site wrapped up Cohort 5 Year One of the traditional Wipro SEF Program and took a break from professional learning sessions during the summer months. The Wipro School Leaders Program also wrapped up its final professional learning session, culminating in certificates of completion.

For the next quarter, the CA Wipro Team will launch the second year of the program for Cohort 5 in late September with a focus on GPS Projects and Teacher Leadership. The CA site will also recruit new participants for the Wipro School Leaders Program to support principals, assistant principals, and instructional coaches to better support science teaching and learning. District Coordinators will regroup with the CA Leadership Team to provide updates about their districts and share what they think their teachers will need in terms of leadership development and GPS goals.

#### **Executive Summary Statement - FL**

The goal of our program is the same, to continue to cultivate leaders in our districts from those individuals with the desire and passion to do more in the classroom. The way we do this is to allow our fellows to focus on innovations that they are passionate about rather than dictating structure and projects to them. The more passionate the fellows are about the projects, the more they will share that fire with others not only in their district but beyond. The passion was ignited in Phase 1 when they were learning leadership skills that could be used to implement projects of their own choosing.

We are in the final year of the projects and thus we either have 2-year projects entering year 2 or new projects that are year-long projects. We have 6 projects that are in their second year. We also started five new one-year projects.

For this past quarter, our main event was on August 16<sup>th</sup>. Though we had planned to be in Pasco, less than 48 hours prior to the event, the air conditioning broke in the building and so rather than be inside in a building without AC in mid-august in Florida, we pivoted to meet in St. Petersburg at the STEM lab. The second-year projects talked about any challenges and opportunities they encountered at the start of the year while the one-year projects discussed how they took feedback from leadership and incorporated it into their work for the year ahead.

Moving forward, our next meeting will be virtual on Monday, September 29<sup>th</sup> from 6 to 8 pm. October and November will be what we call "us to them." As they are meeting with their individual teams to run their projects, one of the leadership team members will go to their meeting and to assist however possible. Finally, Saturday December 6<sup>th</sup> will be an in-person meeting. Our goal is to go back to Pasco and host the event there.

#### **Executive Summary Statement - MA**

The UMass Boston innovation plan includes working with the original five districts as well as beginning Wipro SEF activities with three new districts. The following initiatives are taking place:

Cambridge Public Schools is continuing with V-CCLS teams and H-CCLS teams, led by a Wipro Fellow.

Wipro's Science-Literacy Teacher Leadership, is led by two UMass Boston professors in collaboration with the Massachusetts (MA) State Department of Elementary and Secondary Education. The study aims to identify and develop innovative facilitation scaffolds to support elementary students' sensemaking when engaged in integrated science-engineering learning. This project attempts to create enhanced integrated and equitable science-engineering learning for all elementary students, including dual language learners by helping teachers reconsider the role of disciplinary language and literacy in their students' sensemaking as they engage in the NGSS practices. The teachers represent three school districts.

Dr. Betsy Clifford, the District Science Coordinator from Braintree Public Schools, leads the science department in the following work:

- Continued work on articulating how science content and skills progress and align K-12. (Vertical Collaborative Coaching and Learning in Science: V-CCLS for DCI and SEP)
- Collaboration with peers in the math department about skills for chemistry and physics (Math/Science Collaboration)
- V-CCLS related to the Modeling Pedagogy and specifically student whiteboarding, storyline approach related to phenomena, relevancy and real-world application (V-CCLS for Modeling Pedagogy)
- Send a few teachers to external Professional Development Offerings such as the MAST Conference so they can present their work. (Project dissemination and leadership)

#### **Executive Summary Statement - MO**

The Missouri Wipro project's goal of teaching math and science in a harmonious manner will contribute to transforming the teaching of those subjects in participating districts. We are already seeing collaboration among math and science teachers, development of lessons that borrow from the other subject, discussion about changing the sequences in their curricula, and interest in bringing in other teachers from their grade bands.

Our Wipro project uses a modified version of the initiatives of Phase I. Fellows participate as teams of 2-4 teachers from three grade bands (K-5, 6-9 and 9-12) from a given district, with at least one math and one science teacher in the team. For Cohorts 4 and 5, grade 6-12 teachers were recruited for year 1. K-5 teachers were added only in year 2 for cohort 4. For Cohort 6 K-12 teachers we recruited for both years. In year 1 Fellows collaborate in V-CCLS and H-CCLS teams, anchoring their work in a research article and a math and a science educational practice. In year 2 they focus on creating or modifying four or more lesson plans that integrate math and science content. In both years they make presentations of their work in December and during the end-of-year May conference.

In 2024-25 Cohort 5 worked on their lessons, while Cohort 6 completed on their V-CCLS and H-CCLS work. Both cohorts attended monthly meetings together. They worked together for about half of the meeting, and with their cohort during the other half. During each monthly meeting Physics + math hands-on activities were conducted for both cohorts, which consisted of a 60-75 minute segment where fellows conduct a physics lab and analyze it for the science and math practices used in the lab. MU staff led these activities from August – Nov and Jan-March. In April the Hallsville Cohort 5 team, Kelli Anthes and Bryan Bolton conducted this activity based on the density lessons that they had created as part of their Wipro assignment. The end-of-year conference took place on May 3. 2025. All teams made their presentations.

In August 2026 Cohort 6 fellows began their year 2 work, which consists of creating harmonized math-science lesson plans. Since this is the last year for Phase 2, we have added two new opportunities for current districts' teachers to join the project. The first was to have Cohort 6 teams add one or two non-Wipro teachers (called Associate Fellows) from their districts to help with the process of district transformation. Two teams have added an Associate Fellow each. The second opportunity was to add an Enhancement project and have alumni Cohorts 4 and 5 teams to expand their Wipro work during 2025-26 by working on a group project with non-Wipro teachers. Two teams have responded to this opportunity and will start their work in September. These opportunities will be managed by Marsha Tyson, a Cohort 1 Fellow and newly retired Columbia Public Schools Physics Teacher, who has joined us as a project coordinator.

#### **Executive Summary Statement - NJ**

The Montclair State University site has made progress through the first half of its Phase III project. The program is contributing to district transformation through the Fellows' self-initiated projects, which extend the reach of the Wipro program to new teachers, new districts, new subjects, and new collaborations. The connections that are made through the program would not be possible without the structure that the Wipro SEF program provides.

The current phase of the project has involved 13 Alumni Fellows working on district-related

initiatives and a doctoral student working on publicizing the program. Each of the alumni Fellows has recruited a team of district teachers. Together, these teams are working towards their respective goals as a new cadre of teacher leaders are nurtured.

#### **Executive Summary Statement - NY**

Don't judge each day by the harvest you reap, but by the seeds that you plant.

- Robert Louis Stevenson

Mercy Wipro Reimagined Fellows closed out the school year with dignity and aplomb. They presented at cross-site, local, and national conferences. Cohort 4 began considering ideas for their Mercy STEM conference presentations that will take place this fall. The Mercy Team worked on planning the conference and envisioning what we hope to be the next iteration of our Wipro Fellow work. We were pleased to know that there is a good possibility of another round of the Wipro Science Education Fellowships and are looking forward to leveraging previous work and ongoing partnerships that will support educators in VPLC projects of sustainability.

We continue to plan for our Fall conference. This year for the first time, it will take place across two days, Friday, October 17 and Saturday, October 18. The first day will be dedicated to STEM professional development presenting specialized workshops for educators. Some of the topics on the agenda are teaching fractions using a constructivist approach, integrating ocean literacy into teaching and learning, food justice as climate justice, and the use of AI to craft chatbots, avatars, and digital story worlds. We are anticipating a robust day of learning that will spur the imagination and practice of the attending educators. On the second day, each Wipro Reimagined Cohort 4 team will present their Wipro Reimagined projects. We are pleased to have a Wipro Fellow from Stanford presenting at our conference on the power of art in STEM. Our conference also serves as a vehicle to recruit for our next cohort of Wipro Fellows.

Looking back across the year, it is quite apparent that the continued leadership and tireless work of our Fellows has encouraged district transformation. We are proud of the ways Fellows in Cohort 4 have involved their communities in their projects. Whether it was the STEM Spotlight Newsletter team spreading the word of exciting STEM happenings across the district, or the Arcade Challenge team hosting a school-wide event featuring fourth and fifth grade arcade game engineering designs, or the Learning to Code, Coding to Learn team hosting family nights to engage students and parents in coding, the fact is that they all planted seeds of STEM in their students and communities. As these seeds take root and bud, there is sure to be a continued effort in creating more opportunities for students in STEM. Our teams concluded their Fellowship work with plans for project sustainability beyond their Wipro Fellowship year.

We are looking forward to receiving applications for the fifth cohort of Wipro Reimagined and beginning the process of supporting teachers in their journey towards teacher leadership from the classroom and district transformation. We will also be waiting to learn more about what our next iteration of Wipro SEF may look like so that we can begin customizing it in our setting for our educators.

### **Executive Summary Statement - TX**

The Wipro SEF Innovation Phase at UNT Dallas has successfully completed its third year. This year, I funded school projects, collaborative and individual projects focused on district transformation through teacher leadership. The Texas Education agency introduced new science TEKS (based on the NGSS) to be implemented from Fall 2024. I am happy that several projects addressed these new additions to the science TEKS.

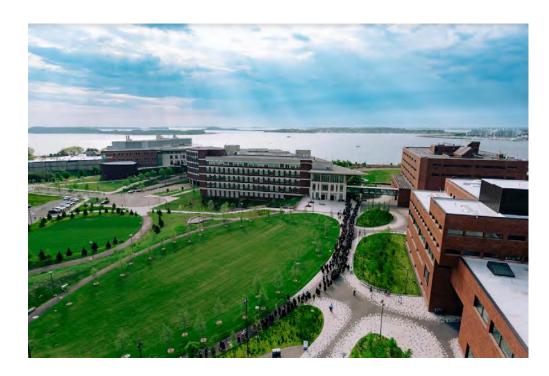
In the innovation phase, Phase 3 Year 3, three types of projects were funded. School projects involved more than 2 fellows working together on a goal that impacted the school/ ISD. Collaborative projects were between Fellows in the same school, ISD or different ISDs collaborating on a project of common interest. Individual projects enabled Fellows to work on projects they were interested in and still be a part of Wipro and impact students. During the Phase 3, year 3 innovation phase, a total of 10 projects were funded, 4 schools, 3 collaborative and 3 individual projects.

There were several highlights. Many of the projects were designed to address a specific item newly added to the science TEKS by the Texas Education Agency, such as the STEM Education Framework, implementing the science & engineering standards. The projects were very responsive and comprehensive and met an obvious need. I was happy that all the projects were completed successfully, and the project websites were done on time as well. We submitted 10 proposals to be presented at CAST 2025 Nov in Dallas and 9 were accepted, Dr. Eisenkraft and Anne Gurnee will attend CAST, which ALWAYS makes me happy. My Fellows and DSCs had successful presentations at Wipro conferences in Missouri, Florida, and California. Our own Wipro Annual Conference went off very well, I was so pleased.

Year 25-26 is Phase 3, year 4 of the innovation Phase. Though I sent out the RFP for year 4 proposals in June, I am still receiving proposals. Like last year, I will be funding school, collaborative, and individual projects.

We have 9 proposals accepted to present at CAST in Nov. All presenters will attend a CAST practice session at UNT Dallas on Sat Sept 27. The Induction and awards ceremony will be held at UNTD on Oct 10th, plaques for the presenters who completed their projects have arrived. Three more sessions are planned for Dec 5th and Jan 16 and Mar 16th. During one of these days, we will have a teacher AI shareathon. Wipro fellows and alums will attend and share how they use AI in their classrooms and learn from each other. The annual Wipro conference and meeting is scheduled for June 20th.

#### UMASS BOSTON LEAD INSTITUTION



#### UMass Boston Lead Institution- Building and Supporting a Network of Wipro SEF sites

#### **Executive Summary Statement**

The UMass Boston innovation plan includes working with the original five districts as well as beginning Wipro SEF activities with three new districts. The following initiatives are taking place:

Cambridge Public Schools is continuing with V-CCLS teams and H-CCLS teams, led by a Wipro Fellow.

Wipro's Science-Literacy Teacher Leadership, is led by two UMass Boston professors in collaboration with the Massachusetts (MA) State Department of Elementary and Secondary Education. The study aims to identify and develop innovative facilitation scaffolds to support elementary students' sensemaking when engaged in integrated science-engineering learning. This project attempts to create enhanced integrated and equitable science-engineering learning for all elementary students, including dual language learners by helping teachers reconsider the role of disciplinary language and literacy in their students' sensemaking as they engage in the NGSS practices. The teachers represent three school districts.

Dr. Betsy Clifford, the District Science Coordinator from Braintree Public Schools, leads the science department in the following work:

- Continued work on articulating how science content and skills progress and align K-12. (Vertical Collaborative Coaching and Learning in Science: V-CCLS for DCI and SEP)
- Collaboration with peers in the math department about skills for chemistry and physics (Math/Science Collaboration)
- V-CCLS related to the Modeling Pedagogy and specifically student whiteboarding, storyline

- approach related to phenomena, relevancy and real-world application (V-CCLS for Modeling Pedagogy)
- Send a few teachers to external Professional Development Offerings such as the MAST Conference so they can present their work. (Project dissemination and leadership)

#### Summary of Current Project(s) and Goals

#### **Cambridge Public Schools**

- This year we have 8 participating educators: 3 middle and 5 high school. Of those, 4 are returning (1 middle, 3 high) and 4 are new (2 middle, 2 high) to the Wipro process.
- Our kickoff meeting will either be September 29th or October 6. In addition, we are starting conversations with administrators about embedding the H-CCLS ideas into department time. The goal is to have two opportunities during the year—one each semester—for all staff to engage in a debrief protocol during the 2025–2026 school year. The aim is to build trust around the video and debrief process to enable greater teacher buy-in with a more robust rollout in 2026–2027. This will also dovetail well with the work the department will be doing with Kentaro Iwasaki and Complex Instruction.

#### **Braintree School District**

This summer provided an opportunity for collaboration and curriculum work by grade level. With each grade level team, I reviewed the general pacing for the year and we updated the curriculum guides for each unit. Our main focus in this work was to make sure our learning objectives matched the standards, included the science and engineering practices explicitly, and are meaningful for students. This was a great opportunity to take a step back and check what we're teaching and focusing on. We then looked at the vocabulary to determine what terms are essential for all students. In 7th and 8th grade and at the high school we included differentiation between the different levels of the course. This work was collaborative and meaningful and is essential in making sure our teaching is grounded in the science disciplinary core ideas, science and engineering practices, and is supporting students to make connections to the world around them.

Here are the workshops that happened this summer:

Date	Course/ Grade	Teachers
6/30/2025	6th Grade	Melanie Chiles, Stephanie Motta, Dianne Robinson, Lisa Fauman, Mary O'Donnell
7/24/2025	8th Grade	Sarah Clark, Jayme Hamann, Sam Ferguson, James Mahoney
7/28/2025	7th Grade	Sarah Clark, Elizabeth Shalhoup, Lea Lewis- Santos, James Mahoney
8/26/2025	5th Grade	Nicole Rivers, Vanessa Singleton, Traci Sullivan,

		Blair Corcoran
8/26/2025	Biology	Jessica Passeggio, Sandra Dziedzic, Peter DiMilla, Ed Fuller, Lauren Saniuk, Cindy Dang, Olivia Mansfield

Later this month I will support two of our Wipro Fellows (Jessica Passeggio and Sandra Dziedzic) to present about performance assessments to the BHS Science Department. We will be launching a PLC focused around moving our assessments to this model where students are applying their content knowledge and skills. This is a shift from the grant proposal but is more timely and follows some summer PD that became available. It will be a good opportunity for some of the teachers in the department and is also an opportunity to support the teacher leadership of Jess and Sandra. We are launching this work with the full department and then Jess and Sandra will facilitate a PLC after school with teachers who opt in.

There continues to be interest in doing the PLC with chemistry, physics, and math teachers. This is still something that I hope to do this year as well.

Lastly, the Science Vertical team will be meeting this fall. I'm hoping that is budget-neutral but may need to cover their substitutes out of the grant.

### **Science-Literacy Teacher Leadership Program**

Detailed description of activities completed (June 2025 and August 2025)

- Between August 2024 and June 2025, we completed one round of action research study for three participating teachers. Following which, in-person all teachers meeting was held in May to organize collected data, decide on analysis plan.
- Between May and June, we worked with teachers individually to analyze data, reflect on work and impacts on teaching and/or learning.
- A final end of the year whole group meeting was held June 21st, 2025, to formally share the results and reGlect on the year-long process. Below we share two outcomes.

<u>Development of facilitation scaffolds:</u> We found that all our teachers, focused on strengthening their facilitation skills, common to all their curriculum units. Comparing across their developed solutions, and their positive student data, we identify their solution as a "facilitation scaffold." A facilitation scaffold is a dynamic facilitation tool that consist of a core tool (e.g. diagram) and aligned facilitation moves for purposeful student engagement in those. A list of each teachers' problem of practice and corresponding scaffold designed is given below.

- Teacher 1(Grade 5, Science)
   <u>Problem</u>: Students need help with writing, expressing their thinking and ideas in science.
   <u>Notetaking Scaffold</u>: This includes regular journaling in science notebooks with aligned facilitation moves as direct modeling, prompting students start with drawings and responding to drawings as to inspire writing, strict but non punitive norms, monthly individual check-ins, and space to self-grade writing, with opportunities for rewrites.
- Teacher 2(Grades 3-5, ELA)
   Problem: How can I provide texts and activities that will facilitate students asking rich

questions? / How can I make a science text exciting?

<u>Activator for Scientific Inquiry through Literacy Scaffold</u>: This includes colorful visuals paired with prompts and routines (such as morphemic analysis of vocabulary) to prepare students to access academic language, inquiry (as asking the why question/ or wonder), and content for the upcoming science text.

Problem: How can I help students move past just recollecting what they did and move further into the *why*? How to promote students adding reasons to their thoughts during design tasks. Reasoning Scaffold: This include sequenced intentional questions, to be leveraged during classroom discussions, when students are engaged in hands-on building tasks. These help advance student explanation to push students to add a reason, and foster a classroom culture in which students feel comfortable engaging in discussion-based inquiry

<u>Building of Teacher learning community:</u> The group although small, provided each other support, feedback and suggestions not only for this project, but even outside regarding other school and teaching matters. The platform fostered a welcoming environment where all teachers felt comfortable sharing their experiences, crucial to creating a science educator community that continues to support each other even beyond the pilot duration.

Based on the results of action research, we submitted two Conference proposals.

- Sensemaking Scaffolds Facilitation tools leveraging disciplinary literacies to support students' scienti9ic sensemaking. (Accepted)Scheduled for November 5, 2025. To be presented with all Wipro teacher fellows.
- Reimagining a practitioner-researcher collaboration model. Leveraging trust; Nurturing relationships; Responding to science classroom needs. (Submitted, under review)

Currently Tej and Pat are working towards curating developed resources into a website for easy access to elementary teachers in the Field.



June 25<sup>th</sup> Final teacher meet. (left-right) Pat Paugh, Jihan Mehideen, Jack McLarnon, Christa Iwnoski, Tej Dalvi, Savvy Demers

#### **Cross Site Collaborations**

**Common Interest Seminars** 

**Book Clubs** 

Wipro SEF Newsletter

Wipro Research Initiative update

Professor Brooke Whitworth, Professor Julian Wenner and colleagues are continuing research regarding teacher leadership and how the Wipro SEF program aligns with current knowledge regarding this field.

An update on research articles:

- One article was accepted at Science Educator and should be published soon.
- The second article was rejected by Learning Professional, reworked and sent to a new journal.
- The third article is being reworked again to hopefully be resubmitted in the fall.

After the success of SCILEADPRO course last year, DSCs were offered the opportunity to enroll in SciLeadPro Leveling Up. Six DSCs are enrolled in SciLeadPro Leveling Up for this year.

- In August, they attended the first half day where they learned about the DiSC model, their DiSC leadership style, and thought about what that meant for how they work with colleagues. They also developed an action plan for working with someone of a different style.
- Between August and September, they read the first two chapters of "Embracing Messy Leadership" and completed asynchronous tasks.
- In September, we learned how we can "read" people's DiSC styles, why that might be important as leaders, how their motivation may be related to their style, and how that all integrates with the MESSY leadership framework.
- For September-October asynchronous work, they are reading chapters 3 & 4.

#### **Partnership with Knowles Teacher Initiative**

Given the overlap of our goals with that of the Knowles Teacher Initiative, five district science coordinators and Arthur Eisenkraft attended the Knowles Annual Conference. We conducted a closed session of our DSCs and Knowles Senior Fellows. We used the session to familiarize those attending with the Wipro SEF and Knowles TI programs. We then brainstormed ways in which we might work together in the future.

As a follow-up to the July conference meeting, it was decided that Wipro DSCs and Fellows would be encouraged to enroll in Knowles online workshops and Knowles Senior Fellows would be encouraged to begin Vertical articulation efforts in their school districts using the Wipro SEF V-CCLS model. The Knowles courses can be found at

https://knowlesteachers.org/professional-learning/knowles-academy/upcoming-courses

#### **Monthly Leadership meetings**

Meetings of representatives from the seven sites in the Wipro SEF program occur monthly to share best practices, plan strategic initiatives, and share progress. The annotated agendas for the August and July meetings are provided here.



Monthly Meeting Agenda Tuesday, August 19, 2025 11 AM – 1 PM (EDT)

Join Zoom Meeting https://umassboston.zoom.us/j/99914434497

Meeting ID: 999 1443 4497

Passcode: 973499

#### Conference updates

- Knowles 2025 Conference July 24, 2025, Philadelphia, PA
   Arthur: Some District Coordinators attended. We had a session where we introduced our
   program to their fellows. We talked about possible collaborations. What came up: Would they
   be interested in vertical coordination in their districts. There are opportunities for our
   fellows to attend their conferences. We can explore it more and see if we can do something
   together.
- National Science Education Leadership Association (NSELA) July 14-15, Salt Lake City, UT Arthur: We didn't send anyone to NSELA.
- American Association of Physics Teachers (AAPT) August 4-6, Washington DC Arthur made a presentation about Wipro program. David was there also presenting.
- Association for Teacher Leadership and Scholarship October 17-18, Las Vegas, NV New initiative. It is international, broad membership. Last year it was the first conference online. Arthur is planning to present there.
- Science Teachers Association of Texas (CAST) November 13-15, Dallas, TX
- National Science Teaching Association (NSTA) November 13-15, Minneapolis, MN. **Arthur:** We should try to figure out if anyone is interested in attending these conferences.

Site conferences and cross site presentations:

• California – June 7, 2025

**Tammy:** We had a great conference. We really enjoy having visitors from different sites. We had various presentations. We didn't try anything new this time, but it went well. We are looking forward to next year. We have some communication with other districts/sites to see if they can sign up for the next cohort but we are not sure about funding. These conferences really help teachers to feel confident.

• Texas – June 13, 2025

**Ratna:** It went really well. We had 20 presentations, and we made an effort to make sure that everyone felt a part of the Wipro community.

• New York - October 17-18, 2025

**Arthur:** I saw an email about the registration.

**Meghan:** We got at least one response from another site. I think maybe we should send another email.

#### Newsletter #4

**Cross-site Collaborations** 

- Climate V-CCLS
  - 3-4 teams did the VCLLS
- Climate book club (DSC) We completed this club.
- AI LLM including Chat gpt (DSC)
- Brooke Whitworth Leadership Institute (DSC)

Future Collaboration with Knowles being explored

#### Books update

• Everybody got their copies.

#### Pins update

**Future Funding** 

We have all been anxious to hear about possible future funding after our grant ends on Aug 31, 2026. (We are presently working on the subcontracts for your sites.)

We had an extension of payment.

I was finally able to have a meeting with Avinash this past Thursday. Avinash has taken over the responsibility for Wipro SEF from Anurag. There is some initial indication that we can get additional funding but certainly not at the levels that we have enjoyed in the past.

As we did in 2021, we will have to come up with initiatives that we think will increase the impact and visibility of Wipro SEF. We all know that we can continue along our present paths. However, we have to view the next grant as including some elements of our present work with novel strategies to expand our work. With our last grant, we anticipated that we could wean districts from Wipro support and have those districts (or new ones) pick up responsibilities and incentives to continue the work. How have we moved forward with this and how can we ensure that this happens if we get

more money? Are there opportunities for sustainability of our past efforts with limited funding?

I think that we should also be thinking about how we can maximize our efforts across sites. For example, can the CA site lead all sites with administration workshops? Can Ratna lead all sites in getting Fellows to present at site meetings? Should we also be looking at synergies between our work and that of other organizations, such as NSELA, NSTA, Knowles, Whitworth's LeadPro courses? Another approach may be that universities receive funds and the universities approach districts with the offer of pd at no cost to the district if the district can generate teacher attendance.

In order to secure another round of funding, we must (once again) convince the Wipro Foundation Board that Wipro SEF has been successful and that more can be done. Toward that end, I propose that each site come up with a set of priorities for how funds could be spent. At our next monthly meeting (Aug 19), we can brainstorm ideas. After that meeting, each site can put together a proposal for funding. This will be due Sep 4. This is not a formal proposal and does not need to go through ORSP. I will compile all of these proposals and present them to the Wipro Foundation. Once we hear back from them with a stronger commitment for funding, we can then start the process of a formal RFP with the usual OSRP approvals.

The format of our proposals will have to include:

- a) our satisfaction with the past/present program;
- b) our excitement regarding leveraging our experiences for more positive outcomes; and
- c) the opportunities that future funding will provide for more positive outcomes.
- d) the proposed projects for new funding

These questions may help frame this:

- a) How the past Wipro funding has led to positive outcomes (university, districts, dsc, fellows, students)? This can include both qualitative descriptions and any quantitative estimates you are able to make.
- b) What are your future goals and outcomes for continued funding? How will we be able to demonstrate positive outcomes?
- c) How has Wipro benefitted from supporting your IHE and districts? Has their brand been enhanced? Any public recognition? Any internal recognition? Articles published?
- d) What are your proposed projects? What will be the impact of these proposed projects? How do they build on past success? How do they lead to sustainability for Wipro SEF?

State Ed: Erin in MA and Possible V-CCLS Susan Germaine

Knowles collaborations?

Other collaborations?

**Arthur:** Everything now that we need to do does not have to be complicated administratively. The question is, what we are currently doing is valuable, but with diminishing funds, is there a better way to do things? What is the impact? Are their qualitative stories? What are we going to do? Are we going to start new initiatives? Do we have contacts from different sites to have a larger impact? Is there a way to use publications to expand our outreach? Maybe we can provide free PD and district would pay for that?

**David:** We can bring some of our phase 1 fellows and make them leaders. One of the trends that we

are seeing is that some of our fellows are taking leadership roles.

**Mika:** I think Monica suggested having some kind of PD. We can somehow create a program that involves administrators from the beginning for greater impact.

**Meera:** We had a long discussion of what really worked well in our program. We came up with the following trends: 1. Bringing math and science together.

2. Impact it has on rural districts. Working on these 2 aspects makes the most sense for us. Rural districts have the most difficulty. We need to see with who we can partner to work on the rural areas. We can bring Wipro fellows to give PD. Online Masters program would be interested in including Wipro work. It would be a way to help. We are trying to bring our Wipro fellows to bring in to be leaders. The'll go out to do presentations. The state will pay for the PD.

We are excited about our new staff. One of the fellows is a former Wipro fellow. She is great and knows what she is doing and well connected with the university and school system.

**Arthur:** It is very similar to what Carmen is done with Mercy University.

**Meghan:** Some of our fellows have been working with the Climate group. A lot of our fellows expressed interest in working on sustainability projects. We are thinking of setting up some V-CCLS groups to work on strands within sustainability and how to bring it in their classrooms.

**Ratna:** We have a lot of ideas. Most of the interest is in language, bi-lingual in STEM.

Tammy: We still have a long list of teachers who want to be in the next cohort. We have many fellows in leadership positions now and they keep bringing more teachers in. I'm feeling a lot of pressure from the districts. We also need to keep with the time on the AI literacy. We can add something about it. What that looks like for teachers and in the classroom. How to make inform choices and how to develop standards around it. I also think about taking Wipro to virtual space. We would be happy to lead it.

**Arthur:** It is difficult here with insufficient grand funding. Another idea that is exciting to me is how we can bring administrators on board. We have an opportunity to grow that.

**Arthur:** If we can have a proposal that could be focused in AI and Climate. How can we bring it together. That could be very exciting for us and Wipro.

**Arthur:** That has been helpful and I'll send email to see if we can generate some ideas. I'll send an email to clarify what I'll need from you.

Other items?



Monthly Meeting Agenda Tuesday, September 16, 2025 11 AM – 1 PM (EDT)

<u>Join Zoom Meeting</u> https://umassboston.zoom.us/j/99914434497

Meeting ID: 999 1443 4497 Passcode: 973499

Conference updates - Wipro attendees? Wipro presentations?

- Association for Teacher Leadership and Scholarship October 17-18, Las Vegas, NV
- Science Teachers Association of Texas (CAST) November 13-15, Dallas, TX
- National Science Teaching Association (NSTA) November 13-15, Minneapolis, MN.
- National Science Teaching Association (NSTA) April 16-18, Anaheim, CA

Site conferences and cross site presentations:

• New York - October 17-18, 2025

#### **Cross-site Collaborations**

- Brooke Whitworth Leadership Institute (DSC) **Arthur:** We have 6-7 people who signed up for 1 year for this institute
- Future Collaboration with Knowles being explored Attendance at their workshops
   Interest in Knowles Fellows participating in V-CCLS

**Arthur:** They run online workshops, and I sent information about these out to you, hopefully you sent it out to your fellows. If some of the fellows participate, it would be great to get their feedback. We can also give workshops there. It could be a good collaboration. Some of our fellows mentioned before that we need to have workshops on how to present. They have nothing in their program on district transformation. We are wondering if they want to set up VCCLS, and our fellows can help them to support this initiative. So, Knowles can start expanding their reach to middle and elementary schools. These steps are easy to implement. I'll remind everyone about their workshops. We need to see if our fellows have any interest in participating.

#### **FUTURE FUNDING**

Thank you for submissions

Your submissions + evaluation report + Wipro guidance

Request to Wipro - Sustainability Phase

- i. Limited funds 2 models
  - 1. Hybrid model
- ii. Changes in programs
  - 1. Intrinsic and extrinsic motivation
  - 2. Respect for teachers and their time
  - 3. How are some Fellows running V-CCLS at reduced costs?
- iii. Focus on AI and Admin PLC

Next steps

**Arthur:** I had to put together a small proposal using Wipro guidance. I started investigating two different models. One model is that everyone gets less money. The risk is that programs might not be as strong. That impacts the national reach of the Wipro program. The second model was only some universities get funding. I came up with a hybrid approach, where everyone will get base money and then there will be additional money for leadership hubs. One focus will be on AI, because we can contribute on this topic. And another focus is on Admin PD, to make sure that there is district connection and support. So, we'll have every site with base amount of money, so that they can work on their projects. Then each year I'll ask who will oversee AI hub for additional support. With the Admin workshops, we can have a hub leader, and they would apply for that on the annual basis. And another hub is looking at the projects. The projects should come from the excitement of the fellows, but they must have an AI and Admin PD component.

**Monica:** Would the projects need to have both components?

**Arthur:** Each of the projects needs one of these things, AI or Admin PD.

Also, I had to completely cut out face-to-face meetings. They cost too much money. We only will have a yearly leaders meeting.

**Arthur:** I really feel good about a hybrid model. Also, this phase we will call Sustainability.

**Anne:** Do you think they'll commit to a multi-year funding or yearly?

**Arthur:** I really don't know.

Quarterly/Annual Report

- Evaluation review and analysis
- Can evaluation data be publication?
- Focus on:

#### **Disconnect with District Leadership**

District leadership often has little awareness of Wipro SEF's work, making it harder to scale impact.

**Arthur:** Part of this report is Anne's evaluation report.

**Anne:** Thank you so much for all your work to help get it done.

**Arthur:** The report is amazing. One thing that came up is that this report should be a research publication. We have so much valuable data, so maybe there could be more than one publication. If anyone has any interest, let me know. We will have a chance to read this report and look at some insights for each of the sites. One thing that came up was about a disconnect with district leadership. Because it will be a focus on the next round of funding, I thought we could spend some time today to think about what we can do to improve that.

**Anne:** One of the challenges that the administrators who come to Wipro events are not necessarily connected to financial decision making and support. There is also a problem with continuous changes of superintendents.

**David:** In FL, some of our superintendents are elected and not by the district.

**Meera:** One of our districts had a strong buy in form the administrations, but it took a long time to establish this culture of commitment where we had to continuously approach superintendents.

**Anne:** We need to help fellow to become advocates for Wipro.

**Monica:** That is part of why our team is proposing PD opportunities for fellows and administrators, so that they are used to working together. The strongest leadership happens when administrators provide a platform for leadership opportunities.

**Arthur:** Some of the results we had in statewide improvements, maybe we should approach these superintendents and ask them why it is working.

**Anne:** We also talked before about district readiness, but we are not clear yet what that is. Whether the district is ready for a change. There are a lot of different elements to what would make a district ready. Maybe there are some common elements to be thinking about.

**Arthur:** If we keep this in mind as new projects will unfold this year and we will focus on connection to administration, maybe we will start making progress in this direction. I know that everyone has been busy with a start of the school year, I'm so glad that we are meeting today. Thank you so much for your help. We'll keep communication active.

Other items?

#### CALIFORNIA- STANFORD UNIVERSITY



Authors: Dr. Preetha K Menon; Dr. Tammy Moriarty

#### **Executive Summary Statement**

The Wipro Science Education Fellowship (SEF) Innovation Phase at the CA site is positioning itself as a key contributor to district transformation by fostering teacher leadership in science. Central to our mission is addressing persistent inequities in science education, ensuring that all students have access to high-quality, engaging, and equitable science learning experiences. By providing focused professional development, individualized mentoring, and opportunities for cross-site collaboration, the CA site aims to elevate science teaching to meet the high standards of the Next Generation Science Standards (NGSS). This approach empowers teachers to lead district-wide change while transforming instructional practices across multiple levels.

The three components for the CA site include the traditional Wipro Science Education Fellowship Program for teacher leaders, the Wipro School Leaders Program, and individual district team support. For the Wipro SEF Program, professional learning sessions are focused on fostering teacher agency and promoting student-centered practices that align with the Next Generation Science Standards (NGSS) and address district-wide needs. Teachers will also be equipped to provide equitable opportunities in science education for all students, regardless of their cultural and linguistic backgrounds. For the Wipro School Leaders Program, this year's emphasis is on supporting instructional coaches to better understand how to practice leadership and elevate the quality of science instruction in their district contexts. For work with district teams, the CA Leadership Team continues to collaborate with district coordinators to plan ways to leverage the expertise of Wipro fellows in furthering their district science goals.

In this past quarter, the CA site wrapped up Cohort 5 Year One of the traditional Wipro SEF Program and took a break from professional learning sessions during the summer months. The Wipro School Leaders Program also wrapped up its final professional learning session, culminating in certificates of completion.

For the next quarter, the CA Wipro Team will launch the second year of the program for Cohort 5 in late September with a focus on GPS Projects and Teacher Leadership. The CA site will also recruit new participants for the Wipro School Leaders Program to support principals, assistant principals, and instructional coaches to better support science teaching and learning. District Coordinators will regroup with the CA Leadership Team to provide updates about their districts and share what they think their teachers will need in terms of leadership development and GPS goals.

#### Summary of Current Project(s) and Goals

The CA site continues to offer the traditional Wipro SEF Program to science teacher leaders across five districts, aiming to further excellence in science teaching and learning. One of the goals for Cohort 5 fellows is to build a strong foundational understanding of science teaching and learning. To this end, professional learning sessions focused on exploring the intersections of the 5E science instructional model and the NGSS standards. Additionally, fellows examined strategies for developing coherent conceptual flows and storylines in science units. The CA site has also started to set a foundation that promotes equity in science classrooms. Fellows were introduced to an equity and social justice framework developed by CSET and reflected on their personal educational journeys and the role they would like to play in their students' journeys.

The CA site continues to offer the Wipro School Leaders Program and expand its reach to include not only principals and assistant principals but also instructional coaches and teacher leaders (Wipro alumni) who provide science professional learning to others. This program is designed to build strong instructional leadership capacity and foster cohesive district teams that align with the goals of the Wipro SEF Program. Strengthening capacity at all levels of the system—classroom teacher, school leader, and district—can drive transformational changes, address persistent inequities in science education, and promote systemic improvements at both site and district levels.

The CA site continues to collaborate with district teams to enhance their collective capacity to advance effective science teaching and learning, address the diverse needs of their students, and support science teachers in maintaining rigor in their classrooms. These efforts include meeting regularly with District Coordinators to plan and strategize how to leverage the expertise of Wipro fellows in their districts.

#### **Progress and Highlights**

Since this past quarter included mostly summer months, this section will focus more on the impact of Wipro fellows on their districts over the past 5 cohorts. The CA leadership continues to keep in touch with past fellows and follow up with their teacher leadership practices and activities. Many teacher leaders have continued to grow and make an impact in their districts. Below are just a few highlights from the past year:

**Delyna Tanzi- Cruz (Cohort 1)**- Promoted to Instructional Coach position supporting two different school sites

**Ron Hamby (Cohort 1)-** Promoted to Instructional Coach position supporting two different school sites

*Anupama Tandon (Cohort 1)- t*ook on leadership role as Science Department Chair for her school

Natalie La Rosa Hillebrecht (Cohort 1)- promoted to an instructional coach

*Kyle Hillebrecht (Cohort 1)-* promoted to an instructional coach

*Margaret Poor (Cohort 2)-* promoted to district-level leadership

*Eric Armann (Cohort 2)-* took a leadership role as a District Science Coach in a neighboring school district

**Brittney O'Brien (Cohort 3)-** Leadership role in the STEM to STERN Program; took a leadership position within the Santa Clara County Office of Education

**Jonathan Lee (Cohort 4)-** Still supporting students in understanding food waste and participating in local environmental efforts

**Brenda Valine (Cohort 4)-** Continue to lead Science Fair at her school sites

Joanne Endo (Cohort 2), Satomi Fujikawa (Cohort 2), Erica Paisley (Cohort 4), Brenda Valine (Cohort 4), Sierra Vance (Cohort 3), Chelsea Alvarez (Cohort 3)- Continue to lead professional development in the district

Plan for the Next Two Ouarters

	That for the Next Two Quarters					
Date	People	Activity				
Wipro SEF Pro	gram					
Across the	Wipro Fellows +	Ongoing coaching with the Stanford Wipro Team				
school year	Stanford					
	Facilitators/Coaches					
Early Fall	Wipro Fellows +	- Introduction of GPS projects during the first				
2025	Stanford	9/20 professional learning session				
	Facilitators/Coaches	<ul> <li>Facilitators help each fellow choose and</li> </ul>				
		commit to a GPS project focused on a				
		personal and district goal				
		- Provide all resources related to GPS Projects				

	1		
		- Have several Wipro alumni present their GPS	
		projects as an example during the 9/20	
		professional learning session	
Late Fall 2025-	Wipro Fellows +	Professional Learning sessions focused on how to	
Spring 2026	Stanford	practice leadership emphasizing	
	Facilitators/Coaches	- Leadership theories & practices	
		- Group relations	
		- Adult Development	
		- Systems Thinking	
Wipro School L	eaders Program		
Fall 2025	CSET Team + District	Recruit new participants and launch program	
	Coordinators	(September-early October)	
Across the	SLP Participants +	Five 45-minute individual coaching sessions	
school year	Tammy	throughout the school year	
Late October-	SLP Participants +	6 two-hour professional learning sessions focused	
June 2026	Tammy	on supporting science teacher instructional	
		practices and opportunities for teacher leadership	
District Work			
Across the School Year	Tammy + Preetha + DSCs	District Coordinator meetings with district representatives from the five districts, SFUSD, SJUSD, Moreland, MVWSD, and Campbell HSD	
		Discuss how they will continue to leverage the expertise of the Wipro fellows (past and present) to support science initiatives in their districts	

#### Vignettes

# Building San Jose Unified School District's Capacity Through Empirically-Driven Coaching

# Embracing a new challenge

After returning from maternity leave, Diane Aronson wanted a challenge. She had taught middle school science in the San Jose Unified School District (SJUSD) for over 15 years and had some experience leading professional development for fellow teachers.

"I had done some coaching, working with other teachers to integrate new technology into their curriculum, and I really enjoyed it," Diane explained. "When I came back from maternity leave, I wanted to do something new within the district, so I began looking around for other opportunities."



When a job as a site coach embedded within a particular school appeared on her radar in 2019, she applied for it. Then, word came back to her that the open position was that of a district coach, meaning that she would be responsible for supporting the professional development of science teachers through SJUSD.

The thought of working across the entire district felt daunting. "I told them it might be a little bit of a stretch for me," she said. Assured that she was well qualified and supported, she went ahead with her application and was accepted.

Aside from an exciting and daunting career transformation, Diane faced other challenges. While she was convinced of the value of professional development, she didn't want to overburden teachers. In her absence, SJUSD had implemented a new science curriculum, and were focusing on science teachers following the 5E instructional model for their everyday teaching practice. Not only was she in charge of her district's professional development, her new job entailed recruiting science teachers for the Wipro Science Education Fellowship, overseen by Stanford's Center to Support Excellence in Teaching (CSET).

Soon after applying, Diane was offered the position, and she jumped headlong into an entirely new career path to support her district's teachers.

#### Learning to lead professional development

Since SJUSD is one of five school districts in which CSET administers the Wipro Fellowship, Diane's new position intersected directly with that of Tammy Wu Moriarty, one of CSET's Associate Directors who oversees the program at Stanford's Graduate School of Education.

"Wipro is about improving science teaching and learning and practicing leadership within our schools and districts," Tammy explained. "What makes the program so successful is that it presents opportunities to learn from and network with other science educators from across the country."

The CSET Team invested deeply in strengthening Diane's professional development skills. First, they discussed SJUSD's needs and Diane's new audience of district educators. Diane said that the CSET Team modeled an active, embodied approach to mentoring that diverges from lecture-based

educational models. As an example, during one CSET exercise, one teacher tries out a lesson while other teachers act as students and debrief afterwards.

"I saw how important it was that teachers are hands-on in the classroom," Diane recalled. "We don't want to just lecture to students. We want them to interact and get reflective about the content."

Throughout Diane's intensive training sessions, the CSET Team also worked closely with Diane to bring her up to speed on the 5E Instructional Model and helped her build relational capacity

throughout the district, modeling the empathy necessary to help teachers navigate complex career challenges.



### Encouraging district-wide transformation

Now, Diane operates independently in her role. She ensures the Wipro Fellowship remains seamlessly integrated into her district and recruits science teachers for the two-year-long program.

New California teachers are required to attend a two-year, individualized Induction Program of mentorship and support, which Diane provides for them. She regularly leads professional development programs for middle and high school teachers centered in the approach she learned collaborating with CSET. Site coaches and teachers rely on her guidance to help them meet their goals.

"Diane is so supportive of teachers. She knows how to be a coach, how to give advice, how to see where someone's coming from. She helps us understand what science teachers in her district need, whether they're Wipro fellows or not," Tammy said.

Diane, who now leads professional development courses focused on the 5E Instructional Model, has seen it transform teachers' classes from lectures to active immersion in scientific exploration.

"Teachers are so excited when they realize they can take a more exploratory approach to science. It's been really fun to see," she said.

Tammy has begun to see system-wide changes in leadership capacity and widespread adoption of transformative classroom practices through SJUSD engagement in the Wipro Fellowship. With each cohort, teacher-leaders build momentum to advocate for research-based practices that enhance student learning, one of the program's ultimate goals.

Engagement with the Wipro Fellowship changed the life of one physics teacher Diane mentored. She started coaching the first-year teacher through the Induction phase of her career and counseled her to apply for Wipro in her third year. This educator has continued to remain engaged with the fellowship and leads professional development for other physics teachers.

"Success to me is seeing how educators grow from the beginning of Wipro to graduating from the program and continuing to demonstrate their leadership within the district," Diane said.

# Calendar

Saturday, September 20	9:00 AM - 12:00 PM	PL Session   virtual
Thursday, October 23	4:30 PM - 6:00 PM	PL Session   virtual
Saturday, November 15	9:00 AM - 2:30 PM	PL Session   in-person
Saturday, December 13	9:00 AM - 2:30 PM	PL Session   in-person
Thursday, January 15	4:30 PM - 6:00 PM	PL Session   virtual
Saturday, February 28	9:00 AM - 2:30 PM	PL Session   in-person
Thursday, March 19	4:30 PM - 6:00 PM	PL Session   virtual
Thursday, April 23	4:30 PM - 6:00 PM	PL Session   virtual
Saturday, May 16	9:00 AM - 2:30 PM	PL Session   in-person
Saturday, June 6	9:00 AM - 2:30 PM	End of Year Conference   in-person

#### FLORIDA – UNIVERSITY OF SOUTH FLORIDA



Author: David Rosengrant, Allan Feldman, and Larry Plank

#### **Executive Summary**

The goal of our program is the same, to continue to cultivate leaders in our districts from those individuals with the desire and passion to do more in the classroom. The way we do this is to allow our fellows to focus on innovations that they are passionate about rather than dictating structure and projects to them. The more passionate the fellows are about the projects, the more they will share that fire with others not only in their district but beyond. The passion was ignited in Phase 1 when they were learning leadership skills that could be used to implement projects of their own choosing.

We are in the final year of the projects and thus we either have 2-year projects entering year 2 or new projects that are year-long projects. We have 6 projects that are in their second year. We also started five new one-year projects.

For this past quarter, our main event was on August 16<sup>th</sup>. Though we had planned to be in Pasco, less than 48 hours prior to the event, the air conditioning broke in the building and so rather than be inside in a building without AC in mid-august in Florida, we pivoted to meet in St. Petersburg at the STEM lab. The second-year projects talked about any challenges and opportunities they encountered at the start of the year while the one-year projects discussed how they took feedback from leadership and incorporated it into their work for the year ahead.

Moving forward our next meeting will be virtual on Monday, September  $29^{th}$  from 6 to 8 pm. October and November will be what we call "us to them." As they are meeting with their individual teams to run their projects, one of the leadership team members will go to their meeting and to assist however possible. Finally, Saturday December  $6^{th}$  will be an in-person meeting. Our goal is to go back to Pasco and host the event there.

# Summary of Current Project(s) and Goals

Our 6 continuing projects are starting year 2. Their work was stated in the previous quarterly report so we will not go into detail here.

# Projects just completing year 1 and starting year 2

**Title**: Storyline: How to use scientific narratives purposefully in science education.

This project is led by Nicole Holman.

**Title**: Flipped classroom in advanced courses in Hillsborough County High Schools

This project is an extension of Bhagyashree Kulkarni's GPS project.

**Title:** Creating new teacher confidence

Chelsey Swats (phase 1 Fellow) leads this project.

Title: Pasco Teacher Leader/Coach Elementary Science PLC

Lora Darby is leading this project.

**Title:** VR in the Chemistry Classroom: Enhancing students' learning experience

Ileana Luna is leading this technology enhancement project.

**Title:** Problem Based Learning in Science

Dawn Avolt is leading this project which is an extension of her GPS project.

The following projects are our new **cohort IV 1-year** projects. We have attached the abstracts of their projects here to highlight each one.

Kelleigh Weeks is leading a project on Citizen Science. Many research organizations have more data/projects than they can handle. They reach out the general public for help with the workload. This gives students the opportunity to do real science. The data the students collect or work with is used in real science by these international organizations. This gives students an opportunity to be involved in real science and moving science forward. Students get to see what scientists actually do and have their contributions valued giving students a sense of self-worth. I believe this engages students with the materials and concepts and allows them real world application of what they are learning in the classroom. I believe that this is engaging for students of all levels in all different science fields. My research includes students of all levels in grades 9-12 and in 7 different subjects.

Laura Kay Lacy-Carlson is leading a project on nature journaling. Nature journaling is an engaging and educational activity that encourages students to observe, explore, and connect to the natural world. Through guided indoor and outdoor experiences, students will record their observations of

plants, animals, weather and seasonal changes using drawings, words, and numbers to record their observations, increasing their scientific knowledge of vocabulary. Using nature journaling will foster curiosity, enhance observation skills, and support scientific thinking and reasoning. By using the integration of art, writing, and science, nature journaling helps students build a deeper appreciation for the environment.

Tara McClintick is leading another project. Our project will be related to helping students in 1st and 2nd grade build background knowledge in Science and in their ELA modules that relate to science through a variety of strategies. These include but are not limited to fiction and nonfiction readalouds, engaging discussion, writing about the science, videos, photographs, wonder walls, realia, extension activities and classroom centers. Building this background knowledge is crucial for young learners because it helps lay the foundation for understanding, thinking and learning across all subject areas. Building background knowledge helps to boost reading comprehension and improves overall vocabulary. Exposure to real-world topics helps students to build a rich vocabulary enabling them to express themselves more clearly when speaking and writing. Building background knowledge also helps to support critical thinking, bridges gaps in learning and encourages curiosity and student engagement.

Jennifer Griffone's work is on Project Based Learning. She will design a scope and sequence, professional learning plan and collaborative structure for a one-year Elementary Science PBL to enhance student engagement and improve F.A.S.T scores. Woodland Elementary School science scores dropped to 29% proficient for the 2023-2024 school year. Teacher turnover has been a problem in 5<sup>th</sup> Grade. Her school became a BSI School for the 2024-2025 school year. Her plan is for students will complete interdisciplinary projects aligned with NGSSS Standards. She will facilitate our weekly PLC/planning times with teacher teams and plan a PBL for our Energy, Space, and Life Units.

Sherri Alvarez is creating a STEM academy at her school. The DeSoto Dragon STEM Academy has been created with a need to teach more inquiry-based science lessons focusing on science vocabulary development and firsthand experiences. With over 80%+ of our student population being Hispanic and multilingual, focus on science vocabulary development will increase student achievement in science. We will accomplish this through teacher-led book studies/planning, applying key district strategies and materials within our science lessons and across the school. The project's goals are to implement a science vocabulary program aligned with our district. This grant will reach underserved students within our school as 90% + of our students receive free/reduced lunch. Another goal will be implementing inquiry-based lessons focusing on our extensive garden we have at DeSoto. With research on the plants in the garden, students will learn how to care for them and decide what we should plant. Students will be responsible for garden maintenance with teacher support. Students will journal, keeping track of research, observations, and investigations. Our garden goal is to provide fresh fruit and vegetables to our school's food pantry already serving the community. This grant will provide students with a field trip to a community garden to learn innovative ideas, expanding their knowledge. We will compare our outside garden and composting with inside hydroponic and electric composting units. An Earth Day celebration on April 22nd, will highlight our 4th and 5th grade student projects, sharing learning with their peers and community about important science concepts and gardening.

# **Progress and Highlights**

We closed out our previous quarter on May 17th and immediately focused upon accepting and

reviewing applications for new projects, which were due in June. IHE leadership along with DSCs reviewed project applications in July. Feedback was provided to each applicant and in some cases, applicants were required to provide further details upon their proposed work, or make edits as required by the reviewing team. In all, six projects were accepted for a one-year term, all of which include promising ideas for district change. In addition to our new projects, we have six projects that will be continuing for their second and final year.

School districts participating in our project began classes on August 11<sup>th</sup>, with teachers returning to service approximately 10 days prior to the start of school. Our first project-wide meeting was held at the University of South Florida St. Petersburg campus on August 16<sup>th</sup>. In the morning portion of our day, new teams were permitted for up to 15 minutes to provide overviews of their projects, and returning teams were permitted for 10 minutes. All of the presentations were interactive in nature with "glows" and "grows" reported back to the presenters via audience members, including fellows, DSCs and IHE leadership. The afternoon session focused upon logistics for our program, "Research 101", and reports from our fellows who traveled to different sites over the spring and summer. The event was facilitated by David Rosengrant and lunch was served to all participants.

Our DSCs and IHE Leadership met twice to generate ideas for the Phase 3 application which was due early in September. The team has suggested a continuation of portions of Phase 1 with some modifications and the inclusion of current roles in support of new fellows to the program. We look forward to the opportunity to continue our Wipro journey in Florida beyond the end of this school year.

Our next meeting with all fellows will be on Monday, September 29<sup>th</sup> and will be virtual in format. During the quarter other regular meetings also took place, such as leadership meetings in a virtual format and DCS-only meetings in a virtual format. We will continue to hold meetings in which leadership and DSCs meet with fellows (and in some cases team members) at their work sites. This format supports a more intimate connection with the fellows.

All fellows from Phase 2 continue to be encouraged to consider presenting or attending fall, spring and summer conferences, including the NSELA Summer Leadership Institute, NSTA fall and spring conferences, Florida Association of Science Teachers (FAST) conference, as well as the Florida Association of Science Supervisors (FASS) conference preceding FAST. Leadership will continue to support fellows who wish to consider authoring manuscripts for the three NSTA practitioner journals, all of which contain a new "Leadership Corner" in each publication suitable for the work of each fellow within the project.

# Plan for the Next Two Quarters

Date	People	Activity
Bi-Weekly	USF Team	Planning and Project Management Meetings.
Monthly	USF & DSCs	Planning and Project Meetings. These meetings ensure discussions and oversight among all stakeholders for our grant, which in and of itself increases district wide impact.
9/29	All	We will have an online meeting with the project members to discuss action research and project planning.
October/ November	All	This will be our to them meeting. We send a leadership team member to their groups meeting to offer assistance and advice whenever we can.
December 6th	All	This will be our final meeting of the fall semester, and it will be in person (location likely Pasco)
		2026 is tentative
January	All	We will have an online meeting with the project members to discuss action research and project planning.
February	All	This will be an in-person meeting to go over how projects are wrapping up and how they can be continued beyond funding.
March/April	All	This will be our to them meeting. We send a leadership team member to their groups meeting to offer assistance and advice whenever we can.
May/June	All	This will be our final celebration.

# **Vignettes**

## **Kelleigh Weeks**

Kelleigh Weeks teaches science at Gaither High School in Hillsborough County. She was a Phase 1, cohort 3 fellow in the Tampa Bay Wipro SEF. This academic year she is beginning a project to involve students in citizen science activities. Often students are intimidated by science and the purpose of using citizen science is to for them to see that they can engage in real science activities. This project is meant to expand students ideas of what science is and how science is "done". Citizen science is a way for ordinary people to help large-scale research projects. Organizations like the Cornell Bird Observatory reach out to the public, including students, for help with the workload. This gives students the opportunity to do real science. They get to see what scientists actually do and have their contributions valued giving students a sense of self-worth. She believes this engages students with the materials and concepts and



see the real world application of what they are learning in the classroom. Furthermore, she hopes to interest students in areas of science that they may have felt were inaccessible or simply did not know existed.

Using citizen science exposes students to hands on nature of science concepts and incorporates the science and engineering practices seamlessly and in an engaging manner. By conducting this project and presenting the use of citizen science to teachers throughout the district, Kelleigh expects that to be an increase in the use of SEPs as well as an increase in students' understanding of the nature of science standards. Students and teachers will also have the opportunity to incorporate technology in a very meaningful way to aid students' understanding of the material they are mastering.

#### **Jennifer Griffone**

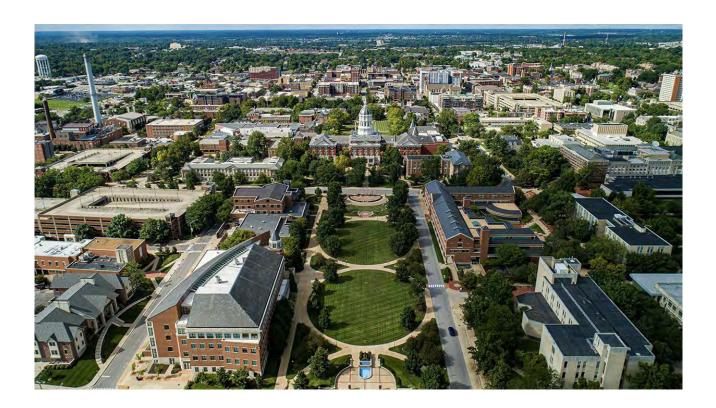
Jennifer Griffone is an instructional coach at Woodland Elementary School in Pasco County. This is a leadership position that she got after participating in Phase 1, cohort 2 of the Tampa Bay Wipro SEF. For Woodland Elementary School the rate of free or reduced lunch was 100% in 2024-25. The scores on the Florida state science assessment was 29% proficient in 2023-24. In addition, it has a high teacher turnover rate. This academic year she is starting a one-year project to increase student engagement in science by using project/problem-based learning (PBL) in



order to increase scores on the Florida science assessment. To do this she will work with teachers to build their capacity to use PBL. Her plan is for students to complete interdisciplinary projects aligned with NGSSS Standards [FL Science Standards]. She will facilitate the teachers' weekly professional learning community (PLC) and planning times with teacher teams. Together they will

plan a PBL for their Energy, Space, and Life Units. She believes that A new science resource like PBL can make a meaningful impact at the district level by aligning strategically with educational priorities, demonstrating measurable value, and gaining stakeholder buy-in. By showcasing how the resource promotes hand-on learning, scientific reasoning through PBL activities will in turn improve student outcomes showing gains in student engagement, understanding, and performance.

#### MISSOURI- UNIVERSITY OF MISSOURI



Author: Meera Chandrasekhar and Linda Godwin

## **Executive Summary Statement**

The Missouri Wipro project's goal of teaching math and science in a harmonious manner will contribute to transforming the teaching of those subjects in participating districts. We are already seeing collaboration among math and science teachers, development of lessons that borrow from the other subject, discussion about changing the sequences in their curricula, and interest in bringing in other teachers from their grade bands.

Our Wipro project uses a modified version of the initiatives of Phase I. Fellows participate as teams of 2-4 teachers from three grade bands (K-5, 6-9 and 9-12) from a given district, with at least one math and one science teacher in the team. For Cohorts 4 and 5, grade 6-12 teachers were recruited for year 1. K-5 teachers were added only in year 2 for cohort 4. For Cohort 6 K-12 teachers we recruited for both years. In year 1 Fellows collaborate in V-CCLS and H-CCLS teams, anchoring their work in a research article and a math and a science educational practice. In year 2 they focus on creating or modifying four or more lesson plans that integrate math and science content. In both years they make presentations of their work in December and during the end-of-year May conference.

In 2024-25 Cohort 5 worked on their lessons, while Cohort 6 completed on their V-CCLS and H-CCLS work. Both cohorts attended monthly meetings together. They worked together for about half of the meeting, and with their cohort during the other half. During each monthly meeting Physics + math

hands-on activities were conducted for both cohorts, which consisted of a 60-75 minute segment where fellows conduct a physics lab and analyze it for the science and math practices used in the lab. MU staff led these activities from August – Nov and Jan-March. In April the Hallsville Cohort 5 team, Kelli Anthes and Bryan Bolton conducted this activity based on the density lessons that they had created as part of their Wipro assignment. The end-of-year conference took place on May 3. 2025. All teams made their presentations.

In August 2026 Cohort 6 fellows began their year 2 work, which consists of creating harmonized math-science lesson plans. Since this is the last year for Phase 2, we have added two new opportunities for current districts' teachers to join the project. The first was to have Cohort 6 teams add one or two non-Wipro teachers (called Associate Fellows) from their districts to help with the process of district transformation. Two teams have added an Associate Fellow each. The second opportunity was to add an Enhancement project and have alumni Cohorts 4 and 5 teams to expand their Wipro work during 2025-26 by working on a group project with non-Wipro teachers. Two teams have responded to this opportunity and will start their work in September. These opportunities will be managed by Marsha Tyson, a Cohort 1 Fellow and newly retired Columbia Public Schools Physics Teacher, who has joined us as a project coordinator.

## Summary of Current Project(s) and Goals

The initial general goals of our Innovative Phase Wipro project were:

- To expand the teacher network
- Provide new opportunities for leadership
- Focus on collaboration among science and math teachers in middle and high school. This initial goal was later amended to include elementary teachers.

To implement these goals, middle and high school teachers (and later elementary teachers) from local and surrounding districts would enroll in the Wipro SEF project as teams of 2-4 teachers, with each team having a math and a science teacher from the grade band. Three cohorts of approximately 15 teachers each were to be recruited, with each teacher participating for two years (referred to as Cohorts 4-6). In 2025-26 teachers from existing districts joined Cohort 6 as Associate Fellows and a 1-year Enhancement Project was begun for Cohorts 4 and 5 alumni to bring in non-Wipro teachers. The Enhancement Project will serve as a pilot for Phase 3.

The focus of addressing the challenges of teaching science and math in a harmonious manner at the middle and high school grade levels was chosen for Phase 2 as this collaboration between math and science teachers is essential to the implementation of a successful science curriculum.

#### Specific Goals:

- Goal 1: Math and science teachers will collaborate to choose mathematical practices and determine methods to harmonize the practices in math vs science courses in middle and high school.
- Goal 2: Fellows will create lessons/units that include harmonized mathematical practices for use in math and science courses.
- Goal 3: The project will disseminate these lessons via a repository that is available to all Wipro fellows and teachers outside the Wipro project. This repository may be in the form of a website.

# Selected/Highlighted Projects

Spotlight: Leslie Verslues, Helias Catholic High School

Leslie Verslues has been teaching high school mathematics for 25 years in every level from Algebra 1 through college level math courses. She currently teaches accelerated pre-calculus, Calculus 1, and Calculus 2 to both juniors and seniors at Helias Catholic High School in Jefferson City. Leslie completed her undergraduate and graduate degrees in Mathematics and Education at the University of Missouri.

The Wipro project has allowed her to collaborate with fellow math and science teachers, gaining several new activities to use in the classroom, which are useful in applying the mathematical concepts her students are learning to scientific exploration. For example, her



Leslie Verslues (foreground) making a point at a WiproSEF monthly meetings.

class collected data on the temperature of various containers of hot chocolate and related it to Newton's Law of Cooling. The students then graphed the collected data, wrote the appropriate cooling equation, and calculated answers to problems predicting future temperatures of the liquid. One of the focus areas to improve student engagement and retention was for groups to work together to create and solve their own questions and then explain their work and answers.

Leslie has found the work and activities conducted during Wipro meetings to improve her ability to relate math to appropriate science concepts. She has particularly enjoyed working with fellow teachers on velocity and acceleration demonstrations that she can use in her calculus classes.

# **Progress and Highlights**

As we begin the new academic year, Cohort 6 is starting on Year 2 of their fellowship. Their expectations are:

- Work with their district and grade band team to create lessons that harmonize math and science content
- Each Fellow should create at least 4 lessons in 2025-26 (complete by late spring).
- Use a course of study (COS Math Practice, SEP and research article) as they create the lessons. HCCLS COS or other choices are acceptable.
- Lesson plans created by a fellow should form a coherent set/ module across their team.
- Participate in collaborative activities.
- Make a professional development presentation of these lesson plans to other teachers in the building and/or district (late spring/summer 2026). Record a video and post it on google drive.
- Collect data on the implementation and success of activities/lessons and report back during PD presentations.
- Submit lesson plans for publication on a website created by the project. This website will serve as a repository of lessons, along with short articles on the successes and challenges faced by fellows. This website will also serve as a reference for interdistrict use as well as use

- over the multiple cohorts. (Summer 2026)
- Consider including a theme in C6 lesson plans (e.g., work in use of graphs in a systematic and frequent manner into their lessons), as discussed in January 2025. If so, we have asked them what resources they would need.

During the beginning of Year 2 meeting on August 8, 2025 we examined the above expectations. The fellows then discussed their plans for the content and structure of their lesson plans. They also conducted a conversation about teacher leadership by reading the article *A systematic approach to elevating teacher leadership* and considering the first two assumptions. They will examine the other assumptions over the academic year. They summarized their views in a google doc that they can revisit as needed.



Megan Kulage and Amy Bartlett presenting their lesson plan ideas.

# **Expansion of Cohort 6:**

We have added two new opportunities for Fellows to bring in colleagues from their districts for a one-year stint. These opportunities have three goals: (1) to help teachers collaboratively disseminate their learning to others in their buildings and begin the process of district transformation; (2) to pilot a small-teams project and get a head-start on Phase 3; and (3) to familiarize our new project coordinator, Marsha Tyson, with managing the Wipro project so that she can take over as the principal investigator in Phase 3.

# Opportunity 1 – Associate Fellows:

Cohort 6 Fellows were invited to bring in other teachers from their grade bands and districts as Associate Fellows to expand the harmonization of science and math. Associate Fellows will attend monthly C6 Wipro meetings, work with the team during in-district meetings, and be part of the team's presentations. The details of the collaborative effort are to be defined by the team. For example, the Associate Fellow might observe Fellows' classes; test the team's lesson plans in their class; work on math-science harmonization if they are teaching a different subject; if the team chooses to work in a specific theme (e.g., graphing), the Associate Fellow will be expected to contribute to integrating the theme with Fellows' lessons. Associate Fellows will receive a stipend of \$1500 for the 2025-26 year.

Two new Associate Fellows have joined the project, both from Columbia Public Schools: Spencer James, a math teacher from Battle High School will work with Hannah Nandor; and Amanda Montgomery, a math teacher from Oakland Middle School, will work with Amanda Wolfe and Anne Stacy.

#### *Opportunity 2 – the Enhancement Project:*

Cohort 4 and 5 grade 6-12 fellows are invited to apply for a special 1-year enhancement project to continue their work on harmonizing math and science learning for their students:

- The 1-year project must be a team effort, either in or across buildings or districts, where fellows enhance and expand the work they began as a C4 or C5 fellow.
- The team will work more-or-less independently, but will have formal meetings with MU Wipro staff monthly and will make two presentations during the year.
- The project should continue the theme of harmonizing the teaching of math and science, as

- they did during their Cohort 4 or Cohort 5 work.
- The lead Fellow(s) will submit one project proposal for the team. A range of \$3,000-\$5000 will be awarded to each project, based on the proposal and number of participants.
- The teams must include <u>a minimum of</u> one or two Cohort 4 or 5 Fellow(s) to act as Team Leader(s); one or two non-Wipro math or science teachers (from the same district); a mix of math and science teachers; a formal school or district leader (instructional mentor, principal, assistant principal, science coach, etc.)

Two teams have submitted proposals and have been accepted.

Team 1 is from Hallsville Middle School, with Cohort 5 alumni Kelli Anthes (8th grade math) and Bryan Bolton (8th grade science), new members Peyton Earley (7th grade science) and Katy Crane (7th grade math), and with Ty Sides as the admin. Their focus is to create a unit of lessons that integrates math and science practices across 7th and 8th grade science and math.

Team 2 is from Hallsville High School, with Cohort 4 alumni Melissa Hough (grades 9-12 math) and Erin Snelling (grades 10-12 biology); new member MaCall Lankford, (grades 10-12 math); and Matt Cooley, Principal. Their focus, named "Logic meets Lab," is to support high school math and science teachers in embedding computational thinking into their classrooms through practical, standards-aligned strategies, thus setting up a framework for students to develop problem-solving, modeling and analytical skills.

The Enhancement meeting cohort (named Cohort 6E) will meet in a mix of face-to-face, zoom and on-site meetings. F2f meetings will take place at MU along with Cohort 6. The new project coordinator Marsha Tyson will manage the program and serve as the enhancement project mentor.

# Hiring of a new project coordinator:

We have hired a new project coordinator, Marsha Tyson, as of August 1, 2025. She will work half-time with the Wipro project. Marsha is well-known to faculty in the Physics department, particularly to Dorina Kosztin and Meera Chandrasekhar, with whom she participated and taught during the Physics First projects from 2006-2015.

Marsha is a Cohort 1 Wipro Science Fellow. She began teaching in 1997 as a high school physics teacher at Columbia Public Schools and has since built a distinguished career in science education. She has taught Science Methods at MU and coordinated student teacher preparation at Westminster College. Her accolades include National Board Certification, the Presidential Award for Excellence in Mathematics and Science Teaching, and recognition as Missouri Science Teacher of the Year and Columbia Public Schools Teacher



of the Year. After retiring as a physics teacher and department chair from Battle High School in 2025 she continues to lead initiatives in literacy, leadership, and hands-on learning. In addition to working as the project coordinator for WiproSEF she works on a statewide literacy grant through the Missouri Writing Project Network. Marsha also coordinates animatronic camps in partnership with the Disney Museum and the Garner Holt Foundation. Her work reflects a deep commitment to empowering educators and engaging students through innovative, joyful learning experiences.

Marsha's enthusiasm and skills make her an excellent choice for running the Enhancement Project. She is well connected with science educators and is bringing in a vibrant group of speakers for the 2025-26 meetings. Since the Enhancement Project is being structured as a pilot for Phase 3, and Marsha is being groomed to be the PI for Phase 3, her experience during the 2025-26 year will help her learn about the running of the Wipro project. Linda Godwin and Meera Chandrasekhar will be retiring from their adjunct positions and plan to serve on the advisory board starting September 2026.

# Plan for the Next Two Quarters

Cohort 6 plan:

conort o plan.		
Date	People	Activity
Aug. 8, 2025	Cohort 6	Initial Fall kickoff meeting
Sept. 11, 2025	Cohort 6	Professional Development, Lesson Plans, Speaker: Dr. Pat Brown
Oct. 7, 2025	Cohort 6, with 6E	Professional Development, Lesson Plans (C6), Project Plans (C6E), Speaker: Mike Sydlowski
Nov. 6, 2025	Cohort 6	Professional Development, Lesson Plans, December presentations, Speaker: Dr. Amy Lannin
Dec. 11, 2025	Cohort 6, with 6E	Presentation of one lesson plan by Cohort 6 teams, Cohort 6E will present on their projects.
Jan. 15, 2026	Cohort 6, with 6E	Virtual meeting, TBD
Feb. 12, 2026	Cohort 6	Virtual meeting, TBD
Mar. 12, 2026	Cohort 6	Professional Development, Speaker Cassidy Urie, TBD
Apr. 9, 2026	Cohort 6,	Professional Development, Leadership, Lesson Plans
	with 6E	(C6), Project Plans (C6E).
May 2 or 9, 2026	Cohort 6, with 6E	End-of year Missouri Wipro Conference

# Cohort 6E Plan:

Date	People	Activity
Sept. 23, 2025	Cohort 6E	Virtual meeting, Initial kickoff
Oct. 7, 2025	Cohort 6E,	Professional Development, Lesson Plans, Speaker:
	with C6	Mike Sydlowski, Discussion of Cohort 6E project plans
Nov/Dec	Cohort 6E	School site visits arranged with Wipro team
Dec. 11, 2025	Cohort 6E,	Presentation of one lesson plan by Cohort 6 teams,
	with C6	Cohort 6E will present on their projects.
Jan. 15, 2026	Cohort 6E,	Virtual meeting, TBD
	with C6	
Feb/March	Cohort 6E	School site visits arranged with Wipro team
Apr. 9, 2026	Cohort 6E,	Professional Development, Leadership, Lesson Plans
	with C6	(C6), Project Plans (6E)
May 2 or 9,	Cohort 6E,	End-of year Missouri Wipro Conference
2026	with C6	

## **Vignettes**

**Collin Mayhan** is a science teacher at Helias Catholic High School where he teaches chemistry and physics. Most of his students are juniors and seniors, but each year several motivated sophomores also enroll in these courses. In addition to these courses, Collin also leads an independent research class where students collaborate with university professors. These students have presented at national conferences and have publications in peer-reviewed journals.

Wipro has given Collin the opportunity to further his craft. The excellent leadership and insightful discussions have influenced the design of activities able to fit within his lectures. He feels that implementing these new practices and research has directly influenced students as they ask "how" and "why" in classroom discussions.

**Kyle Chrisman** has been teaching middle school math for three years since he obtained his degree in education from the University of Missouri. He intended to pursue veterinary school after obtaining his undergraduate degree. However, his work as a substitute teacher at Laura Speed Elliott Middle School in Boonville while he was a student at Mizzou influenced him to switch to an education degree. After graduating from Mizzou, Kyle applied at LSE and has been teaching math ever since.



Kyle was already worked closely with 6th grade science teacher, Lauren Friedrich. After they attended a presentation from previous Wipro participants at Boonville, they decided that MU's Wipro program would be a great opportunity to improve their teaching and benefit their students. Both are now Cohort 6 fellows.

During year 1 as a Wipro Fellow Kyle learned many different lessons that already benefit him in his classroom. For example, an early project focused on the use of data in the classroom. The article his team chose for V-CCLS focused on the differences between using firsthand or secondhand data. In most past math lessons, Kyle provided the students with the numbers to use in their calculations. Applying concepts he learned from the article, he allowed his students to collect data and use their own numbers to perform the necessary calculations. Kyle saw a huge increase in student engagement and found that students were better able to make a connection between their math classes and the real world.

#### **NEW JERSEY MONTCLAIR STATE UNIVERSITY**



Author: Mika Munakata, Monica Taylor, Emily Klein, Colette Killian

#### **Executive Summary Statement**

The Montclair State University site has made progress through the first half of its Phase III project. The program is contributing to district transformation through the Fellows' self-initiated projects, which extend the reach of the Wipro program to new teachers, new districts, new subjects, and new collaborations. The connections that are made through the program would not be possible without the structure that the Wipro SEF program provides.

The current phase of the project has involved 13 Alumni Fellows working on district-related initiatives and a doctoral student working on publicizing the program. Each of the alumni Fellows has recruited a team of district teachers. Together, these teams are working towards their respective goals as a new cadre of teacher leaders are nurtured.

# Summary of Current Project(s) and Goals

Below are the projects the Fellows will be continuing in Year 2 of their participation.

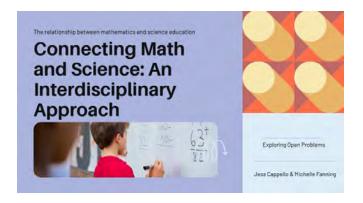
Mazurek	Kearny	Thousand Pounds for Garden Grounds
Kleiner	Clifton	Connecting students, parents and teachers to explore authentic STEM activities
Carlo	Clifton	Arts Integration and S.T.E.A.M. Club
Scrivens	Paramus	Tiger Tinkering Tank (our mascot is the tiger)
Bartol	Montclair	Getting S Done
Trabona	Hawthorne	Building Bridges - Diversifying Social Networking Presence to Support Teacher Feedback
Cappello	Bloomfield	The effect of math metacognitive problem- solving practices on critical thinking and problem-solving in the science classroom
Cann	Pascack Valley	Integration of boardgames into the science curriculum
Mahfouz	Paramus	Paramus Does Phenomena
Borriello	Clifton	Making Environmental Science Relevant for Students
Rodriguez	Kearny	LMS Culture Club
Hester-Fearon	Kearny	LMS - charging forward with eSTEM and ELLs to make lasting school community connections
Hogel	Clifton	In Our Science Era
Serino	Kearny	STEAM Full Ahead in understanding climate change @ LMS
Griffith	Plainfield	Creating vertically aligned K-12 Science Assessments
Nolan	Kearny	National Wildlife Federation's EcoSchools U.S. program
Tchalabi	Kearny	Garden Expansion Project
Graziano	Pascack Valley	Increasing 3-Dimensional Teaching Practices by Supporting Teacher-Leaders

## **Progress and Highlights**

The research team is currently working on three papers. All three papers are at the final stages of preparation.

- Teaching and Teacher Education (TATE): Self-Created Social Network Maps: A Tool to Advance Professional Development of Science Teacher Leadership.
- International Journal of Teacher Leadership. Mapping Their Terrain: Using Social Network Analysis to Support Feminist Teacher Leadership and Educational Renewal.
- Studying Teacher Education. Reimaging teacher leadership through social network mapping: A collaborative self-study

# **Vignettes**



Connecting Math and Science: The presentation emphasizes an interdisciplinary approach to connect math and science education.



Integrating Math for Science Success: Open-ended math problems are crucial for encouraging critical thinking, promoting a deeper understanding of scientific concepts, and building problem-solving confidence across subjects.

Open Problems in Math: Flexible math instruction, particularly through open-ended problems, enhances scientific exploration and understanding by fostering critical thinking and strengthening problem-solving skills.

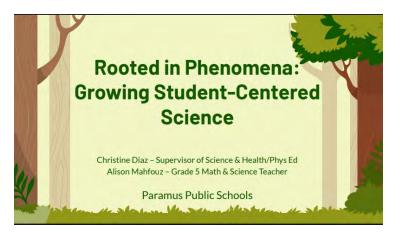
Instructional Methods: Open-ended math problems, especially in a "Group-challenge" setting, significantly enhance student engagement compared to traditional methods like lectures.

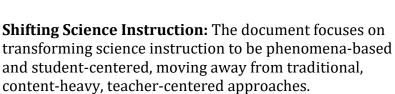
Why Multi-Solution Problems? Multi-solution tasks encourage critical thinking by prompting exploration of multiple approaches, analysis of different methods, and evaluation of effectiveness, contrasting with traditional single-solution problems.

Productive Struggle: Introducing multi-solution tasks helps students engage in "productive struggle," which is effortful learning that develops grit, creative problem-solving, and a sense of empowerment, as opposed to destructive struggle leading to frustration.

Initial Challenges and Progress: When initially working with third graders, students struggled with productive struggle and were stuck on having one correct answer. However, with continued work, they began to show productive struggle, understanding of multiple solutions, improved critical thinking, and increased inquiry-based questioning.

The Process and Next Steps: The process involved classroom observations, activity planning, lesson implementation, and consistent classroom visits. Future plans include continuing with the same group of students in fourth grade and potentially incorporating third grade, with bimonthly lesson implementation and adjustments.







**Culture Change:** This shift requires more than just changing lessons; it involves growing a new culture around science education.

**Professional Development (PD):** Continuous and embedded professional learning is crucial, including structured reflection time and administrative involvement. The quality of PD is directly linked to curriculum success.

**PRISM Models:** PRISM Models are presented not as end goals but as "springboards for sense-making, curiosity, and scientific reasoning." Models should be used as thinking tools to simplify or magnify phenomena and represent multiple ideas.

**Alignment with NJSLA-S:** Models are important for building conceptual foundations for constructed response tasks and emphasize the application of science concepts.

**Humanizing Pedagogy for Critical Science Education (HPCSE):** This approach, highlighted in a dissertation, emphasizes challenging status quo knowledge, centering science on students' lived experiences, and helping all students see themselves as successful contributors.

**Reconnecting with WIPRO:** The Paramus Public Schools are re-engaging with the WIPRO program, with a focus on bringing leadership voice back to the fellowship for long-term change.

**Articulation and Collaboration:** Monthly articulation meetings (MS and HS) are used to discuss instruction, assessment, NGSS shifts, and AI integration, as well as share PD takeaways and build

shared language. The goal is to create sustainable learning communities.

**Exploring AI in Science:** The schools are exploring how middle and high school teachers and students can use AI in science, piloting tools like MagicSchoolAI and KhanMigo, framing AI as a "thinking partner."

**Key Elements for Strong Science Shifts:** These include phenomena at the core, professional learning embedded in local culture, and collaboration across roles (teachers, coaches, supervisors).

**Learnings from Phenomena-Based Learning:** It is anchored in curiosity, empowering to students, and demands teacher support and collaborative planning. Successful districts have mentoring models, vet PD providers, and build reflection time into schedules.

**Future Steps:** Continue articulation meetings, rejoin WIPRO with leadership, evaluate pilot programs, visit model districts, and expand AI exploration, with a focus on PD, mentoring, and support systems.

**Metaphor:** Science instruction should be "as bold and joyful as a bag of Skittles," emphasizing curiosity-driven learning, student-centered discovery, multiple entry points, and integration across disciplines.

# Plan for the Next Two Quarters

Date	People	Activity
October 16, 2025	All Fellows	Year 4 (Year 2 of their 2-year projects) kick off!

#### **Calendar of Events**

The following are the site's meetings dates for the academic year:

- 1. Thursday, 10/16
  - a. 4:30-6:30
- 2. Tentative Friday 1/30 1-6pm
  - a. Schmitt as a backup
- 3. Culminating event
  - a. June 9 Tuesday 4:30-6:30

#### **NEW YORK - MERCY UNIVERSITY**



**Author:** Carmen King

# **Executive Summary Statement**

Don't judge each day by the harvest you reap, but by the seeds that you plant.

#### - Robert Louis Stevenson

Mercy Wipro Reimagined Fellows closed out the school year with dignity and aplomb. They presented at cross-site, local, and national conferences. Cohort 4 began considering ideas for their Mercy STEM conference presentations that will take place this fall. The Mercy Team worked on planning the conference and envisioning what we hope to be the next iteration of our Wipro Fellow work. We were pleased to know that there is a good possibility of another round of the Wipro Science Education Fellowships and are looking forward to leveraging previous work and ongoing partnerships that will support educators in VPLC projects of sustainability.

We continue to plan for our Fall conference. This year for the first time, it will take place across two days, Friday, October 17 and Saturday, October 18. The first day will be dedicated to STEM professional development presenting specialized workshops for educators. Some of the topics on the agenda are teaching fractions using a constructivist approach, integrating ocean literacy into teaching and learning, food justice as climate justice, and the use of AI to craft chatbots, avatars, and digital story worlds. We are anticipating a robust day of learning that will spur the imagination and practice of the attending educators. On the second day, each Wipro Reimagined Cohort 4 team will present their Wipro Reimagined projects. We are pleased to have a Wipro Fellow from Stanford

presenting at our conference on the power of art in STEM. Our conference also serves as a vehicle to recruit for our next cohort of Wipro Fellows.

Looking back across the year, it is quite apparent that the continued leadership and tireless work of our Fellows has encouraged district transformation. We are proud of the ways Fellows in Cohort 4 have involved their communities in their projects. Whether it was the STEM Spotlight Newsletter team spreading the word of exciting STEM happenings across the district, or the Arcade Challenge team hosting a school-wide event featuring fourth and fifth grade arcade game engineering designs, or the Learning to Code, Coding to Learn team hosting family nights to engage students and parents in coding, the fact is that they all planted seeds of STEM in their students and communities. As these seeds take root and bud, there is sure to be a continued effort in creating more opportunities for students in STEM. Our teams concluded their Fellowship work with plans for project sustainability beyond their Wipro Fellowship year.

We are looking forward to receiving applications for the fifth cohort of Wipro Reimagined and beginning the process of supporting teachers in their journey towards teacher leadership from the classroom and district transformation. We will also be waiting to learn more about what our next iteration of Wipro SEF may look like so that we can begin customizing it in our setting for our educators.

# Summary of Current Project(s) and Goals Progress and Highlights

Our Fellows wrapped up their projects for the school year feeling satisfied and highly accomplished. The STEM Spotlight Newsletter team finalized and sent their Newsletter out to the district! They felt great seeing how all the pieces came together and the richness of the newsletter. They said, "It was truly a team effort and we all put in a tremendous effort to produce a stellar final product that we are all proud of! So far there have already been over 1000 views from all around the world!"



Map of locations where our Newsletter has been accessed. We've gone world wide again!

The Arcade Challenge Team also felt accomplished as they brought their project to a close for the school year. They reported, "The clubs were eager and excited to present their finished games to the students in grades 3-5 during our annual Steamposium on Arcade Gallery Day in June. High school students joined us on Arcade Gallery Day to assist at our 'arcade game fix-it station' for the day."



Webster Elementary School (New Rochelle) annual Steamposium on Arcade Gallery Day in June

Last but definitely not least, The Learning to Code, Coding to Learn Team had their 2nd grade presentation held at the end of May and their 3rd and 5th grade presentations held in June. They were filled with pride at "the amount of rigor students put forth to complete their projects. Students were engaged and excited whenever they had the opportunity to work with their robots."



Ms. Vanegas' students designing their project

Wipro Reimagined Cohort 4 was a smashing success. We will reconvene one more time for project presentations at our annual conference in October.

# **Progress and Highlights**



Marcia Manzueta, Wipro SEF and Reimagined Fellow presents at Lasdon Park and Arboretum, Katonah NY at the CELF (Children's Environmental Literacy Foundation)

Sustainability Summer Institute, August 5-7, 2025. The theme of the institute was learning how to embed systems in your classroom that create a culture of sustainability through a climate lens. Marcia presented intriguing information of her school's journey of growing a kindness garden, celebrating with salad parties, and now moving into food waste prevention through a composting project. (CELF is an organization with which we share an ongoing partnership.)

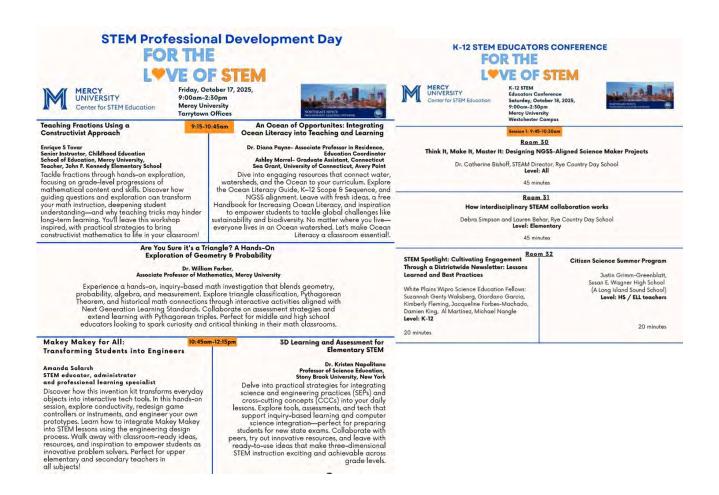




Elcilia Taveras-De LaRosa, (Wipro Reimagined Fellow Cohort 1) presents her STEM Hub project at the University of North Texas at Dallas Wipro Science Education Fellowship Annual Conference, June 13,2025.

# Plan for the Next Two Quarters

Date	People	Activity
October 17, 2025	Fellows,	STEM Professional Development Day
	educators, guests	
October 18, 2025	Fellows,	K-12 STEM Educator's Conference
	educators, guests	
November 2025	Educators and	Wipro Reimagined Applications Submitted
	administrators	
December 2025	Educators and	Wipro Reimagined Fellows Selected
	administrators	
January 2026	Fellows and	Wipro Reimagined Cohort 5 Whole Group Meeting
	administrators	



#### **Vignettes**

The Webster Wipro Reimagined team got great press with their Arcade Club fair <a href="https://coredocs.s3.us-east-1.amazonaws.com/documents/asset/uploaded file/2207/NRPS/5790122/June 19 English Newsletter 2 .pdf">https://coredocs.s3.us-east-1.amazonaws.com/documents/asset/uploaded file/2207/NRPS/5790122/June 19 English Newsletter 2 .pdf</a>

The students who participated in playing the arcade games had so much fun. The adults enjoyed the games and were impressed with the engineering and the innovative designs students used. The students who created the games were filled with pride in their work and themselves. The event was a prime example of how a Wipro Reimagined project can facilitate teacher leadership, student learning and engagement, and district transformation.





#### WIPRO STEM Education

In partnership with Mercy University, Webster teachers Kathy Coyne, Samantha Eisenberg, Sandra Galano, and Melissa Landau participated in the WIPRO STEM Education program and were awarded a grant to further STEM education at Webster.

Students in grades 3, 4, and 5 voluntarily joined the Arcade Club to create arcade games from recycled materials. They were further supported in this initiative by NRHS physics teacher Zachariah Biondo. Mr. Biondo and 10 high school students joined Webster's Arcade Club members, collaborating on game design, the engineering process, and coding options. NRHS and Webster students created a Game Gallery for all Webster students to enjoy playing.

https://core-docs.s3.us-east-1.amazonaws.com/documents/asset/uploaded\_file/2207/NRPS/5790122/June\_19\_English\_Newsletter\_ 2\_pdf City School District of New Rochelle ENewsletter June 19, 2025



Congrats to our very own Highlands teachers Mr. King and Mr. Vela who presented at ISTE25 on AI integration in the classroom. Mr. Vela is the 2025 NY State Schoolai Educator the Year and was invited today to present at the Schoolai booth. @rvaruolo #WPProud @HighlandsMS\_WP

5:30 PM · Jun 30, 2025 · 603 Views





Damien King, White Plains middle school educator, continued to exercise teacher leadership by presenting at ISTE (International Society for Technology in Education) on AI spaces for students and educators. Mr. King has created projects as a Wipro Reimagined Fellow in Cohort three – "TechBoat Battles" and Cohort four – "STEM Spotlight Newsletter." He is scheduled to present his Newsletter project with his team and present his AI work independently at our 2025 Wipro Conference.

#### TEXAS - UNIVERSITY OF NORTH TEXAS - DALLAS



Author: Dr. Ratna Narayan

#### **Executive Summary Statement**

The Wipro SEF Innovation Phase at UNT Dallas has successfully completed its third year. This year, I funded school projects, collaborative and individual projects focused on district transformation through teacher leadership. The Texas Education agency introduced new science TEKS (based on the NGSS) to be implemented from Fall 2024. I am happy that several projects addressed these new additions to the science TEKS.

In the innovation phase, Phase 3 Year 3, three types of projects were funded. School projects involved more than 2 fellows working together on a goal that impacted the school/ ISD. Collaborative projects were between Fellows in the same school, ISD or different ISDs collaborating on a project of common interest. Individual projects enabled Fellows to work on projects they were interested in and still be a part of Wipro and impact students. During the Phase 3, year 3 innovation phase, a total of 10 projects were funded, 4 schools, 3 collaborative and 3 individual projects.

There were several highlights. Many of the projects were designed to address a specific item newly added to the science TEKS by the Texas Education Agency, such as the STEM Education Framework, implementing the science & engineering standards. The projects were very responsive and comprehensive and met an obvious need. I was happy that all the projects were completed successfully, and the project websites were done on time as well. We submitted 10 proposals to be presented at CAST 2025 Nov in Dallas and 9 were accepted, Dr. Eisenkraft and Anne Gurnee will attend CAST, which ALWAYS makes me happy. My Fellows and DSCs had successful presentations at

Wipro conferences in Missouri, Florida, and California. Our own Wipro Annual Conference went off very well, I was so pleased.

Year 25-26 is Phase 3, year 4 of the innovation Phase. Though I sent out the RFP for year 4 proposals in June, I am still receiving proposals. Like last year, I will be funding school, collaborative, and individual projects.

We have 9 proposals accepted to present at CAST in Nov. All presenters will attend a CAST practice session at UNT Dallas on Sat Sept 27. The Induction and awards ceremony will be held at UNTD on Oct 10<sup>th</sup>, plaques for the presenters who completed their projects have arrived. Three more sessions are planned for Dec 5<sup>th</sup> and Jan 16 and Mar 16<sup>th</sup>. During one of these days, we will have a teacher AI shareathon. Wipro fellows and alums will attend and share how they use AI in their classrooms and learn from each other. The annual Wipro conference and meeting is scheduled for June 20<sup>th</sup>.

# Summary of Current Project(s) and Goals

Each project has a google site specifically for it. On this site you can find information regarding the participants, their proposal, research that informed the project, their data, reflections, results, and photographs among other items.

https://sites.google.com/view/wipro-2024-2025/wipro-websites

I plan that all the projects I fund in 25-26 will also have similar google sites.

A	School Projects		
1	Effects of Collins Writing in Science: Cedar Hill ISD	1 DSC	2
		7 alums	elementary
	grade Science and Biology STAAR (State of Texas		2 middle
	Assessment of Academic Readiness)/(EOC)End Of	Third year of	1 high
	Course scores across Cedar Hill Independent School	funding	school
	District.		
	Collins Writing: CHISD District Initiative		
	We might lose one of our fellows due to illness.		
2	From Concrete to Abstract Science: Grand Prairie ISD	4 alums	6 teachers
	They are combining the development of English and	2 new	paired up
	Spanish language speakers with STEM (Science,		at Ellen
		,	Ochoa
		funding	
	speaker is paired with a Spanish speaker to help		
	acquire and facilitate dual language acquisition		
	through a science project-based curriculum.		
	Focus on: STEM, TEA's STEM framework, dual		
	language vocabulary acquisition, leadership, science,		
	and engineering practices		
3	STEM Sensation: 3D Toys for the Senses: Irving ISD	1 DSC	Stipes
	This project aims to engage 3rd grade students in	2 alums	Elementary
	designing and creating a 3D printed game that can be	1 new	
	enjoyed by someone with a disability. Through this		
	project, students will learn about accessibility, 3D		

	modeling, and the process of designing and printing 3D objects. The game will focus on tactile elements that allow children with various types of disabilities to play and enjoy the experience. Focus: STEM, 3D Modelling, designing, printing, fostering empathy and STEM, science, and engineering practices		
4	Lancaster ISD This proposal aims to establish STEAM events/experiences for Pre-K through 5th grade students, families of 3 Lancaster ISD elementary schools and foster a culture of family and community engagement that enriches all students through hands- on STEAM experiences. Focus: TEA's STEM Framework Domain 5.5 STEM family engagement events/experiences hosted by the district/campus.	1 alum 2 new	Pleasant Run, Rosa Parks, West Main, and Belt Line Elementary
В.	Collaborative projects		
1	STEM Explorations for Gifted Minds: A Framework for Innovation and Excellence: Lancaster ISD We will focus on creating interdisciplinary, project-based learning activities that integrate science, technology, engineering, and math based on grade level content for grades 3-5. By providing these project - based learning activities, students will explore real-world experiences and connect them back to the classroom content. Our project will incorporate robotics, coding, engineering design, and inquiry-based activities that can prepare students for future STEM careers.  Focus: his proposal aims to implement the TEA STEM framework in the Gifted and Talented (GT) classroom for students in grades 3rd through 5th.		Pleasant Run, West main elementary
2	Building Blocks of Discovery: K-2 STEM adventures DeSoto ISD This proposal outlines an exciting initiative to engage K-2 students in the world of STEM through three interactive projects: designed to spark curiosity and foster a love for learning while introducing fundamental concepts in physics, engineering, and design thinking. Focus: TEA STEM Framework, scientific and engineering practices, hands-on science	1 DSC 2 alums 1 new	Cockrell Hill elementary, DeSoto
3	Extending writing through design challenges: Lancaster ISD This project aims to engage 3rd and 6th grade students in science content by utilizing the 5E model	1 DSC 2 alums	3 <sup>rd</sup> graders at Pleasant Run Elementary

Engineering Practices and Engineering Design Challenges connect learning to real-world problems. Students will be expected to reflect on their learning of the content after the conclusion of the Design Challenges using short constructed response questions. Focus: articulate science content learned through writing, engineering design challenges, science, and engineering practices  C Individual Projects  1 Personalized learning through AI: a new approach to differentiation in science: Brittney Preston, Lancaster  Run				
C Individual Projects  1 Personalized learning through AI: a new approach to differentiation in science: Brittney Preston, Lancaster ISD  This proposal aims to integrate artificial intelligence (AI) into 3rd - 5th grade science classrooms to enhance differentiated instruction through leveled choice boards that will be used during small group/ intervention times in the science classroom. The subjects of the study will be four 3rd - 5th science teachers and twenty-four students in total. There will be 6 students chosen by the teacher to collect data based on learning levels high, medium, and low. The goal is to collect data from pre/post exams created by district curriculum to see the effectiveness of the activities with students.  Focus: integrating AI into elementary school science, LISD places a high value on equity in education, and AI-based differentiation can ensure that all students, regardless of background or ability, can access quality science instruction.  2 Mixed Reality and Aquaponics: Using immersive Technology in the classroom, Marquita Muhammad, Lancaster ISD In this project four classes of 7th and 8th grade students and the STEM and Applied Engineering teachers from Elsie Robertson will collaborate on a sustainable PBL project using 3D technology. Students will use the Z-space platform to bring learning to life through immersive experiences and hands on through the aquaponics system.  Focus: As a STEM school with limited resources, the project provides students with hands and minds on simulations providing virtual and authentic collaborations of aquaponics systems and technology		Design Challenges during the elaboration stage. During this project, we will utilize Science and Engineering Practices and Engineering Design Challenges connect learning to real-world problems. Students will be expected to reflect on their learning of the content after the conclusion of the Design Challenges using short constructed response questions. Focus: articulate science content learned through writing, engineering design challenges, science, and		in George Washington Carver 6 <sup>th</sup> grade
differentiation in science: Brittney Preston, Lancaster ISD  This proposal aims to integrate artificial intelligence (AI) into 3rd - 5th grade science classrooms to enhance differentiated instruction through leveled choice boards that will be used during small group/ intervention times in the science classroom. The subjects of the study will be four 3rd - 5th science teachers and twenty-four students in total. There will be 6 students chosen by the teacher to collect data based on learning levels high, medium, and low. The goal is to collect data from pre/post exams created by district curriculum to see the effectiveness of the activities with students. Focus: integrating AI into elementary school science, LISD places a high value on equity in education, and AI-based differentiation can ensure that all students, regardless of background or ability, can access quality science instruction.  2 Mixed Reality and Aquaponics: Using immersive Technology in the classroom, Marquita Muhammad, Lancaster ISD In this project four classes of 7th and 8th grade students and the STEM and Applied Engineering teachers from Elsie Robertson will collaborate on a sustainable PBL project using 3D technology. Students will use the Z-space platform to bring learning to life through immersive experiences and hands on through the aquaponics system. Focus: As a STEM school with limited resources, the project provides students with hands and minds on simulations providing virtual and authentic collaborations of aquaponics systems and technology	С	Individual Projects		
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3 Using the Engineering Design Process to Increase Lancaster		Mixed Reality and Aquaponics: Using immersive Technology in the classroom, Marquita Muhammad, Lancaster ISD In this project four classes of 7th and 8th grade students and the STEM and Applied Engineering teachers from Elsie Robertson will collaborate on a sustainable PBL project using 3D technology. Students will use the Z-space platform to bring learning to life through immersive experiences and hands on through the aquaponics system. Focus: As a STEM school with limited resources, the project provides students with hands and minds on simulations providing virtual and authentic collaborations of aquaponics systems and technology	1 alum	Robertson middle school
	3	Using the Engineering Design Process to Increase		Lancaster

Student Engagement in Physics, Robert Matthews,	ISD STEM
Lancaster ISD	High School
As a physics teacher, I will use Science and	
Engineering Practices specifically and Engineering	
Design Challenge for each of my units in order to	
increase student engagement and learning gains	
related to physics content knowledge.	
Focus: This project will engage students in hands-on	
learning and real-world application to solve problems	
and challenges. The proposal also supports district	
goals of increasing STEM education and creating	
pathways for students to pursue advanced learning in	
the field of science.	

# **Selected/Highlighted Projects**

I have been waiting to write about this project as I myself have learned so much from it. This is Brittney Preston's collaborative project titled Personalized learning through AI. This project integrated artificial intelligence (AI) into a 4th and 5th grade science classroom to support differentiated instruction through leveled choice boards used during small group intervention. They used AI-powered tools, such as MagicSchool.ai and Canva, to create and customize the boards to meet the diverse needs of students. I trust Brittney, she is awesome, and I will admit I was a little skeptical because of my own ignorance and she assured me that the choice boards would just enhance the class and not replace Hands-on activities the students would participate in, in class.

Even after the project, I was still curious about the use of AI in a class regarding teaching science. I teach a science methods class, Teaching Science EC-8 at the university, we have been talking about the use of AI as a resource. I had Brittney present to the undergraduates in my class regarding how too use magic school AI and Canva to create choice boards in the science class to help with differentiation with regards to science activities, high, medium, and low for a given science topic and grade.

Brittney did a really good job and received very good reviews for her presentation from my students. I decided to incorporate the use of choice boards in an assignment the undergraduates will be completing today, and I am very excited about it. Preliminary conversations with my undergraduates revealed they really liked and appreciated the use of A1 as a resource to enhance their science lessons. Like I said earlier, I live and learn, also Thank you Brittney.

# **Progress and Highlights**

Wipro@UNT Dallas presentations at other Wipro Sites

Three of my DSCs and 5 Fellows visited and presented at Wipro conferences at MO, FL, and CA Below is their reflection on their trips:

#### Janice Washington: Wipro Fellow, DeSoto ISD, presented at the MO Wipro conference.

At the STEM conference in Missouri, engaging with other WIPRO fellows was one of the most impactful parts of the experience. I learned about innovative teaching strategies and real-world STEM applications that other educators are successfully implementing in their classrooms. From

hands-on engineering challenges and student-led investigations to integrating technology like coding and robotics, the shared ideas expanded my perspective on how to make STEM learning more dynamic, inclusive, and relevant.

A key benefit was the opportunity to collaborate with educators from a wide range of grade levels, districts, and communities. Hearing their stories, both successes and challenges, helped me reflect on my own teaching practices and identify areas for growth. I was especially inspired by the creative ways fellows are engaging underrepresented student groups in STEM, which reminded me of the importance of equity and representation in the classroom.

The sense of community among WIPRO fellows also fostered meaningful connections that I know will extend beyond the conference. We exchanged resources, offered feedback, and encouraged one another in a way that was both professional and deeply supportive. This collaboration reignited my passion for STEM education and gave me practical tools and renewed confidence to bring fresh, student-centered ideas back to my own classroom.

#### Raisha Allen, DSC DeSoto ISD, attended the Wipro MO conference.

I appreciated the opportunity to attend the University of Missouri WIPRO Science Education Fellowship. In my role as a district science coordinator, it was an inspiring experience to collaborate with dedicated educators and observe the methods implemented by various school districts in Missouri to enhance STEM instruction. I acquired new and innovative strategies aimed at strengthening our science and mathematics curriculum within DeSoto ISD. A significant highlight involved learning about the integration of vertical science and mathematics projects, which contribute to the creation of more meaningful, hands-on learning experiences for students across all grade levels. These projects not only foster collaboration across different grade bands but also deepen comprehension by linking real-world STEM concepts. We took pride in showcasing the remarkable STEM initiatives currently underway in our district and eagerly anticipate applying the insights gained to promote sustained growth in science education.

# Latrice Cooks, Wipro Fellow, Lancaster ISD, presented at the FL Wipro Conference

The Wipro Conference in Tampa was such an eye-opening experience for me and gave me a whole new perspective on STEM. At first, I honestly felt a little intimidated being around fellows who were seasoned secondary science instructors. As a Pre-K through 5th grade STEAM teacher, I've done a lot of hands-on projects, but I started to question if they were rigorous enough. Then I had to remind myself that I'm helping students build that early foundation—I'm at the awareness stage of STEAM, which is exactly where my kids need me to be.

What really excited me was getting so many new ideas to bring back to my school. One that stood out was the "Data with Dads" event—an activity where dads come to school and help calculate velocity with their kids on the track. Activities like this build not only academic skills but also strengthen school-family connections in meaningful ways. I also gained valuable insight into building partnerships with local businesses to support educational programs, which I plan to pursue to enhance student learning opportunities.

Moving forward, I will incorporate more inquiry-based learning, real-world applications, and community involvement into my instruction. This experience empowered me to think bigger and design STEAM experiences that are both rigorous and deeply engaging for students and families alike.

#### Robert Matthew, Wipro Fellow, Lancaster ISD, presented at the Wipro FL event:

My visit to the Wipro site in Tampa was a valuable experience that gave me several new ideas to bring back to my own classroom. I had the opportunity to sit in on two particularly impactful presentations, one focused on vocabulary instruction and another on the use of Generative AI in the classroom. Each presenter offered thoughtful, practical strategies that expanded the way I think about engaging students. The vocabulary session highlighted creative approaches to building word knowledge in context, which I'm excited to adapt for my own students. The AI presentation, on the other hand, opened my eyes to how these tools can support personalized learning and spark curiosity when used with intention. It was inspiring to see how different fellows are experimenting with new methods while staying grounded in strong pedagogy. The visit not only gave me actionable strategies but also left me feeling more connected to the broader Wipro community and motivated to keep pushing my own practice forward.

#### Faith Milika, DSC Lancaster ISD, attended the FL Wipro event.

As the Wipro Fellow for Lancaster ISD, I'm grateful to have had the opportunity to attend the Wipro Science Fellowship Annual Conference in Tampa in May 2025. This enriching experience allowed Lancaster ISD educators and me to connect with District Science Coordinators and teachers from the Tampa area, gaining valuable insight into both ongoing and emerging projects that address challenges similar to those we face in Texas classrooms. The conference not only provided practical strategies that can be adapted to support our students' needs but also sparked my interest in innovative topics such as Artificial Intelligence in education and Storylines in Science—areas I look forward to exploring further.

# Jeremy Hesse, DSC, Cedar Hill ISD, attended and presented at the CA Wipro event.

From these presentations, I learned the critical importance of fostering robust argumentative and discourse skills in science education, particularly for students in grades 6-12. "Evidence to Explanation: Empowering Students with Argumentative Language Tools" emphasized the core components of a strong argument: a clear claim, supporting evidence, and logical reasoning to connect the two. It highlighted the distinction between mere persuasion and evidence-based argumentation, advocating for a focus on verifiable facts and logical support. Their handouts were well organized and scaffolded for the 4 different grade levels. My science teachers could implement something very similar in my district.

Complementing this, "Developing Talk Science in 6-12" underscored the power of verbal discourse in deepening scientific understanding. It stressed that science talk transforms individual ideas into shared resources for collective reasoning, promoting critical thinking and language development. The presentation outlined practical strategies (teacher toolkit) for facilitating meaningful science discussions, including establishing a welcoming environment, utilizing "talk moves" to prompt deeper thinking and peer interaction, and strategically framing questions to encourage diverse perspectives. Both presentations collectively reveal that by equipping students with the tools to construct and articulate evidence-based arguments, and by cultivating a classroom culture that values and facilitates scientific discourse, educators can significantly enhance students' engagement, comprehension, and ability to think.

# Kellie Burchfield, Wipro Fellow, Cedar Hill ISD, attended and presented at the CA Wipro Conference

I had the opportunity to attend the end-of-year conference at both the Missouri and California

locations. This year, I participated in the California conference, whereas last year, I attended the conference in Missouri. Attending these conferences afforded me the opportunity for professional growth and collaboration. It allowed me to exchange ideas, share successful strategies, and learn about new instructional methods. Being surrounded by peers fostered a sense of community and support. Additionally, it provided me with access to resources that will enhance classroom practices and strategies to help me grow other science teachers as an instructional specialist. Moreover, it promotes continuous learning and strengthens both individual and collective teaching effectiveness. I feel like attending these conferences is beneficial to everyone involved in WIPRO. I am looking forward to attending more conferences in the future.

# Sherry Thompson, Wipro Fellow, Irving ISD, attended and presented at the CA Wipro Conference

During my time at Stanford University, I was able to present as well as watch presentations from other Wipro fellows. This opportunity has sparked my interest in a multitude of ways in regard to providing future professional development to my campus. To begin with, I appreciated how the H-CCLS group from California presented their project in stations in which we were able to rotate with a packet of objectives and guiding questions. I was intrigued by the way one of the presenters scaffolded the learning for EL students with visuals to represent spatial as well as academic vocabulary. Modeling the reason, we have seasons in 8th grade is also able to be adapted to elementary grade levels. Also, the dioramas showed an extensive understanding of ecosystems by their students. Small group activities are a great way to differentiate learning and provide feedback one on one.

I was also able to attend a high school H-CCLS group that discussed utilizing mathematical computational skills in science data analysis. Basic math concepts were related to real world scenarios that immediately grabbed my attention. For instance, mining land using a cookie required us to use financial literacy skills while discussing preserving land. We also discussed the importance of using the same vocabulary among different disciplines.

During the last session, it was interesting to see how one district uses a toolbox of information to develop common language in regard to teaching and reflecting on science lessons. This is helpful in vertical alignment since teachers understand what is needed for students to be successful in upper grade levels. I am excited to share this valuable information with my colleagues as we will soon embark on a new school year. I am looking forward to sharing ideas that teachers would like to implement in their classroom.

# Dr. Narayan, IHE UNT Dallas, attended the CA Wipro conference.

Thank you Dr. Eisenkraft for enabling me to attend the Wipro CA conference. It has been a while since I attended one of these out-of-town conferences and with my conference coming up in a few days, I learned a lot I can implement at my own conference.

I love it when my Fellows present at other Wipro University conferences. They return full of confidence, with lots of new ideas and a dual sense of purpose a) that they are indeed part of a bigger Wipro family and b) they come brimming with ideas they can implement with their own classes. I believe the most important impact is with regard to their self-worth, that an organization, other than their ISD, sees something in them and provides them an opportunity and covers the cost for them to present at a BIGGER, OLDER, MUCH MORE WELL-KNOWN UNIVERSITY than the one they are associated with! Initially they were all scared and nervous, but they worked hard and did well and can claim that with a sense of pride. It is an opportunity they will never forget! Thank you

for creating this very positive memory they will carry for the rest of their lives!

# **UNT Dallas Annual Conference, June 13th, 2025**

I was so pleased with how everything went, we ended on time right to the minute and it was an awesome event.

https://sites.google.com/view/wipro-2024-2025/wipro-websites?authuser=0

On this website there is a tab for the Wipro Conference, and it has a link to the conference agenda and the abstracts. I had 5 sessions, each with 4 concurrent presentations made by Wipro Fellows from UNT Dallas as well as other sites. Each room had a room host and IT help assigned to it, there were no IT issues. Given the tight schedule, I assigned Fellows and DSCs to be on the feedback table for each session, the remaining audience wrote their warm and cold feedback and submitted it. After each session, a runner took the submitted feedback to the printer and emailed them to the presenters. UNTD presenters also attached the feedback to their own individual google sites (please see under presentations).

One thing I am very proud of is the Wipro Book session. During this session that all attendees were present at, we presented copies of the book to the ISD superintendents/ admins, and UNTD administrators and the DSCs.

This is the slide show I used for the Book Presentation, <a href="https://docs.google.com/presentation/d/1PnZwg-Hkal-h5xRmI-jnSYst2hLE-1aZj30iSyn9YkY/edit?usp=sharing">https://docs.google.com/presentation/d/1PnZwg-Hkal-h5xRmI-jnSYst2hLE-1aZj30iSyn9YkY/edit?usp=sharing</a>

I went through the book chapter wise and picked out the quotes featuring all my UNTD Fellows and I asked them for a slide with the quote, their pic, name, and designation on it. I invited them to stand and read the quote out as it was displayed on the screen. We took their pictures and presented them with a flower. But that wasn't all, I knew that in the audience were fellows from other Wipro Sites like Nicole Holman, David Kleiner, Yichang Liu, and DSC Eric Lewis, I created slides for them too with their pictures and quotes, invited them to stand and read their quotes out and had their picture taken, presented with a flower and a color coded copy of the Wipro Book. They were so pleased, and I was so happy too.

These are the pictures from the event, <a href="https://photos.app.goo.gl/iuacRh2YRTY9ut3y5">https://photos.app.goo.gl/iuacRh2YRTY9ut3y5</a>. The event was also attended by Ms. Anne Gurnee, the Wipro evaluator and I received very valuable feedback from her Texas year end conference survey and response report.

Year 25-26 is Phase 3, year 4 of the innovation Phase. Though I sent out the RFP for year 4 proposals in June, I am still receiving proposals. I am expecting to fund 8 proposals this year. This week, I am meeting with project participants via zoom to answer any questions prior to sending out acceptance letters and project websites. I met most of the participants by zoom yesterday. Interestingly, a new Environmental Science School in GPISD sent in their proposal. Their RQ was soil temperature will be most ideal for plant growth. I talked to them about how their garden proposal needed to focus more on their science teaching using their garden and the science learning of their students. They will recraft their proposal and send it to me soon.

#### CAST 2025 Conference and presentations

All the participants have been registered, and the schedule of the 9 Wipro Presentations is as below. I am so pleased Dr. Eisenkraft and Ms. Anne Gurnee will be attending.

Session Title	Session Code 1	Session Code 2	Date	Time		Venue
Wipro Presents Building Blocks of Discovery: K-2 STEM Adventures	20157		11/13/25	11:30 AM - 12:30 PM	Majestic 6-7	Sheraton Dallas Hotel
Wipro Presents: STEAMing Year-Round—Building Family Engagement Through Interactive STEM Events	20208		11/13/25	01:00 PM - 02:00 PM	Majestic 6-7	Sheraton Dallas Hotel
Wipro Presents: STEM Sensation—3-D Toys for the Senses	20191		11/13/25	02:30 PM - 03:30 PM	Majestic 6-7	Sheraton Dallas Hotel
Wipro Presents: Design Across the Disciplines—STEM That Connects, Engages, and Inspires	20261		11/13/25	04:00 PM - 05:00 PM	Majestic 6-7	Sheraton Dallas Hotel
Wipro Presents: A³—Augmented and Authentic Aquaponics	20280		11/14/25	09:30 AM - 10:30 AM	Majestic 6-7	Sheraton Dallas Hotel
Wipro Presents: Choice Boards Unleashed Innovating Differentiation for Every Learner	20262		11/14/25	11:00 AM - 12:00 PM	Majestic 6-7	Sheraton Dallas Hotel
Wipro Presents: Hands on, Minds on — Exploring the Link Between Engineering Design and Student Writing	20246		11/14/25	12:30 PM - 01:30 PM	Majestic 6-7	Sheraton Dallas Hotel
Wipro Presents: From Concrete Models to Abstract Thinking	20188		11/14/25	02:00 PM - 03:00 PM	Majestic 6-7	Sheraton Dallas Hotel
Wipro Presents: Using the Engineering Design Process to Increase Student Engagement in Physics	20207		11/14/25	03:30 PM - 04:30 PM	Majestic 6-7	Sheraton Dallas Hotel

# <u>Challenges we are facing:</u>

2 of our participating school districts, Cedar Hill and Grand Prairie have new superintendents, I am yet to meet them, I will as soon as I get on their schedule. I will invite them to the Wipro award and Induction ceremony.

The successful CHISD team has disbanded, some teachers have left the profession due to illness, moving to another school district or retiring. Many of their teachers are uncertified or first year teachers who do not meet our requirements of being a Wipro Fellow.

We have not had a DSC from Grand Prairie for 2 years now., Ian Talamentes, a fairly new Wipro Fellow, has taken charge of his group project for the last few years. I asked him about how and why he stepped up to the plate to take responsibility for his group in absence of a DSC, this is what he had to say. I am so proud of him.

https://docs.google.com/document/d/1dy9FpWdTGFolUxs20wxHI2s1KV8E2KRTrNiC uyhue0/edit?usp=sharing, He is spearheading the new project for 25-26 as well.

It is possible that one of our DSCs who is on medical leave may not continue. We will know more in a few weeks. However, in spite of these challenges, we persevere!

## Plan for the Next Two Quarters

The plan for the next two quarters is to ensure that all the projects are carried out with fidelity and purpose. Unlike previous years, the RPF does not include a requirement for presenting at CAST 2026. To counter this, I will work with fellows to present PDs at their schools and districts. As I said earlier, I am fascinated by AI and from brief conversations with our fellows most use chat GPT and magic school AI for a variety of purposes. Some fellows range from not using AI at all to being mildly proficient with its use. One of the things I am planning to do in Dec is to hold an AI shareathon where all of them will present how they best use AI round robin style to each other. That is the initial thought. Several Fellows are not aware of AI tools other than ChatGPT and magic school A1 and I have presenters who use tools like Claude A1, Gamma, Sora, and Image X to name some. It will be a learning experience for all.

#### **Vignettes**

#### Ian Talemantes

My name is Ian Talamantes. I am a Fourth Grade Dual Language teacher at Ellen Ochoa STEM Academy with 12 years of teaching experience. I teach using argument driven inquiry in all subjects thanks to what I have learned as a science teacher. With a background that includes teaching 5th-grade science, I consistently seek innovative methods to ignite curiosity in others.

When you asked me to write about myself, I was a bit apprehensive. How can I write about my achievements and efforts without sounding boasty? I spent a while looking inward, thinking of whether I am even worthy of the attention. I had to reflect and remember who I was before I was asked to take part in the Wipro Fellowship. The first memory that came to mind was this:



I remember visiting local grocery stores, taught from a young age that I should accompany my mother to keep her safe. Standing in line, I would observe the wall of candy and chocolate bars—a mural of desire that, for me, was an intangible indulgence. Time and again, I stayed quiet and focused on bagging essentials for my mother. Growing up with economic hardship taught me the value of money, work, and merit. It also instilled in me the habit of always doing more than asked, because that was the way to get ahead and create opportunities.

When I inherited the lead position of my campus project, I did not see it as extra work; I saw it as a chance to contribute to something bigger than my own classroom. I approach leadership as service—I do not seek recognition; I seek opportunities to help. Taking on the challenge of the Wipro Fellowship gave me exactly that: a way to support my colleagues, strengthen the credibility of our STEM initiatives, and provide meaningful opportunities for our students.

As a 12-year dual-language teacher at Ellen Ochoa STEM Academy, I was chosen for this role because I consistently embraced innovation. Now, I lead the project, intentionally bringing new teachers into the circle while ensuring vertical alignment across grade levels. In our classrooms, I've witnessed students transform from hesitant learners into confident risk-takers, especially during recent STEM challenges like our food-web build, where every student became fully engaged, creative, and collaborative.

Leadership became a big deal to me when I first heard my principal, Dr. Dinnah Escanilla, speak

about the absurdity of needing to have a title to be considered a leader. A leader can be found anywhere. A leader can be built through the practice of tenacity and passion.

At the same time, I cannot ignore the ways the fellowship has shaped me. I am far more confident as a leader than I was three years ago. The work pushed me to step forward in ways I never expected, and I found my voice as someone who could guide and influence beyond my own classroom. In fact, after my first year as a Wipro Fellow, I was honored to be named Teacher of the Year—an award I believe reflects both the growth I experienced through the fellowship and the values instilled in me from childhood: to work hard, to serve others, and to do more than asked.

Looking back over these three years, what stands out most to me is not necessarily the title of "fellow," but the visible change in students and colleagues. Students who once doubted themselves as leaders now take risks, explain their thinking with confidence, and embrace STEM challenges as opportunities for growth. Teachers who joined our team have found a space where collaboration is not only encouraged but validated through the projects we have struggled with together. For me, that is the heart of leadership: creating opportunities where others discover and challenge their own capacity to succeed.

I began this journey with values shaped by my upbringing, always doing more than asked, never seeking recognition, but pursuing what is needed. Leading the Wipro Fellowship in my campus has given me the chance to live out those values on a broader stage. It has lent credibility to STEM work across our campus and even across our district, it has given students new ways to see themselves and reminded me that leadership is not about being at the front, but about building the conditions for others to thrive. My hope moving forward is to continue creating opportunities like these, where STEM, service, and leadership intersect and to keep proving that teacher leadership can grow from any classroom when we choose to serve first.

#### Latrice Cooks

I am dedicated STEAM educator in Lancaster ISD with a strong commitment to innovative teaching. I have a bachelor's degree in interdisciplinary studies from the University of Texas at Arlington and have only recently completed my master's in education leadership with a STEM concentration at UNT Dallas. I am nationally certified in STEM Education, and have seven years of elementary reading teaching experience, spanning 3rd and 4th grades. I have been a Wipro

The Wipro Conference in Tampa was such an eye-opening experience for me and gave me a whole new perspective on STEM. At first, I honestly felt a little intimidated being around fellows who were seasoned secondary science instructors. As a Pre-K through 5th grade STEAM teacher, I've done a lot of hands-on projects, but I started to question if they were rigorous enough. Then I

had to remind myself that I'm helping students build that early foundation—I'm at the awareness stage of STEAM, which is exactly where my kids need me to be.

What really excited me was getting so many new ideas to bring back to my school. One that stood out was the "Data with Dads" event—an activity where dads come to school and help calculate velocity with their kids on the track. Activities like this build not only academic skills but also strengthen school-family connections in meaningful ways. I also gained valuable insight into building partnerships with local businesses to support educational programs, which I plan to pursue to enhance student learning opportunities.

Moving forward, I will incorporate more inquiry-based learning, real-world applications, and community involvement into my instruction. This experience empowered me to think bigger and design STEAM experiences that are both rigorous and deeply engaging for students and families alike.

#### Calendar

All our meetings will be face to face at UNTD FH 138AB.

# **Meeting dates**

Induction and plaque ceremony, Friday Oct 10th 5:30-8:30 pm, UNT Dallas, FH 138AB

Friday Dec 5th 5:30-8:30 pm, UNT Dallas, FH 138AB

Fri Jan 16th 5:30-8:30 pm, UNT Dallas, FH 138AB

Monday Mar 16th 5:30-8:30 pm, UNT Dallas, FH 138AB

Saturday June 20th Annual Wipro Conference and meeting, UNT Dallas

# PROGRAM EVALUATION ANNE GURNEE CONSULTING, LLC

2024-2025 Evaluation Summary

**SEE NEXT PAGES** 



# 2024-2025 Evaluation Summary

# **September 16, 2025**

# Prepared by:

Anne Gurnee, M.Ed., Founder & Brian Garrison, M.A., Research Assistant Anne Gurnee Consulting, LLC

# Submitted to:

Center of Science and Mathematics in Context (COSMIC) at the University of Massachusetts Boston



# **Executive Summary**

With financial support from Wipro, the University of Massachusetts Boston's Center of Science and Mathematics in Context (COSMIC) launched an initiative to prepare teacher leaders in partnering school districts. This initiative, the Wipro Science Education Fellowship (Wipro SEF), was originally built on the success of the Boston Science Partnership's Science Education Fellowship, a project funded by the National Science Foundation from 2009-2012. In 2012, the Wipro Science Education Fellowship program expanded to include partnering school districts from New Jersey in collaboration with Montclair State University and, then in 2013 with New York and Mercy University. In 2017, the program added a new state, Texas, with a new university partner, the University of North Texas at Dallas (UNT), and in 2018, three more universities, Stanford University in California, University of South Florida and the University of Missouri joined Wipro SEF.

Since its inception, a major goal of the Wipro Science Education Fellowship is to develop a cadre of teacher leaders in each partnering district who deepen their practice and lead from their classrooms. As the program has remained active in each state's partner districts for seven or more years, an additional goal has arisen: district transformation. Defined individually by each state and their partner districts, the goal of district transformation has become an equally important outcome of the program in addition to the continued development of high-quality teacher leaders.

In 2022-2023, a new phase of funding of the project began, Wipro SEF Innovation, which allowed for each site to grow and modify their program while keeping the two prime goals of teacher leadership and district transformation at the core. Here is a summary of each state's Wipro SEF Innovation structure:

- California—Two more cohorts of Fellows from their existing partner districts are going through the "classic" Wipro SEF program; School Leaders Program provides leadership professional development for selected leaders from their partner districts.
- Florida–Fellows from partner districts propose extended GPS one- or two-year projects that involve new Fellows and utilize action research.
- Massachusetts–Individual Fellows engage in select projects such as vertical teaming; professional development seminars are offered to interested Fellows.
- Missouri–Three more cohorts of Fellows from their existing partner districts (and some new districts as well) are engaging in a Wipro SEF "classic" program with a focus on science and math educators initially at the 6-12 level but now expanding to include K-5.
- New Jersey–Fellows from partner districts are developing and implementing two-year district goal-aligned projects involving new Fellows.
- New York–Fellows from partner districts are engaging in new GPS projects that are generated, in part, at an annual K-12 STEM Teacher Conference each fall.
- Texas—School-based projects are occurring in each partner district annually; collaborative minigrants are offered that involve at least one Fellow and one other district personnel.

#### Wipro Science Education Fellowship: 2024-2025 Evaluation Summary

Prepared for the Center of Science and Mathematics in Context at UMass Boston

The Wipro Science Education Fellowship program leadership contracted again with Anne Gurnee Consulting, LLC (AGC) to continue an evaluation study of Wipro SEF Innovation during the 2024-2025 academic year. The goal is to document outcomes of participation on the Fellows and the participating school districts. Specifically, the evaluation seeks to gain insight regarding the effects of the program on the development of teacher leaders within the districts, the growth in the District Science Coordinators leadership and how they engage the cadres of teacher leaders, and to the extent possible, the type and amount of district impact that results from the Wipro SEF Innovation program.

During the year, the evaluation team submitted several interim reports including a summary of the midyear survey data, summary data from the District Science Coordinators virtual leadership conference sessions, and a summary of results from the Texas year-end conference. The focus of this report will be to highlight the key findings from program activities in spring 2025, to present overall findings of note, and to offer data-driven recommendations on next steps for continued program growth and refinement.

# **Key Findings-2024-2025**

In 2025, there continued to be broad agreement among the Fellows and District Science Coordinators involved with the program that the Wipro Science Education Fellowship was successfully implemented at all sites with active Fellows (California, Florida, Missouri, New York, New Jersey and Texas). The data from this evaluation study indicated that the program was positively received by participants and resulted in numerous outcomes and impacts for Fellows and District Science Coordinators and continued evidence of district impact.

#### Key overall findings from the 2024-2025 academic year include:

- A large majority of Fellows (97%) and DSCs (94%) reported being "satisfied" or "very satisfied" with the program. Half of DSCs chose "very satisfied."
- Nearly all Fellows (96%) and DSCs (94%) reported that the program met or exceeded expectations. A quarter of Fellows said it exceeded expectations.
- Almost all Fellows (95%) and DSCs (85%) agreed the program was worth their time. 97% of Fellows and 100% of DSCs would recommend it to a colleague.
- The most frequently cited source of support by Fellows (87%) and DSCs was a network of likeminded colleagues.
- Fellows reported meaningful growth in teacher leadership, particularly in Florida, New York, Missouri, and Texas. Self-identification as advanced/expert teacher leaders doubled or more in those states.
- Teacher leadership activities most frequently engaged in were guiding other teachers, leading classroom improvement efforts, and collaborating with peers.
- Activities Fellows were least confident in were writing articles for peers and leading large-scale professional development.
- At least three-quarters of Fellows in all states except California (64%) agreed Wipro SEF had a positive impact on their schools.
- District impact perceptions varied more widely, with strong agreement in Texas, Florida, New York, New Jersey, and Missouri. Only 36% of California Fellows saw impact at the district level.
- 100% of DSCs agreed Wipro SEF had a positive impact on their district, an increase from 2024.
- Fellows and DSCs widely agreed that teachers can lead district change and should aim for it.
- Participants in cross-site conferences emphasized how such interactions inspired new strategies and built a stronger professional community.
- Newer initiatives, such as SciLeadPro and the Climate Change Book Club, provided meaningful leadership development for DSCs.
- Teacher-led innovation projects continue to grow and succeed fostering increased student engagement, community-building and improved communication in schools and districts.
- Long-term Fellows and DSCs are ready for new, differentiated roles and more sophisticated professional development experiences.

#### **Recommendations**

While the Wipro Science Education Fellowship continues to be successful, input collected from participants (e.g., Fellows, District Science Coordinators, and program leadership) indicated potential areas for refinement of the model. As the program continues to evolve during this Innovation phase, the evaluation team provides the following recommendations to help to inform the future program growth and expansion:

#### 1. Maintain and deepen the value of professional relationships.

As in prior years, Fellows and DSCs ranked the network of like-minded colleagues as the top source of support. Find ways to maintain these relationships through informal meetups, consistent check-ins, and shared leadership structures, especially across cohorts and states.

# 2. Communicate the core goals of teacher leadership and district transformation frequently and explicitly.

Repeat and reinforce the dual program goals with all stakeholders. Encourage Fellows and DSCs to define these terms themselves, reflect on their own leadership growth, and articulate district impact in concrete ways.

# 3. Consider relaunching "classic" Wipro SEF in select districts.

Given teacher turnover and the influx of new staff in many districts, offering new rounds of the classic, two-year fellowship can serve as an onboarding pipeline and leadership accelerator.

#### 4. Differentiate offerings for long-term Fellows and DSCs.

Continue to provide advanced training, leadership roles, or publication opportunities for those who have participated in the program for five or more years. Encourage veteran Fellows to take on mentoring, newsletter, or professional development leadership roles.

#### 5. Offer structured support for professional writing.

Because Fellows report low confidence in academic writing again this year, provide optional writing workshops or mentorship opportunities to help them publish or present their work more broadly.

#### 6. Engage districts in planning for sustainability.

Start working with district leadership to fund or co-fund Wipro SEF activities. Use the evidence of program impact to build the case for inclusion in district strategic plans and budgets.

#### 7. Continue investing in special initiatives like SciLeadPro and cross-site book clubs.

These efforts empower DSCs, foster leadership identity, and build a culture of reflective practice.

#### 8. Streamline and strengthen program meetings.

Review the structure, length, and purpose of all meetings. Ensure clear agendas, defined outcomes, and participant contributions. Consider how to differentiate meetings for various stakeholder roles.

Prepared for the Center of Science and Mathematics in Context at UMass Boston

#### 9. Improve knowledge sharing and archiving across the program.

Create a shared digital space to store and disseminate project work, resources, and lessons learned across cohorts, sites, and years.

#### 10. Continue to elevate the visibility of successful Fellow-led projects.

Share frequently, enthusiastically and widely examples of impactful projects through conferences, online publications, and collaborative events so that the program's innovation spreads internally and externally.