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

WIPRO SEF

YEAR 13

QUARTERLY REPORT
June 2025

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Table of Contents

Contents

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

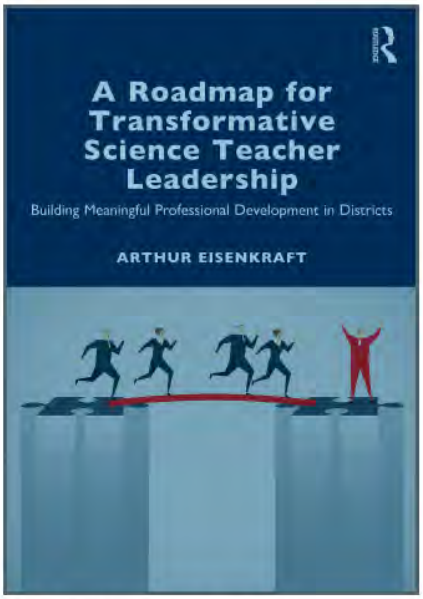
After Fellows complete the two-year "foundation" program, District science coordinators work with their university partners in exploring ways in which to build on the Fellows experiences, projects and leadership skills in order to support district transformation. Through various and varied initiatives, 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.



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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 March 31, 2024 through June 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 Stanford University	FL University of South Florida	MA University of Massachusetts Boston	MO University of Missouri	NJ Montclair State University	NY Mercy College	TX 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	Funding ended	Phase II	Phase II
2022-2023	Phase II	Phase II	Phase III & Lead Institution	Phase II	Phase III	Phase III	Phase III
2023-2024	Innovation Phase	Innovation Phase	Innovation Phase & Lead Institution	Innovation Phase	Innovation Phase	Innovation Phase	Innovation Phase
2024-2025	Innovation Phase	Innovation Phase	Innovation Phase & Lead Institution	Innovation Phase	Innovation Phase	Innovation Phase	Innovation Phase

Table of Wipro SEF sites

BY THE NUMBERS

Metrics/Site	MA	CA	FL	MO	NJ	NY	TX	Total
# of Participating Districts	5	5	3	9	4	5	5	36
Total Students in Districts	74,000	97,288	400,013	34,900	31,486	33,580	83,160	754,427
# of DSCs involved since the inception of Wipro SF	10	5+3 Wipro Teacher Leaders	5	13	7		11	54
# of Teacher Leaders (Fellows)	58	96	50	79	13	105	101	502
# of Teachers Engaged by Fellows		88	25		31		numerous	?
# of Projects	68	75	71	110	77	97	185	683
# of Principals “involved”	0	30	12		5	20	25?	?
# of University Faculty Involved	5	2	3	5	3		1	19
# of Graduate Students Involved	3	2	3	2	3			13

Metrics/Site	MA	CA	FL	MO	NJ	NY	TX	Total
# of Undergraduate Students Involved	0	0	0		1			1
# of Publications/Papers	19	4	40		22	37	50+	172
Programs/grants Initiated as a Result of Wipro Involvement	1	2	0		0			3
# of Family or Community Events Led by Fellows	0	0	10		8		10	28
# of Parent or Community Members Engaged	0		4000		214 families		TBA	?
Teacher Leaders in Classroom after 3 + years	90	90 %	70	88%	100%		90-95%	
Highlights of Wipro SEF								

Table of Wipro SEF Impact

UPCOMING MEETINGS AND MILESTONES

Knowles 2025 Conference – July 24, 2025, Philadelphia, PA

National Science Education Leadership Association (NSELA) - July 14-15, Salt Lake City, UT

American Association of Physics Teachers (AAPT) – August 4-6, Washington DC

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.

Site conferences:

California – June 7, 2025

Texas – June 13, 2025

New York – October 17-18, 2025

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 quarter, the CA site continued to provide professional learning, coaching, and support to districts in achieving their science goals. The Wipro SEF Program supported H-CCLS collaborative group work as well as professional learning focused on high-quality science instructional practices. The Wipro School Leaders Program continues to delve deeper into problems of practice and explore how to apply leadership principles to address these challenges. District Coordinators will also continue to collaborate with the CA Leadership Team to focus on individual district needs.

For the next quarter, we will update the H-CCLS form logs and download all the data related to the H-CCLS cycle of this cohort. Cohort 5 will begin Year 2 with their inaugural session on September 20th, 2025. This initial meeting will be a 3-hour virtual session focused on introducing the GPS project and providing resources to help participants generate ideas for their projects. For the Wipro School leader program, we will recruit new participants beginning in August 2025 and aim to launch the new program in October.

Executive Summary Statement - FL

The goal of our program is 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.

We have eight team projects that just completed either in their first or second year of implementation. The team leaders chose their own projects based off previous Wipro work, selected their own team members, and then implemented that work. Some of these projects involve creating curricula while others focus on technology or promoting stem to various groups. Six of the eight teams are returning to complete their second year of the project. 2 of the teams completed their two-year project (we had one complete a two-year project last year) and both of them are submitting something this year.

For this past quarter, our main event was planning for our Celebration event on May 17th and working on communicating with fellows to recruit for our final cohort in Phase 2. The agenda for the celebration is located here: https://usf.box.com/s/8xwwimwmrfj087y98s01n4qtyn9kyrww

We spent part of our March meeting talking with the fellows about what they wanted their celebration to be in May. Thus, we had Dr. Eisenkraft come speak to us about Wipro and science education as well as Dr. Zafer Unal from USF St. Petersburg to talk to us about AI. in education and his platform teacherserver.org. We had two Fellows and one DSC from Texas as well as a fellow from NY visit us for the celebration. The three Fellows presented on their work in NY and Texas. We also invited Pam Pelletier to come and join us for the event. We had a wonderful list of presentations.

Moving forward, we will not be having any meetings as it is the summer, but we are working on collecting applications for our fourth and final phase. Application deadlines are Monday, June 16th. We have about ten who have expressed genuine interest in submitting a proposal (and already have one submitted).

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. They have seven middle and high school teachers focusing on Talk Science as one element of their course of study and either Developing and Using Models, or Analyzing and Interpreting Data, as their second element. The science coordinator is anticipating having elementary teachers join the V-CCLS groups in the spring.

A new project, 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)
- UMass Boston will continue to try to generate interest in the foundation Wipro SEF program of 4 years in three high-needs districts in the Boston area. Unlike the original sites, these new sites and Fellows will not be receiving the generous stipends of the past and will have to come up with other ways to incentivize participation in the program.

Executive Summary Statement - MO

The Missouri Wipro project's goal of teaching math and science in a harmonious manner will contribute to the transforming of 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 cohort 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 we have changed the grade band mix to recruit all grades, namely, K-12 teachers for both years. In year 1 they 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.

During this quarter (April – June 2025) Cohort 6 completed work on their H-CCLS segment of year 1. Cohort 5 has completed working on their lesson plans and is finalizing submission and scheduling professional development. We continued our segment on Physics + math activities for both cohorts, which consists 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. 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. Further details are included below.

In the next two quarters Cohort 6 fellows will begin their year 2 work, which consists of creating harmonized math-science lesson plans. We have sent out a call for a new opportunity for Cohort 6,

which is to include one or two non-Wipro teachers in their team so that they can begin the process of district transformation in this year. We expect to hear more about their level of interest in doing so over the next month. We will also be contacting Cohorts 4 and 5 to expand their Wipro work during 2025-26 by working on a group project with non-Wipro teachers in a similar manner.

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 12 Alumni Fellow 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

"We can't become what we need to be by remaining what we are." – Oprah Winfrey

This quarter has provided opportunities for growth and transformation. Our fellows have seized those opportunities and have been committed to becoming. They have continued working on their projects; hosted school family nights; organized school events for students to experience Wipro Reimagined projects; provided professional development for their colleagues; and presented at cross-site Wipro STEM conferences. Collectively these activities have made a positive impact on students, educators, and the wider district communities. The Fellows have been on a transformative journey to stronger leadership and have spurred momentous transformation in their districts.

On May 1, 2025, we had our end-of-year meeting. We took time to reflect on and discuss our project achievements, group highlights, personal highlights, and ways we thought our projects impacted the districts and wider communities. Each group reported out the highlights of their projects. They then planned for project sustainability. Ultimately, they prepared an elevator pitch for funding, time, and support and shared those pitches with each other offering warm and cool feedback so that groups could lift the quality of their pitch.

In this quarter, our New Rochelle Arcade Challenge Team lead their Webster's Arcade. This was a culminating event of their project. The students were excited and engaged. The Fellows were pleased to see how well the projects were received and how proud the students who made the arcade games were of their work and themselves. The high school students that supported the elementary students through this project were proud as well. The New Rochelle Code to Learn Team provided a half-day professional development session for all their building colleagues. It was an amazing success by all accounts. It whet the appetites of a wide variety of non-Fellow educators and helped them build confidence that they too could help their students with coding. Our Fellows felt the power of their project and their leadership. Our White Plains Fellows completed the second edition of their newsletter. It has been seen not only by the White Plains community but has been

shared with people across many different countries. The newsletter spread the word about so many STEM activities, events, and people in the STEM fields. The community is now more informed about the STEM happening in the White Plains City School District and Westchester at large.

We have begun to plan our Fall conference and will continue that work through the next quarter. This year for the first time, it will take place across two days, Friday, October 17, 2025 and Saturday, October 18, 2025. Day one will be a STEM Professional Development Day with specialized workshops for educators. Day two will be the K-12 STEM Educators Conference. Each Wipro Reimagined Cohort 3 team will present on the 18th. A call has gone out for crosssite Wipro Fellows to submit a proposal for presentation as well. We are anticipating a robust day of learning on the professional development day. We are also looking forward to Fellow presentations during the conference. Our conference also serves as our first step in recruitment for our next cohort of Wipro Fellows.

Executive Summary Statement – TX

The Wipro SEF Innovation Phase at UNT Dallas is in its third year. This year, we have funded school projects, collaborative and individual projects focused on district transformation through teacher leadership. New science TEKS have been implemented since fall 2024 and most of these projects address the changes made.

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 are between Fellows in the same school, ISD or different ISDs collaborating on a project of common interest. Individual projects enable Fellows to work on projects they are interested in and still be a part of Wipro and impact students. This year, 2024-2025, I am funding a total of 10 projects, 4 schools, 3 collaborative and 3 individual projects.

This quarter is the STAAR Testing Quarter and as a results schools are primarily in testing mode. The testing frenzy often disrupts classes, but my fellows are pros, and I did not hear reports of any major issues with interrupted data collection. On April 7th, I met face to face with the Fellows and DSCs at UNT Dallas. The focus of the discussion was their projects, submitting proposals at CAST and presenting at the June Annual Wipro Conference. For the former, the audience is science teachers, and their presentation is with regards to the application of their research projects to the science classroom. The CAST proposals were due May 31st, the date extended to June 10th, abstracts for the conference were due June 1st. 9/10 CAST proposals have been submitted, the pending one will be submitted soon.

I sent Raisha Allen (DSC) and Janice Washington from DeSoto ISD to Missouri, Faith Milika (DSC), Robert Matthews and Latrice Cooks from Lancaster ISD to FL. Jeremy Hesse (DSC), Kellie Burchfield from Cedar Hill, Sherry Thompson from Irving ISD will be presenting at the CA Wipro event.

The next quarter. I will be busy with the One-day Wipro annual conference, helping Wipro fellows complete their websites with all the required components. I also hope to send the RFP for the 25-26 year much earlier by the middle / end of June and talk to teachers and receive proposals earlier that will start in September.

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

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Summary of Current Project(s) and Goals

Cambridge Public Schools

- This spring felt particularly powerful for the team. After completing their V-CCLS, they met at the end of January to launch their H-CCLS. At that meeting, it was suggested that everyone continue with *Talk Science Primer* (Sarah Michaels and Cathy O'Connor), as it had felt really fruitful. Five of the seven teachers in this cohort teach full-year classes, so it was also an opportunity for students to revisit the ideas presented in the primer.
- It was really rewarding for the team to have four practices explored with the same article.
  The fall science practices were: Analyzing and Interpreting Data; Developing and Using Models.
  The spring practices were: Engaging in Argument from Evidence (High School) and Obtaining, Evaluating, and Communicating Information (Upper Schools).
- The team also prepared a district 6–12 science professional development session, which was delivered at the March district PD day. At this hour-long session, they introduced the ideas they had worked on and gave vertical teams a chance to look through their prepared toolbox (documents created during their V-CCLS) and identify ways the tools could be used and/or adjusted for classes. Then the teachers went to content/grade-based groups and identified one tool they could commit to using by April break.
  Results were mixed, but most teachers reported they had forgotten what they chose, rather than feeling overwhelmed. A total of 34 teachers and 2 administrators participated.
- At this time, there are 12 people who are Yes or Maybe for the third cohort. The team is hoping to grow to at least 10 participants next year.
- In addition, they 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.

- End of year thoughts from the group:
- It was great seeing the same kids at different grades – nice to see how they grow
- I wasn't as impressed with myself as I wanted to be, but then they said they were impressed. So it was really gratifying to see my work recognized by colleagues.
- I just modified another lesson for this Friday based on what we've done. It really has helped me figure out how to embed focused skills into small moments.
- I think I rarely get feedback and it's really helpful to have feedback from peers. We also in our school don't have vertical collaboration time. It was great to have an article to focus on for our vertical collaboration and to get a chance to see each other's classrooms because we never ever do that. We started doing rounds using swivels to watch ourselves as part of our in school instructional learning time. I did speak to our school last year because of Wipro.
- It really takes me back to why I'm doing this; why I'm teaching. I get an idea of how I want to share a really cool idea or science concept with somebody and then I get to try it out. And I get to hear people's ideas on it, and borrow other people's ideas. To truly collaborate. It's a lot of work and sometimes stressful but it's so great. And even if I don't think it went well I always get the warm [and cool] feedback. It takes me back to why I'm doing this.
- I've been thinking a lot about AI recently and AI in education. When we talk about science talk, when we talk about AI resistant/next level assignments, our science talk gets to how students are in an authentic way showing their own thoughts and demonstrating knowledge. I'm excited about how this could take science education to the future [as we talk about AI concerns]. Their discussions are a good form of assessment. You can't AI that stuff.
- In watching both [teachers], there were little things of "Oh I can use that. I like what you did there." I really like the focus of using an article. When I was trying to create (or recreate) my lesson, I was using something to focus my attention. We did that when we were in schools ourselves but then we forget that teaching should be research based as well. To reframe it from the point of view with someone else's research has been really helpful.
- It was really great to focus on one part to organize around one practice and one science and engineering practice. Even though there's so much we could do, here's our 2 specific things that can apply over and over again.
- Seeing student work from high school gives an idea of where my students are and where they're going.
- Sometimes teaching is an island. It was great getting to know other teachers in the department as humans (life and work). It's like a little family.
- I've taught 25 years and always said if you think you know what you're doing, you don't. Every year is new. I wasn't getting complacent, but having a camera helped keep me on my game. Even when the camera was gone, it felt like my team was there. Gave me an "I'm new again" feel, and thinking about little details again.
- I can't believe how much better my design process is. Using prototype reflections as "data" allowed my students to actually enter discussions about priorities and the discussion forward. I've never had a class

where every single student knew what their group was building and why - there's typically the few students who sit on the side and don't really know how to contribute. The new protocol I developed with the help of my group is really a game changer.

Braintree School District

- The science department was extremely grateful to receive another round of funding from Wipro. The funds arrived to the district in March, so the tangible work is beginning this spring and summer. This year, the district had a professional development budget of $0. Everyone understood how important professional development and teacher collaboration are, and how detrimental the lack of funding was. Knowing the funding was coming allowed the department to continue moving forward with its work.
- This spring and summer, there will be professional development for teachers by grade level or content area at the high school. The Vertical Science team will also meet again. This team consists of 9 teachers, including: 1 fourth-grade, 1 fifth-grade, 2 sixth-grade, 1 seventh-grade, 1 eighth-grade, 2 biology, and 1 chemistry teacher. The team continues to work on the vertical alignment of science content and skills K–12. Additionally, throughout the district, there have been observations of students struggling with general academic and study skills. The department is embracing this concern and working to integrate specific instruction about these strategies into courses.
- Looking toward the next school year, there is excitement about focused PLC time with math and science. This will include chemistry, physics, and algebra teachers, with participation expected to be between 8 and 16 teachers. Additionally, there will be a PLC to return to the department's work on the modeling pedagogy, including student whiteboarding, the storyline approach related to phenomena, relevancy, and real-world application. This work started prior to the pandemic with a small group of teachers (5) but will continue with a mix of biology, chemistry, and physics teachers. The department has made many strides with vertical articulation, but as the needs of students shift, these practices must continue to be updated.
- Lastly, the department is grateful for the support provided by Dr. Eisenkraft. He has been a wonderful thought partner in helping to move this work forward in the district despite frequent obstacles and challenges. The department looks forward to continuing this partnership.

Wipro's Science-Literacy Teacher Leadership (SLTL)

SLTL activities for this last quarter:

- Participating teachers have completed their classroom data collection.
- Monthly meetings were held via Zoom. During these individual meetings, the team studied the data and looked at how best the designed scaffolds could support student reasoning. These meetings resulted in refining scaffolds.

- During the May meeting, discussions were held with individual teachers on the best ways to share and present their data for the year-end group meeting. Teachers will be presenting data, and as a group, they will then refine the designed scaffolds.
- Tej and Pat have started to work on putting together a website to share the scaffolds with a wider audience.
- The June all-group meeting will be held on June 21st.
- There is also an intention to send proposals to NARST (August deadline), as well as NSTA, along with the teachers.

Cross Site Collaborations

Attendance and Site Visits for Wipro SEF

The end of year conferences at our California, Florida, Missouri, Texas, New Jersey and New York provide an opportunity for cross site visits.

Florida Conference – The conference included presentations from the New York and Texas sites.

Wipro Celebration
May 17th Agenda
Sam Horton Instructional Services Center
2920 N. 40th Street
Tampa, FL 33605

9:00 – 9:15	Welcome & Ice Breaker	David and Team
9:15 – 9:35	Wipro Overview/State of Wipro address	Arthur Eisenkraft
9:35 – 10:20	Artificial Intelligence in Education	Zafer Unal

Overview of Teacherserver.com
Workshop

10:20 – 10:30 Break

10:30 – 11:45 Continuing Projects

These are two-year projects who have completed year 1 and are starting year 2. Each presenter will have 15 minutes, 10 for their presentation and 5 for questions. Those finishing year 1 of year 2

Shree
Chelsey
Nicole
Ileana
Lora

11:45 – 12:30 Lunch

12:30 – 1:15 Visiting Site Presentation

Wipro is doing wonderful things across the country. We are incredibly excited to hear about some of the work being done in other states. Each presenter will have 15 minutes, 10 for their presentation and 5 for questions.

New York: Kimberly Fleming
Texas 1
Texas 2
1:20 – 1:50 2 Year Project Wrap Ups
These groups have completed two years with the project and will be sharing their journey with us. Each presenter will have 20 minutes, 15 for their presentation and 5 for questions.
Jaqueline Bromley/Carolyn Graham
Tara McClintick
1:50 – 2:00 Presentation (ceremony / favor something to pass out)
2:00 – 3:00 New Project Round Tables (1-year projects)
Individuals in this group are contemplating submitting a proposal for a one-year project as part of Cohort IV.
Jaqueline Bromley/Carolyn Graham
Tara McClintick
Teresa Buckman
Nicole Caltabellotta
Jennifer Griffone
Laura Lacy-Carlson
Christina Macurdy (?)
Charles Turner (?)
Closing / Logistics / electronic survey?

Missouri Conference - The conference included presentations from the Texas site.
Missouri Wipro Conference Schedule May 3, 2025
Location: Room 572, University of Missouri Bond Life Sciences Center
Parking: Virginia Avenue Garage, 901 Virginia Ave, Columbia MO (campus map on next page)
The Conference Brochure with presentation abstracts is available through the QR code or the link below (laptop or iPad recommended (hard to read on a phone):
,,,,https://tinyurl.com/MO-WiproConf2025

8:30 - 9:00 Registration and Breakfast 9:00 - 9:10 Welcome - Linda Godwin, MU
9:10 - 9:25 Introduction to Conference - Arthur Eisenkraft, U Mass, Boston 9:25 - 10:00 C6 H-CCLS MO High School
10:00 - 10:35 C5 Lesson Plans Hallsville 10:35 - 10:50 Break
10:50 - 11:25 Texas Team
11:25 - 12:00 C5 Lesson Plans CPS 12:00 - 1:00 Lunch
1:00 - 2:00 Keynote
2:00 - 2:40 C6 H-CCLS Elementary
2:40 - 2:55 Break
2:55 - 3:30 C6 H-CCLS Middle School
3:30 - 4:00 C5 Graduation and Recognition

New Jersey conference - The conference included presentations from the Texas site.
4:30–4:45 Re-Greetings
4:45–6:05 Then, Now, Next Presentation Sessions

Room 2109
Room 3rd floor - Universal Technology Institute (UTI)
Group 1: Room 2109
8 Presentations led by: O. Betty Rodriguez,, Regina Borriello, Mercy visitors, Susan Bartol, Frances Carlo, Kim Serino, Patricia Hester-Fearon, Janine Hogel & Dave Kleiner
Group 2: Universal Technology Institute (3rd floor)
8 Presentations led by: Clyde Griffith, Kristen Scrivens, Jessica Cappello, Diane Mazurek, Jayme Tchalabi, Kristen Trabona,, Megan Graziano, Alison Mahfouz
Up to 7 minutes per group
Complete reflection form (QR codes on the next slide) as you listen
Please save your questions until the end
Have discussions until 6:05
6:10–6:45
Dinner
Reflections and Takeaways From Presentations
Enjoy your time with each other. If you'd like, you can share with your table your response to the following questions:
How do you think you inspired others today?
How were you inspired by others?
Announcements

California conference - The conference included presentations from the Texas, New York, Missouri, Florida, Massachusetts, New Jersey and Florida sites.

End of Year Conference Schedule June 7, 2025

Time	**Room**			
8:30 - 9:00 am	Lobby	Check-In & Breakfast		
9:00 - 9:20 am	Breakout Room #1: 101	Welcome (Tammy Moriarty) Introductions		
9:20 - 9:30 am	—--	Transition/Break		
		Breakout Room #1 Rm. 101 Facilitator: Tammy	**Breakout Room #2 Rm. 108 Facilitator: Preetha**	**Breakout Room #3 Rm. 204 Facilitator: Arthur**
9:30 - 10:55 am (1hr 25 total)	Breakout Rooms #1: 101 #2: 108 #3: 204	H-CCLS Group 1 *Elementary* Brittney Geer, Madison Gallagher, Amy Ciu-Sakamoto Guest Presentation *Elementary* Amy Bartlett	H-CCLS Group 3 *Upper Elementary* Nicole Data, Abbie Meyer, Michael Rollins Guest Presentation *Upper Elementary* Frances Carlo & Traci Duff	CA H-CCLS Group 4 *Middle School* Lisa Carrell, Kaitlyn Kraybill-Voth, Allison Lee Guest Presentation *Elementary* Sherry Thompson
10:55 - 11:00 am		Break		

11:00 - 12:25 pm (1hr 25 total)	Breakout Rooms #1: 101 #2: 108 #3: 204	H-CCLS Group 2 *Elementary* Tracey Ananmalay, Marcy Johnson, Laura DuMont, Jen Yee Guest Presentation *Grades 5 and 8* Kellie Burchfield and Jeremy Hesse	CA H-CCLS Group 5 *High School* Moumita Biswas, Martha Perez Murillo, Francesca Briones, Brian Finley Guest Presentation Nancy Sharfun Islam	CA H-CCLS Group 6 *High School* Laura Nichols, Tess Carlson, Dion De La Cruz Guest Presentation *(K-12)* Susannah Genty-Waksberg
12:25 - 1:15 pm	Roof, Lobby	Lunch		
1:15 - 1:40 pm (25 min each)	Breakout Rooms 101 108	Guest Presentation *High School* Stephanie Worthen	Guest Presentation *High School* Tal SebellShavit	
1:45 - 2:00 pm	CERAS 101	Reflection on the Day (Arthur)		
2:00 - 2:30	CERAS 101	Feedback Survey & Closing (Tammy Moriarty)		

Texas conference – The conference included presentations from the California, New York, Missouri, Florida, New Jersey and Florida sites.

Date: Friday, 13th June 2025

Location: UNT Dallas, All conference events will be held in the 7400-building known as Founders Hall, (FH).

Time: 8 am – 2:15 pm

Agenda at a glance

Time	Location	Event			
8:00-8:15am	**FH 138AB**	**Registration and breakfast**			
8:15-8:45am	**FH 138AB**	**Welcome Address by UNTD President, Dr. Warren von Eschenbach**			
8:45-8:50 am	**FH 138AB**	**Conference reminders/ instructions**			
Session 1 9:00-9:30am	**Third Floor FH**	**Room 304**	**Room 306**	**Room 307**	**Room 308**
		DeSoto ISD Wipro Fellows, UNT Dallas **K-2 STEM adventures Elem** Raisha Allen (DSC) Ebonie Davis Savannah Burkhalter Janice Washington	Wipro Fellow, Stanford University California **Thinking maps, texts, visuals, Multi language learners, Elem** Julia Reed	Lancaster ISD Wipro Fellow, UNT Dallas **Physics, Engineering design. HS** Robert Matthews	Cedar Hill ISD Wipro Fellows, UNT Dallas **Writing in Science K-12** Jeremy Hesse (DSC) Judge Solomon Stephanie Riley Kellie Burchfield Brandi Tilley O

					Terri Harris Krystal Rising
9:30-9:40am	**BREAK**	**Coffee and snacks on third floor**			
Session 2 9:40-10:10 am	**Third Floor FH**	**Room 304**	**Room 306**	**Room 307**	**Room 308**
		Lancaster ISD Wipro Fellows, UNT Dallas **STEAM, Elem** Monica Hatley Latrice Cooks Ladonna Brown	Wipro Fellows, University of Missouri, Columbia **Solar Car Challenge, MS/HS** Kelli Anthes Bryan Bolton	Wipro Fellow, Montclair State University, New Jersey **Authentic learning, Chromebook generation, Elem** David Kleiner	Lancaster ISD Wipro Fellow, UNT Dallas **Mixed reality, aquaponics, MS** Marquita Muhammed Rawlings
10:10-10:20 am	**BREAK**	**Coffee and snacks on third floor**			
Session 3 10:20-10:50 am	**Third Floor FH**	**Room 304**	**Room 306**	**Room 307**	**Room 308**
		Irving ISD Wipro Fellows, UNT Dallas **3D toys for the Senses, K-3** Chris Dazer (DSC)	Wipro Fellow, Mercy University, New York **Authentic Experiences, Young learners, Sc/**	Wipro Fellows, University of South Florida, Tampa **Virtual reality, Chemistry classroom** Ileana Bermudez Luna	Lancaster ISD Wipro Fellows, UNT Dallas **Design across disciplines, STEM, Elem** Brittney Preston

		Sherry Thompson Elizabeth Velasco Erika Rocha	**Engineering, Elem** Elcy Taveras	Luis Rosardo Bermudez Roschell Thybulle	Saundria Jackson
10:50-11:00 am	**BREAK**	**Attendees make their way down to FH 138AB**			
11:00-11:40 am	**FH 138AB**	**Wipro Book celebration Light refreshments**			
Session 4 11:45-12:15 pm	**Third Floor FH**	**Room 304**	**Room 306**	**Room 307**	NA
		Grand Prairie ISD Wipro Fellows, UNT Dallas **Bilingual, STEM, Elem** Guillermo Lozano Ian Talamentes Mariana Garcia Rosalyn Miles Marisol Guerrero Brianna Chandler	Wipro Fellows, University of South Florida, Tampa **Science Vocabulary adventures: Discover, play, learn, Elem** Ford Madison Howze Floyd	Lancaster ISD Wipro Fellows, UNT Dallas **AI, differentiated choice boards, Elem** Brittney Preston	
12:15-12:25	**BREAK**	**Coffee and snacks on third floor**			

Session 5 12:25-12:55 pm	**Third Floor FH**	**Room 304**	**Room 306**	**Room 307**	NA
		Lancaster ISD Wipro Fellows, UNT Dallas **Engineering design, short constructed responses, Elem** Faith Mallika (DSC) Rhenett Ingram	Wipro Fellow, University of South Florida, Tampa **Storylines in science, HS** Nicole Holman	Wipro Fellow, Stanford University California **Achieving the three pillars of Wipro, National Board Certification, HS** Yichang Liu	
1:00-1:15 pm	**FH 138AB**	**Lunch**			
1:15-2:00pm	**FH 138AB**	**Keynote Address by Dean Patrick Valdez, Dean, SOE, UNT Dallas**			
2:00-2:15pm	**FH 138AB**	**Thank you by Dr. N**			

Common Interest Seminars

Book Clubs

Climate Book Club: The second book club took place in May with *The Story of More: How We Got to Climate Change and Where to Go from Here* Paperback – March 3, 2020 by Hope Jahren.

Reflections from a few book club participants:

- Being part of the book club was great. It allowed me to interact with people from across the nation allowing for rich conversations around climate science. Also, it helped me to think more about current events. I especially enjoyed leading a book club session. It gave me the opportunity to consider multiple perspectives while respecting varying opinions. It is

wonderful to be in a learning space where you can be vulnerable and open to growing professionally and personally.

- I became intrigued by the text Not too Late by Rebecca Solnit and Thelma Young Lutunatabua at the NSELA Summer Leadership Institute, Science Learning for Sustainable and Just Futures as it takes a look at climate change and justice through the lens of hope. (That spoke to my spirit as an elementary educator.) Our Wipro Science Education Fellowship District Science Coordinators and leadership members attended at the invitation of Dr. Eisenkraft. I was introduced to the text there. So, when Dr. Eisenkraft offered the opportunity to extend our learning within our smaller community by reading and discussing the text, I was immediately all in. I have been in several book clubs that I have enjoyed, but this one was almost a surreal experience because the participants were all phenomenal educators and scientists who were still committed to learning through examining multiple perspectives. The conversations were fascinating. The level of learning was off the charts. And in my humble opinion, the community became even stronger. Loved it!!!
- Being part of the Wipro Book Club has provided the opportunity for me to be part of a wonderful professional learning community that is focused on better understanding climate change. When reading the books *(Not Too Late* and *The Story of More),* it is easy to become overwhelmed by the magnitude of the problem. Being part of the group helped me reflect on the readings, process the emotions that they raised in me, and commit to remain hopeful while finding ways to **do something to improve what I can**. This feels to me to be the same message we need to share with students, families, and communities: It's not too late if we can learn to use less and share more!

Seminar series for District Science Coordinators on AI – large learning modules

The 4-session seminar, participants

- learned about the capabilities of Chat GPT and its potential applications in science education
- explored different approaches for using Chat GPT to enhance student engagement and understanding of scientific
- gained hands-on experience developing Chat GPT-based educational tools
- networked with other educators and share best practices for integrating Chat GPT into your teaching practices
- The Conference Goals were:
- To support a community of department science coordinators (DSCs)
- Recognize the critical role that DSCs play in their districts and in the Wipro SEF program
- To share experiences and expertise as DSCs in Wipro districts and learn from each other through useful dialogs

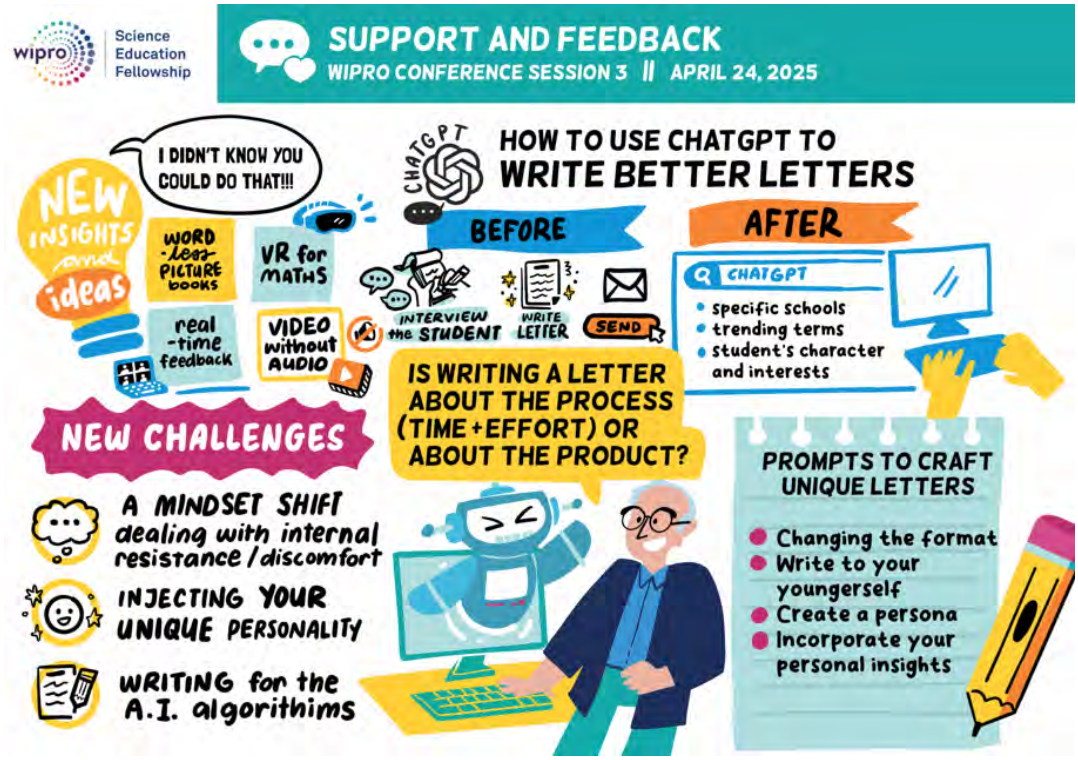
Session 1: Wednesday, April 9 from 7 PM-9 PM (EST): Assessment and Assignment Generation

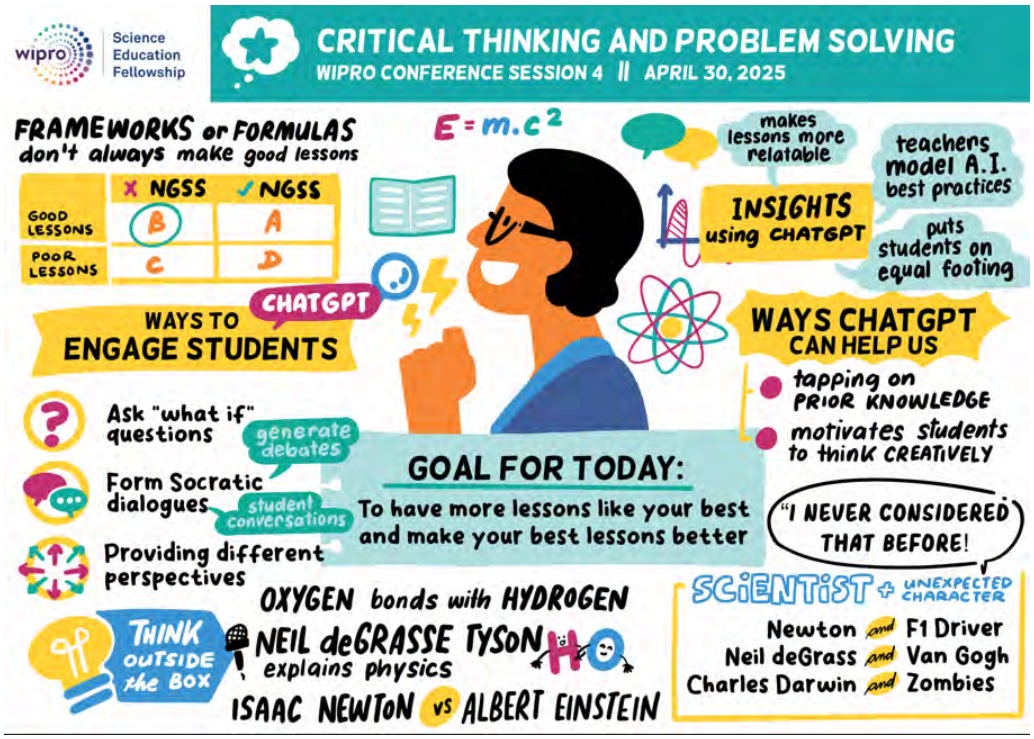
Session 2: Tuesday, April 15 from 6 PM – 8 PM (EST): Engagement and Creative Content

Session 3: Thursday, April 24 from 6 PM – 8 PM (EST): Support and Feedback

Session 4: Wednesday, April 30 from 7 PM – 9 PM (EST): Critical Thinking and Problem-solving

Visual summaries of three of the sessions are shown here:


wipro
Science Education Fellowship
SUPPORT AND FEEDBACK
WIPRO CONFERENCE SESSION 3 || APRIL 24, 2025
I DIDN'T KNOW YOU COULD DO THAT!!!
NEW INSIGHTS and ideas
WORD-less PICTURE books
VR for MATHS
real-time feedback
VIDEO without AUDIO
HOW TO USE CHATGPT TO WRITE BETTER LETTERS
BEFORE
INTERVIEW the STUDENT
WRITE LETTER
SEND
AFTER
CHATGPT
specific schools
trending terms
student's character and interests
NEW CHALLENGES
A MINDSET SHIFT dealing with internal resistance / discomfort
INJECTING YOUR UNIQUE PERSONALITY
WRITING for the A.I. algorithms
IS WRITING A LETTER ABOUT THE PROCESS (TIME + EFFORT) OR ABOUT THE PRODUCT?
PROMPTS TO CRAFT UNIQUE LETTERS
Changing the format
Write to your youngerself
Create a persona
Incorporate your personal insights


wipro
Science Education Fellowship
CRITICAL THINKING AND PROBLEM SOLVING
WIPRO CONFERENCE SESSION 4 || APRIL 30, 2025
FRAMEWORKS or FORMULAS don't always make good lessons
E = m.c²
X NGSS
✓ NGSS
GOOD LESSONS
POOR LESSONS
B
A
C
D
makes lessons more relatable
teachers model A.I. best practices
INSIGHTS using CHATGPT
puts students on equal footing
WAYS TO ENGAGE STUDENTS CHATGPT
Ask "what if" questions
generate debates
Form Socratic dialogues
student conversations
Providing different perspectives
THINK OUTSIDE the BOX
WAYS CHATGPT CAN HELP US
tapping on PRIOR KNOWLEDGE
motivates students to think CREATIVELY
GOAL FOR TODAY:
To have more lessons like your best and make your best lessons better
"I NEVER CONSIDERED THAT BEFORE!
OXYGEN bonds with HYDROGEN
NEIL deGRASSE TYSON explains physics
H2O
ISAAC NEWTON vs ALBERT EINSTEIN
SCIENTIST + UNEXPECTED CHARACTER
Newton and F1 Driver
Neil deGrass and Van Gogh
Charles Darwin and Zombies

Evaluations of AI Seminars

The four AI seminars were conducted in April, 2025. Here is a synthesis of evaluation quotations for each of the Wipro SEF Virtual Leadership Conference seminars.

Session 1: Student Assessment & Assignment Generation

Date: April 9, 2025
Key Participant Quotes:

- "I am far better informed about ChatGPT now… This was my first interaction with it. Not too shabby."
- "It was great to hear some new thoughts and perspectives on AI and assessment."
- "I appreciated the modeling of prompt engineering for assessment creation."
- "I came with the spirit of inquiry and was able to get some answers to questions I have had about AI."
- "I loved Arthur's presentation… the re-prompting he did live was extremely helpful and different from what I've seen."
- "The AI we see today is the worst AI that we will see… What does that mean for the future?"
- "I learned some new ideas. The story about the student who moved from Netflix to Chat GPT is thought provoking."
- "Always check for accuracy and ask AI questions when there is discrepancy."
- "I value the input from the Wipro SEF community because the members are intelligent, dedicated, intentional, and deep thinkers."
- "That AI can be your friend."

Session 2: Engagement & Creative Content

Date: April 15, 2025
Key Participant Quotes:

- "I loved all the new ideas I received tonight about how to engage students with AI."
- "The difference in the quality of the answer that I got when I decided to be creative with my prompt was ginormous!"
- "I'm thinking about experimenting over spring break and trying some new things out in our last marking period."
- "I loved the Dr. Seuss-like poems. I'm going to use my moon phase poems that GPT wrote for '2 truths and a lie.'"
- "This session made me think about how I can be more creative in my prompting."
- "Someone said, 'I need to work on not being a robot when I write prompts' — I agree!"
- "I love being in a (virtual) room where people are curious and open to trying stuff without judgment."
- "Be creative! Think about the student experience!"
- "ChatGPT is multifunctional. It is for us to use it such that it can provide us the best possible

outcome we want."
- "I learned that ChatGPT can create cartoons as well :)"

Session 3: Support & Feedback

Date: May 16, 2025
Key Participant Quotes:

- "This session helped me understand better how AI can be used to improve student support."
- "I feel better able to coach teachers in AI use to provide student feedback."
- "I learned something new about how AI can assist with engagement and personalization."
- "It's eye-opening to think about how feedback might become more individualized through AI tools."
- "AI can open new ways of supporting learners, especially when we need scalable solutions."
- "I'm now thinking about how to combine AI feedback with student self-assessment."
- "This gave me confidence to work with teachers on AI as a feedback tool."
- "The idea that AI can help surface misconceptions early in student work is compelling."
- "Session 3 really clarified the difference between AI-generated grading and student-centered feedback."
- "I left today's session with a renewed sense of curiosity and possibility."

Session 4: Critical Thinking & Problem Solving

Date: April 30, 2025
Key Participant Quotes:

- "I found out what it might be like if Neil deGrasse Tyson were able to speak to Vincent Van Gogh!"
- "There are a host of ways AI can be used to help students deepen critical and creative thinking."
- "It was wonderful to share information, ideas, questions, worries, laughter, and joy — all as they related to AI."
- "I learned that creativity is key."
- "We can re-engage the disengaged like we haven't been able to for many years."
- "I had the opportunity to try out some cool new things and see how others came up with their own ideas."
- "I'm wondering about creating custom Chat GPTs to work with students."
- "This session sparked a lot of great ideas about different prompts I can bring back to teachers."
- "I think the order of the themes allowed me to build a better understanding of AI and its implications."
- "The time flew by and I am leaving inspired."

CLIMATE V-CCLS GROUPS

Three teams engaged in Climate V-CCLS groups.

Overall Summary:

The Wipro Climate Initiative was widely praised across diverse schools and grade levels for its powerful integration of science with civic engagement, creativity, and community values. Teachers highlighted increased student engagement, higher-order thinking, and deeper interdisciplinary learning, including cross-curricular and multilingual approaches. Many educators remarked on the transformative nature of the work—both for their students and for themselves as practitioners—urging continued support and expansion of such programming.

The initiative fostered:

- Cross-disciplinary innovation (science, math, ELA, music, social studies, SEL)
- Culturally responsive pedagogy through multilingual and community-focused projects
- Authentic student voice and leadership in climate justice
- Stronger educator collaboration within and across schools

Highlighted Quotes from Participants:

(5th Grade, Maries County R-2, MO)

- "The use of a popular video game was… a game changer in their thinking."
- "We discussed how you can replay a video game if it doesn't turn out how you expected, but with our atmosphere, we will have no replays."
- "This was an amazing addition to the science curriculum… one I believe the students will remember and continue to ponder for a long time."

(6th Grade Creative Writing, Bland Middle School, MO)

- "The initiative gave real world relevance to my lesson and helped students see the power of their words."
- "Students were not only learning writing skills—they were learning how to be informed, responsible citizens."
- "It sparked thoughtful discussions, inspired creativity, and encouraged critical thinking."

(Middle School, Alice Fong Yu, CA)

- "The project wove together science, math, English, and social studies, music, art, and garden… honoring their diverse cultural backgrounds."
- "Students showcased their multilingual skills… before government officials, families, and youth from San Francisco."
- "Collaborating on climate-focused lessons pushed me to rethink how I teach data analysis in math and how I scaffold English language writing for research."

(Music, Alice Fong Yu, CA)

- "I initially wondered how I might contribute… but it really pushed me to think about the role music could play in addressing climate change."
- "We created a trilingual song… to reach more people."
- "In the future, I want students to think even more about using music to spread information about climate change."

(CA Wipro site)

- "Creating the culture of inclusion through the lenses of SEL, NGSS, and Common Core… set the stage for the next generation of change agents."
- "I learned how to develop and partner with local governmental organizations."
- "Funding should continue for other schools across the country."

Wipro SEF Newsletter

We produced and disseminated our third Wipro SEF Newsletter. The new format was a collaborative effort of the Leadership Team and coordinated by Natasha Mello (MA). This brief newsletter highlights the latest updates from the Wipro SEF program, along with a few inspiring stories from districts across the country. It offers a glimpse into the extraordinary work being done by teacher leaders and the meaningful impact this initiative is having on students, educators, and communities. The newsletter is found in the appendix to this report.

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 this summer.
- The second article was reworked and resubmitted to the Learning Professional.
- The third article is being reworked again to hopefully be resubmitted this summer.

The last SCILEADPRO session last week.

- For April, participants considered how to facilitate effective professional development and reflected on how to facilitate small and whole group conversations in their asynchronous work.
- The group met on April 5 to think more deeply about designing and implementing professional learning. Participants engaged in a facilitation investigation, practiced designing a session, and worked with the group to engage in a critical friends protocol to provide feedback on the developed plans.
- For May, participants finalized their strategic plans and learning plans for the year.

- Participants met on May 12 to wrap-up and to consider how they can better disseminate, persuade, and influence stakeholders regarding what we have discussed all year. Participants brainstormed next steps for the week, month, and year.

SciLeadPro – Evaluation

Leadership Institute Feedback
Purpose: Gather feedback on the value of the Leadership Institute seminars, identify recommendations for future participation, and collect testimonials for Wipro reporting.

1. General Reflection on Experience

I wanted to deepen my experience in a leadership capacity. While I have been part of Wipro for 10 plus years, SciLeadPro offered another perspective and another opportunity to practice leadership. It also gave me another angle for working on my Wipro plan.
A personal goal was to work on my leadership skills and to see myself as a leader. I enjoyed hearing other perspectives on how to approach different situations. I also liked speaking to people 1:1. Getting to know Wipro fellows from around the nation was a treat.
Opportunities for professional learning focused specifically on science leadership don't come around very often. I was excited to participate in this group alongside other leaders in science education. I appreciated the opportunity to connect with everyone and hear about the struggles they were experiencing, the goals they were setting, and then discussing solutions/strategies with them.
I joined SciLeadPro because I wanted to grow in my leadership as a science coordinator. I wanted to learn how to lead when times get difficult and teachers become resistant. I wanted to be a better leader for myself and my district. Collaborating with other teachers and coordinators nationwide was the most valuable aspect of SciLeadPro. I learned a great deal from others and gained additional resources for my toolkit. The series where we had to consider all stakeholders was the most impactful because a lot of stakeholders I had never considered.

2. Specific Impact on Leadership and Practice

I am using their material on facilitating workshops next week. Another resource that we used at the beginning of the program, the Leadership game, gave me valuable insight into how to bring everybody up based on their readiness. I was able to look at my

colleagues with better understanding
It has given me access to valuable resources which are current. For example, I was able to learn more about Culturally Relevant and Sustaining Educating practices through the program and received additional information after requesting it. The information I gained was specific to science. In terms of the strategic planning process I did use it in my school and district.
I started off this year with a plan to improve 3-dimensional instructional strategies throughout my department. While I felt like I had a strong plan going into the year, going through the process of developing the strategic plan allowed me to think about the process in a different, more holistic manner.

3. Collecting Testimonials

Have usable leadership tools that give me credibility as a science teacher leader. The resources and relationships extend beyond geography and the year-long program. These are long-term, supportive, professional relationships. Working in groups with brilliant experts in science education, elevates my practice which I can then share with colleagues.
Because of the Leadership Institute, I now have a more in-depth plan to tackle my goals in a major way! Seeing my work come alive by being invited into meaningful conversations and hearing my goals echoed has been electrifying. It made a real difference. The best part? I'm surrounded by science rock stars who generously share their knowledge wherever they go. Join the fun, leap into learning, and get ready to watch the science magic come to life.
Because of the Leadership Institute, I now have more confidence with being a leader inside and outside of my district. I now have new valuable resources and networking opportunities with other district leaders.
Thanks to SciLeadPro, I have a deeper understanding of the NGSS Standards and 3D Learning, as well as the future of science education in Texas public schools. I also have tools in my toolkit to provide teachers with a more engaging professional development experience.

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 April and May meetings are provided here.

Monthly Meeting Agenda
Tuesday, April 15, 2025
11 AM – 1 PM (EDT)

Join Zoom Meeting

https://umassboston.zoom.us/j/99914434497

Meeting ID: 999 1443 4497

Passcode: 973499

In preparation for our meeting and for our discussions, please refer to the Newsletter #2 and your section of the Evaluation report in the Quarterly Report that is posted on Slack. Of course, you can read the entire report to see what other sites are doing as well as our cross-site interactions

Newsletter - 3

- Feedback and suggestions
- Frequency

Evaluation Report

- Please review the quotes in the evaluation report from your site. Choose 3 quotes that you want to share. We are anxious to hear the quotes you chose and why you chose them. Do they represent successes, challenges, questions?

Meghan Marreo: Quotes were interesting. There was a theme of collaboration that emerged. We saw a lot about how important it was to collaborate with colleagues for various reasons. Meaghan provided a sample quote from the evaluation report.

Arthur: Collaboration, Leadership and risk taking are all in this quote.

Ratna: One of the fellows stated:
Wipro SEF transforms teachers into leaders. When I first joined the program, I didn't see myself as a leader, but the experiences and connections I've gained have completely changed my perspective. Th e program sets high expectations, encouraging us to embrace leadership opportunities and step out of our comfort zones. Through its supportive environment and emphasis on professional growth, Wi pro SEF motivates us to develop confidence in our ability to lead and to see ourselves as change-makers in education.

Arthur: This is such a reach quote. I could see giving this quote to fellows and asking them to provide examples of how they do any of these things.

Monical Taylor: "Wipro SEF program helped me to step out of the comfort zone." That quote spoke to me because I like the idea that this fellow continues to push out of the comfort zone, indication of learning. Wipro fellows can feel motivated and encouraged.

David: I looked at the quotes and picked the positive one, a big picture one, and what can we do to improve. The big ideas one: We need to pay better attention to the underrepresented groups, …

This quote got me thinking about the current climate and what can be done for the underrepresented groups.

Tammy: I picked a quote from Wipro School Leaders program. "…Wipro was helpful to my role as science educator…"

Arthur: In addition, the Wipro program is helpful for strategies for getting a new position.

Tammy: Also want to say that fellows feel that they are part of a bigger community when they read the newsletter.

Linda: Thank you to Anne for these quotes. We picked several quotes that address positive contributions and this quote addresses science and mathematics that are at the core of our program. It really speaks to me because it is about making connections, and I really like this insight about the more you connect the subjects the more you can connect the environment. And there were more challenging quotes. Some of the comments that fellows provided showed that elementary school teachers really feel disconnected with science topics. Elementary teachers are not necessarily in the comfort zones in science and mathematics. We need to address that.

Meera: We give them opportunities to send us their responses about science activities if they don't want to share them in person. High school teachers find the connections quickly but for some elementary school teachers it can be intimidating. Next year we are planning to have elementary teachers bring in their activities and think about how they would be propagated to the middle school. It was a risk that we took, and it worked for some teachers.

Arthur: In VCCLS, some of the elementary school teachers were showing their own lessons and felt pride in it. We must figure out how we could use those experiences as a positive aspect and somehow begin with that before getting into the high school lesson.

Meghan: One of the questions that Anne asked is what you would like to see: I've noticed a lot of challenges there. Something that came up, for example that science is still not as exciting.

Ratna: When I looked at it, it was interesting about what change you would like to see. I put the responses into different categories. Some things I don't even want to get into (micromanaging, student difficulties, etc.) and another one is what we can contribute to (opportunities for teachers to present professionally, provide resources). I want to use from one of the quotes is the culture of positivity and me and my fellows need it.

Arthur: I like that that you recognize the positivity. We are always trying to think about what we can do with Wipro support.

Arthur: This idea is fascinating that as a fellow you go to the universities and get a new feeling and when getting back to their districts how do they transfer this feeling. Maybe a newsletter is a connection?

Anne: It serves as an inspiration.

Monica: We can ask fellows about ways we can support them.

Plans for cross-site visits

- Sending 5 Fellows, 2 DSCs and 1 IHE from your site to a conference.
- Distribution of visits
- Payments
    - The easiest way is if the sites are willing to pay and we amend next year's contract.
    - I don't mind doing the reimbursements, but the individuals would have to wait to be reimbursed.
    - As far as you paying for the hotels, that's too much to put on your procard. We can pay with a PO, if the hotel is willing to wait for payment?

Arthur: These are wonderful opportunities for fellows to interact and learn from each other. I want to support this. Let's figure it out.

Plans and Updates from each site

Tammy: Things are going very well. We are still in Wipro traditional. They presented VCCLS and they are off and running. We have a full cohort of 20 fellows. School Leaders is a small group but very consistent. Switching to the instructional coach was very helpful. We don't know yet what we'll do next year, but we are trying to figure it out. We'll have our end-of-year conference in June. Everyone is welcome.

Ratna: Please come to TX. We are having our book release. We'll have a session, and everyone can get a copy of the book.

David: We are excited and getting prepared to our May 17th celebration. We are also having our faculty developing an AI platform for educators.

We have individual and one-year projects. We will have fellows talking about their proposal and

they can come to the event and get feedback on what they are planning to do. We have our Leadership teams going to the fellow and that helps them feel more comfortable. We are excited to have some of the people in May.

Larry: We welcome fellows and DSC to participate in AI in Education panel. We also have a NASA project, and Linda was kind to speak to our 5th grade students.

Ratna: Linda will be zooming with our 3rd graders, and they are excited!

Monica: We are gearing for AERA. Our doctoral students are presenting. We are doing our work around social network mapping. We also met with the DSC to plan

the year end event, and we are looking forward to celebrating our fellows!

Meera: We are going to have our monthly meeting this week and have a preview of the activities for next year. I think all the teachers are excited about end-year conference in May and some of the fellows have started working on their presentations. We are looking forward to the meeting!

Meghan: We have lots of activities in different teams happening. We will have an event on October 18-19. We would like to have you there! We also had two different schools that had some involvement with Wipro, and they had a presentation for the board of education. Aimee is very active and helped to organize several activities.

Arthur: Thank you so much!

Cross-site conferences and updates

- Climate initiatives
    - Climate V-CCLS
        - 4 teams (MO-2; MA -1; CA -1)

We have 2 teams from MO they came through. MA not so much. Fl are doing great.

- Climate Book Club: Hope Jahren: The Story of More: How We Got to Climate Change and Where to Go from Here
- Arthur: Not many people are stepping up for that. We'll have our 1st meeting in May.
- Brooke Whitworth Leadership Institute
- Cross-site interest groups – plans for Spring?
- Leadership seminars
- We had about 15-15 fellows. Lots of interest. We'll see how they'll be going.
    - AI and Large Language Models
    - 4 sessions
    - Session 1: Wednesday, April 9 from 7 PM-9 PM (EST): Assessment and Assignment Generation
        - Session 2: Tuesday, April 15 from 6 PM – 8 PM (EST): Engagement and Creative Content

- Session 3: Thursday, April 24 from 6 PM – 8 PM (EST): Support and Feedback
- Session 4: Wednesday, April 30 from 7 PM – 9 PM (EST): Critical Thinking and Problem-solving

Conferences

- NSTA – Philadelphia (March 27-29)
- We had a great time at the conference.

The following Wipro Fellows and Leaders made presentations based on their Wipro work.

First Name	Last Name	Site	Presentation Title
Arthur	Eisenkraft	MA	Guidance on being a teacher leader without leaving the classroom
Allan	Feldman	FL	Dialogic Collaborative Action Research to Improve Science Teaching and Learning
Tara	McClintick	FL	Science Vocabulary Adventures: Discover, Learn and Play!
David	Rosengrant	FL	Leading from the Classrom: Cheers and challenges of a six year science teacher leadership development program
Susan	Bartol	NJ	Shaping the Direction of School-Based Professional Learning
Larry	Plank	FL	Leading from the Classrom: Cheers and challenges of a six year science teacher leadership development program
Regina	Borriello	NJ	Three Easy Steps to Adding Inquiry to Labs
Meghan	Marrero	NY	You Can't Be Science Literate if You Are Not Ocean Literate: Celebrating 20 Years of Understanding the Ocean's Influence on Us and Our Influence on the Ocean.
Leana	Peltier	NY	Creating a Culture of Community in the Classroom: Celebrating Indiviuality and Cultivating Equity
Abbey	Gilligan	NY	Teacher Leadership in Action: Transforming Professional Development Through a Teacher-Led Elementary Science Conferece
Kris	Grymonpre	MA	NASA PATHS Storytelling Program (With Shirley Tang & Arthur Eisenkraft)
Brooke	Whitworth	other	I have multiple sessions - several as Editor for TST
Victor	Pereira	MA	NSTA Postsecondary Presents: Moving Beyond Lecture - Proven Pedagogy for the

			21st Century College Science Classrooms (Speed sharing Session)
Victor	Pereira	MA	Kids in Nutrition: Fostering Long-Term Engagement in Food Sustainability

Group dinner at NSTA

Future Collaboration with Knowles being explored

Arthur: It is an incredible program. He started Knowles teacher fellowship program. They work with new HS teachers who are strong in science and give them a program for over 5 years and teacher network. I met with the head of the program, and I said we should do some collaboration. How can we collaborate and learn from one another?

Book update – Received? Disseminated? Future funding

Other items?

Monthly Meeting Agenda
Tuesday, May 20, 2025
11 AM – 1 PM (EDT)

Join Zoom Meeting

https://umassboston.zoom.us/j/99914434497

Meeting ID: 999 1443 4497

Passcode: 973499

In preparation for our meeting and for our discussions, please refer to the Newsletter #3.

Newsletter #3

Feedback and suggestions

- **Linda:** Need to move back Wipro logo to the top of the page for clarity.
- Frequency
- Comparison with NY newsletter by Fellow
- https://docs.google.com/presentation/d/1ArRyV6CEqYD7pNAOMG4r7s78KY7iXmjy/edit?slide=id.p11#slide=id.p11

Cross-site visits are underway

- MO comments
- FL comments
  https://drive.google.com/drive/folders/1l_pYyEt8ZsJVwiu52erEydgy_NTiMOj-
- NJ plans
- CA plans
- TX plans

Arthur: FL and MO provided such great experiences.

Meera: It went really well. Having visitors from outside really improves the quality. Listening and giving feedback was wonderful.

Arthur: Also, the state ed department representative was at MO event.

Meera: The person who oversees the curriculum in our state is a former Wipro fellow. She shows up at our events. Her feedback was great and she shared how it could have an impact on the state.

Arthur: The person from ed department in NY is also a former Wipro fellow and what I didn't realize the MA ed representative is also a former Wipro fellow, I should connect them.

Dave: Our event was on Saturday. We brought several speakers. A lot of the discussion was about AI in education. One of our faculty developed a tool and was explaining ways to use it to the participants. Such events provide opportunities for the national level exchange. We had a full day event. We also presented awards. Overall, it was a great event.

Larry: We had a wonderful day! The way that we structured the event provided an opportunity for all participants to have their voice and express their opinions. It was great!

Arthur: Visitors added a level of quality, and it was great! It gave me an opportunity during lunch to sit together with district coordinators fellows from different sites.

Mika: We are having our big day next week. We'll have a showcase of fellow's work. The theme is: Inspiring others and being inspired by others. We are looking forward to this event!

Arthur: Several people from NY will be coming to NJ.

Preetha: We'll have 12 fellows coming. We'll have presenters from all sites. As part of the presentations, they'll be showcasing their projects. Half of the time visitor fellows will be doing their presentations. The event will be from 9-3 pm. We'll have some fellows visiting TX because of the schedule.

Arthur: I didn't realize that every site will be represented in CA

Preetha: The excitement is great here. This excitement makes a difference.

Ratna: We'll also have 12 visitors. They'll be presenting as well. They'll have 20 mins to present and 10 mins for feedback. We will also have some district representation. I'm looking forward to it!

Cross-site conferences and updates

- Climate initiatives
    - Climate V-CCLS
    - 4 teams (MO-2; MA -1; CA -1)
    - Meeting being arranged

Arthur: It didn't get the way I was thinking but we made some progress.

Climate Book Club: Hope Jahren: The Story of More: How We Got to Climate Change and where do we go from here

- One meeting and one to go

Brooke Whitworth Leadership Institute

- **Arthur:** 4-5 Fellows completed this institute

Leadership seminars
- AI and Large Language Models
- 4 sessions
    - Session 1: Wednesday, April 9 from 7 PM-9 PM (EST): Assessment and Assignment Generation
    - Session 2: Tuesday, April 15 from 6 PM – 8 PM (EST): Engagement and Creative Content
    - Session 3: Thursday, April 24 from 6 PM – 8 PM (EST): Support and Feedback
    - Session 4: Wednesday, April 30 from 7 PM – 9 PM (EST): Critical Thinking and Problem-solving

Arthur: So glad I did it. It was great.

Future Collaboration with Knowles being explored
- Summer workshop
- Summer conference
- Are there Knowles Fellows in our districts? https://docs.google.com/spreadsheets/d/1mItbcofw9t2oslxp3YGrQc_w7w80-i7NpCwX_ZBdbbU/edit?usp=sharing

Arthur: We see a starting point is to participate in a summer workshop. It is a 3-day workshop. It will take place in Philadelphia. We can send some fellows to figure out whether these workshops are worthwhile. We agreed that we can take one of the session times during their conference day and present our Wipro work. The first thing I want to find out is if there are any Knowles fellow in our districts?

Arthur: How would you pick fellows to attend the Knowles event?

Meera: Ask some of the more senior fellows

Dave: We can poll them and ask about what they are hoping to learn? So then we can see what would be helpful to us to bring back and share with the community.

Tammy: There are some very active fellows who keep coming back to different events.

Arthur: We need to figure out if there is any interest.

Summer and next year

NSELA conference – placed based learning?

Arthur: We had some fellows who were really involved with it.

Meera: We had a fellow who was interested in it. We should make him aware of this opportunity.

Arthur: What do you think about placed based learning? Is there any interest?

Meera: We actually had several fellows who did their GPS projects on placed based learning.

Brooke Whitworth course?

Arthur: We need to find out the value of participating in it from our fellows before figuring out what to do next.

Anne: I just want to say something about place based learning. I think everyone should have it in their schools.

Book update – Received? Disseminated?

Arthur: Has anyone got their books?

Tammy: I'm not actually sure, I'll need to find out.

Received books: NY, FL, TX, Anne, NJ

Future funding – no news

Quarterly report for June 15

Arthur: I'd like to share about storylines in biology. It is fantastic. It is an incredible impact that I'd like to highlight. Are there other stories that we can highlight? It is such a success story. If we could highlight it as a special part of the report that could be great.

A focus on impact

- We have the dashboard that shows teachers involved
    - Does it do an adequate job?
- We need some stories
    - Nicole in FL – Storytelling → 100 biology teachers
    - Do we have others we can highlight

Summer plans?

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 quarter, the CA site continued to provide professional learning, coaching, and support to districts in achieving their science goals. The Wipro SEF Program supported H-CCLS collaborative group work as well as professional learning focused on high-quality science instructional practices. The Wipro School Leaders Program continues to delve deeper into problems of practice and explore how to apply leadership principles to address these challenges. District Coordinators will also continue to collaborate with the CA Leadership Team to focus on individual district needs.

For the next quarter, we will update the H-CCLS form logs and download all the data related to the H-CCLS cycle of this cohort. Cohort 5 will begin Year 2 with their inaugural session on September 20th, 2025. This initial meeting will be a 3-hour virtual session focused on introducing the GPS project and providing resources to help participants generate ideas for their projects. For the Wipro School leader program, we will recruit new participants beginning in August 2025 and aim to launch the new program in October.

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

The CA site facilitates monthly professional learning sessions for Cohort 5 Wipro fellows. Four professional learning sessions have been held since the last V-CCLS conference (two in-person sessions and two virtual sessions) with the following focus:

a) Next Generation Science Standards (NGSS): What does this look like in practice?
b) Equity & Social Justice: Who are we serving?
c) Leadership: What does it mean to be a teacher leader?

On June 7, 2025, the CA Team held its end-of-year conference, where the CA Wipro fellows presented their H-CCLS projects. The CA Team worked closely with the other sites to ensure that their fellows and District Coordinators could present their Wipro projects in three synchronous sessions at the conference. The CA team, along with Arthur, facilitated these sessions on the day of the conference.

H-CCLS Projects

See the following link for the End of Year Conference Program.

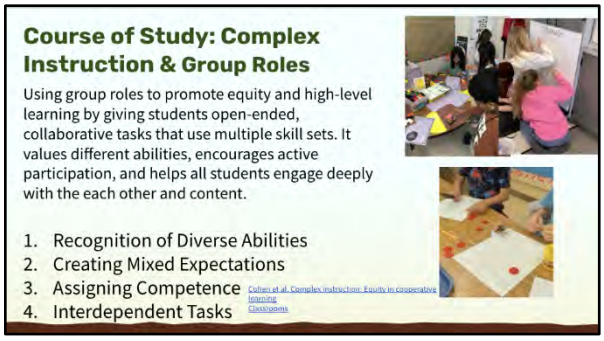
Group #	Team Members with Name of School/District/Grades	Title of Presentation
Group 1	Brittney Greer, (2nd Grade, Theuerkauf Elementary, MVWSD, Madison Gallagher, ES Gr. 2, Theuerkauf Elementary, MVWSD Amy Chiu- Sakamoto, ES Gr. 1, Alice Fong Yu Alternative School, SFUSD	Planning & Carrying Out an Investigation Through Group Roles
Group 2	Tracey Ananmalay - Gr 4/5, Los Alamitos Elementary SJUSD Marcy Johnson -Gr 5, Jefferson Elementary, SFUSD Laura DuMont - Gr 3-5, Anderson Elementary MSD Jennifer Yee , Gr 3, Theuerkauf Elementary MVWSD	First and Second-Hand Data
Group 3	Nicole Data, Mariano Castro Elementary, ES, STEAM K-5, MVWSD Michael Rollins, ES, STEAM 3-5, Amy Imai Elementary, MVWSD Abbie Meyer, ES Gr. 3,Theuerkauf Elementary MVWSD	From Evidence to Explanation: Empowering Students with Argumentative Language Tools

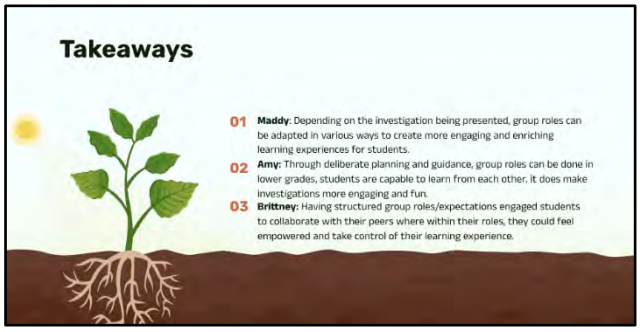
Group 4	Lisa Carrell, Gr 7, Moreland Middle School, MSD Kaitlyn Kraybill-Voth,Gr 7, 8, Everett Middle, SFUSD Allison Lee, MS Gr. 8, Graham Middle School, MVWSD	Developing and using models to ground and inspire group inquiry and equitable discussion.
Group 5	Moumita Biswas, 11-12th grade, Leland High School, SJUSD Martha Perez Murillo 11-12th grade, Wallenberg High School, SFUSD Francesca Briones -11-12th grade, Mission Bay Hub, SFUSD Brian Finley - 9-10th grade, Thurgood Marshall Academic High School, SFUSD	Mathematical Computational Skills In Science Data Analysis
Group 6	Laura Nichols, HS General Science, Downtown High School, SFUSD Dion De La Cruz - 11/12 HS Physics, Branham High School, CUHSD Tess Carlson, 11/12 HS Biology, Mission Bay Hub, SFUSD	Constructing Written Explanations of Place-Based Phenomena

H-CCLS Group 1, Elementary

Brittney Geer, Madison Gallagher, Amy Chiu-Sakamoto

We explored the Science and Engineering Practice of Planning and Carrying Out Investigations, emphasizing how young learners develop inquiry skills through hands-on, collaborative experiences. Drawing from current research, we examined how the strategic use of group roles—such as leader, recorder, and materials manager—supports engagement, accountability, and deeper scientific thinking in early elementary classrooms. As a group, we reflected on how intentional role structures can empower students to investigate questions, test ideas, and work as a scientific team from an early age.

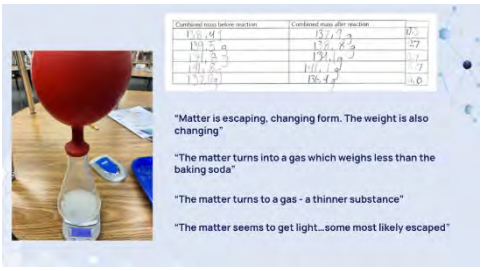




H-CCLS Group 2, Elementary

Tracey Ananmalay, Marcy Johnson, Laura DuMont, Jennifer Yee

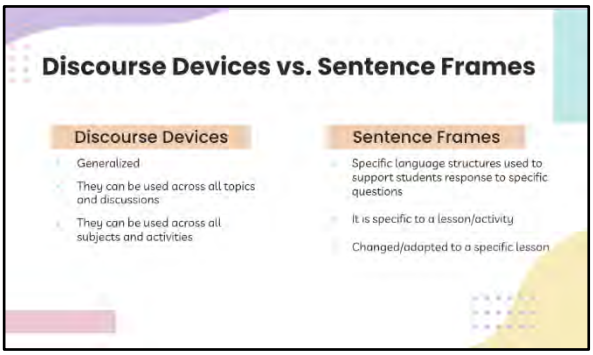
We taught lessons in both math and science involving data analysis. Our presentation today will focus on the benefits and differences of using first and second-hand data with students.

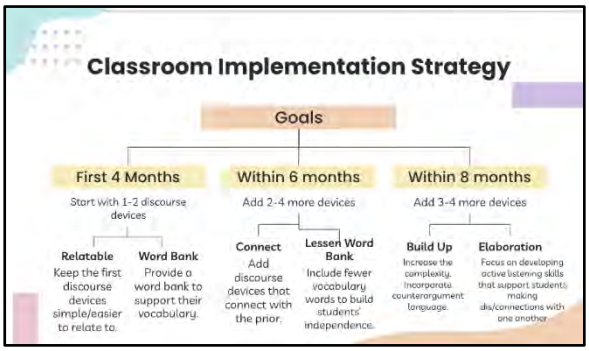


H-CCLS Group 3, Upper Elementary

Nicole Data, Abbie Meyer, Michael Rollins

How can we intentionally support students in developing the language skills needed to engage in meaningful argumentative discussions? In this session, participants will explore how language scaffolds – such as talk moves, sentence frames, and structured discourse strategies – support students making claims based on evidence. Our cohort will share practical classroom strategies to elevate student voice and deepen content understanding through structured argument. The purpose of these strategies is to increase access and confidence for all learners in the classroom.

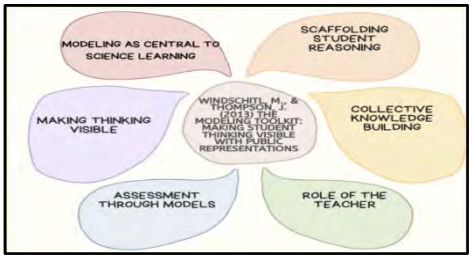


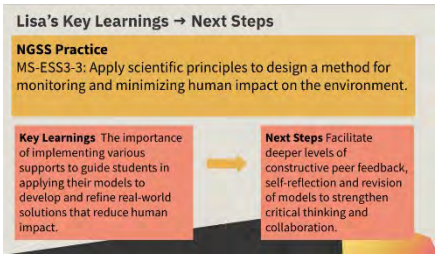


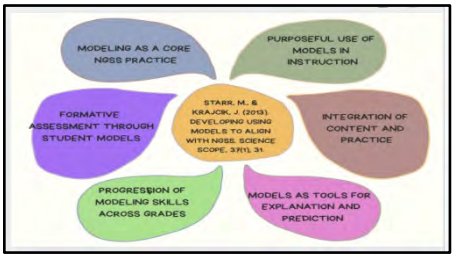
H-CCLS Group 4, Middle School

Lisa Carrell, Kaitlyn Kraybill-Voth, Allison Lee

Modelled lessons guide students through the process of using and creating models to understand and address grade-specific science standards. Students investigate and discuss their learning through various types of models, including dioramas, conceptual diagrams, data graphs, probability charts, and kinesthetic simulations.



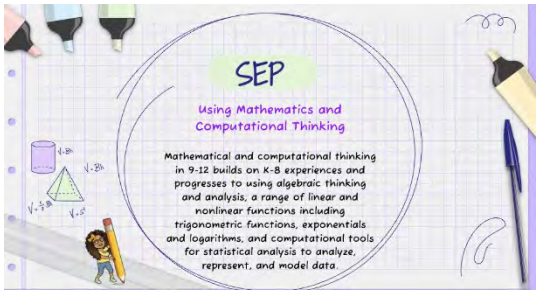


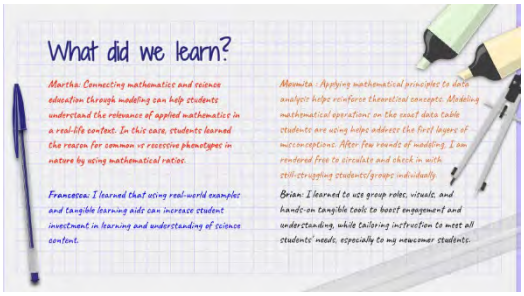


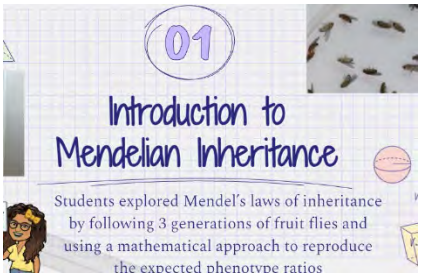
H-CCLS Group 5, High School

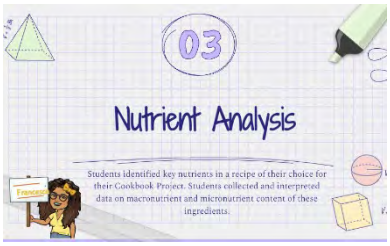
Moumita Biswas, Martha Perez Murillo, Francesca Briones, Brian Finley

Mathematical and computational thinking in 9-12 builds on K-8 experiences and progresses to using algebraic thinking and analysis, a range of linear and nonlinear functions including trigonometric functions, exponentials, and logarithms, and computational tools for statistical analysis to analyze, represent, and model data.





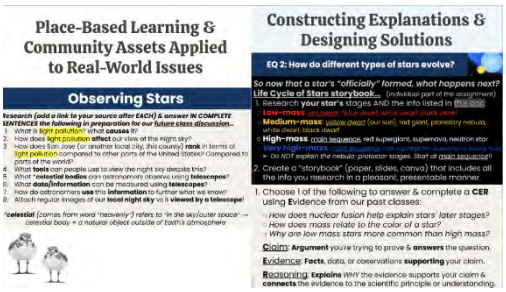




H-CCLS Group 6, High School

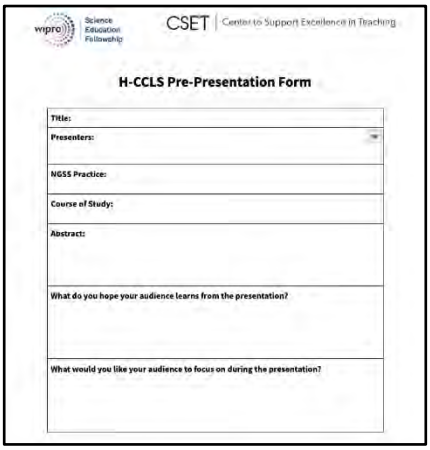
Laura Nichols, Tess Carlson, Dion De La Cruz

Three high school teachers from different science disciplines and school settings explored how to support students in constructing written explanations using claim-evidence-reasoning (CER) paragraphs. We considered the various cognitive demands of making sense of phenomena and producing scientific writing, and we implemented strategies to support students in these processes. We also explored the impact of using real-world and localized place-based phenomena on student engagement and learning. We will share our findings and key takeaways from this inquiry cycle.



Reflection and Feedback

As is customary with all Wipro conferences, feedback forms were distributed to the audience so they could provide both warm and cold feedback on all the presentations. For the CA Wipro fellows, we also provided a brief overview of their projects with a pre-presentation form.



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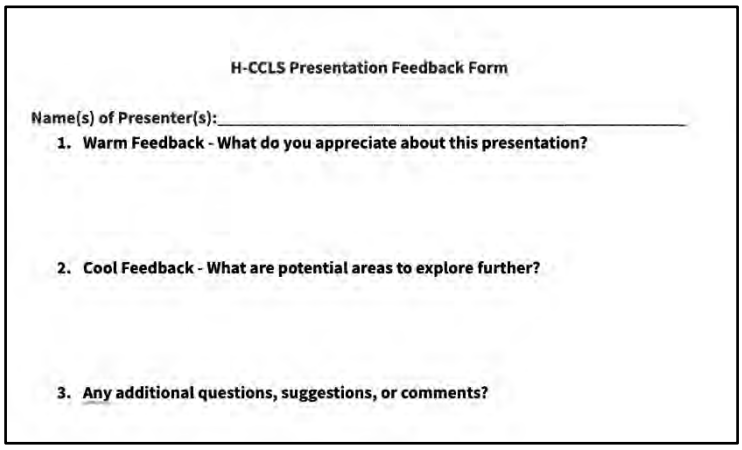
H-CCLS Pre-Presentation Form

Title:
Presenters:
NGSS Practice:
Course of Study:
Abstract:
What do you hope your audience learns from the presentation?
What would you like your audience to focus on during the presentation?

H-CCLS Pre-Presentation Form



H-CCLS Presentation Feedback Form

Name(s) of Presenter(s):_____

1. **Warm Feedback - What do you appreciate about this presentation?**

2. **Cool Feedback - What are potential areas to explore further?**

3. **Any additional questions, suggestions, or comments?**

Pre-Presentation Form

At the end of the conference, we provided a survey, which gave us insights into how the conference fared. Some of the responses to the reflection questions are highlighted below.

1. What did you learn from today's Wipro SEF conference? What were some highlights?

   - Inspiration for talk structures, modeling feedback cycles, and anchor phenomenon implementations for next year.
   - I really enjoyed hearing from the California groups where especially the GPS projects from across the country. It's always so nice to learn more about ways to engage students in science learning.
   - I learned some strategies for supporting my students in modeling. I saw how engineering can be introduced to elementary students. I got thoughtful feedback on my group's presentation.
   - I enjoyed how interconnected all our presentations were. I felt like each one added to my understanding.
   - Common theme: student-led collaboration and discourse

2. Do you have any suggestions about how we can improve future conferences?

   - It was great. I wish I'd been able to view some other presentations but understand there just wasn't time.
   - I'm looking forward to reading other slides, but I would have loved to see more presentations.
   - Some of the presentations were extraordinary. I wonder if we can get a template on what to present next time.

The Wipro SEF conference provided valuable inspiration for implementing talk structures, feedback cycles, and anchor phenomena, with participants particularly appreciating the diverse GPS projects shared by California groups and educators nationwide. A common theme emerged around student-led collaboration and discourse, with attendees gaining practical strategies for modeling instruction and integrating elementary engineering, while enjoying the interconnected nature of presentations that built upon each other's insights.

Some of the suggestions for future conferences include providing more opportunities to view additional presentations, extended time slots, or access to recorded sessions. Several attendees recommended creating a presentation template to help standardize and enhance the quality of future submissions, building on the extraordinary presentations they witnessed.

Plan for the Next Two Quarters

Date	People	Activity
Wipro SEF Program		
Across the school year	Wipro Fellows + Stanford Coaches	Ongoing coaching with the Stanford Wipro Team
Fall 2025	Wipro Fellows + Stanford Coaches	Introduction of GPS projects: Provide all resources related to GPS. Have Wipro alumni present some of their GS projects.
Wipro School Leaders Program		
Fall 2025	SLP Participants + Tammy	Recruit new participants and launch program
Across the School Year	SLP Participants + Tammy	Five 45-minute individual coaching sessions throughout the school year
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 We met with all the District Coordinators, and they shared how they were able to leverage the expertise of the Wipro alumni to support science initiatives in their districts

Vignettes

Madison Gallagher
Grade 1
Mountain View Whisman School District

As a second-year teacher, I entered the Wipro Science Education Fellowship Program eager to deepen my practice and grow as an educator. I quickly discovered just how transformative this experience would be, not only for my teaching, but for my students as well. Wipro provided the space, community, and structure to reflect, collaborate, and elevate the way I integrate science into my classroom.

One of the most valuable shifts in my instruction has been how I approach the science content already embedded within our Amplify CKLA Knowledge units. While units like The Human Body and Cycles of Nature are naturally rich in scientific concepts, my experience in WIPRO helped me make these units more meaningful and engaging for students. I became more intentional about deepening student understanding by providing consistent opportunities for academic discourse around the higher-level texts presented during read-alouds. Each day, students were encouraged to process and apply what they were learning through structured conversations, hands-on activities, and conceptual modeling. I incorporated strategies such as turn and talks, sentence stems, and whole-group discussion routines to help students build confidence using academic vocabulary and explaining their thinking. This shift not only enhanced their grasp of scientific ideas but also strengthened their ability to make connections, collaborate, and think critically about the world around them.

The V-CCLS and H-CCLS group work was especially impactful. Being able to learn from educators in both my own grade band and from upper elementary and high school challenged and inspired me. Our discussions helped me broaden my understanding of science learning across grade levels and better appreciate how foundational skills build into more advanced content. Whether I was recording a lesson or debriefing with my group, I felt like I was constantly growing, reflecting deeply, receiving meaningful feedback, and adjusting my instruction to promote more effective science discourse and engagement.

Throughout this fellowship, my knowledge of how to support student discourse in science has grown immensely. I've learned how to increase equity of voice, structure conversations more intentionally, and give my students the language tools they need to explain their thinking. I've also become more confident in facilitating rich, hands-on learning that invites curiosity and supports all learners, regardless of their background knowledge or language proficiency.

This being my first year in Wipro, I already feel the deep impact it has made on my teaching and leadership. I'm especially grateful to have entered the program with the encouragement of my instructional coach, Jordan Garvey, whose support helped me make the most of every opportunity. I'm eager to begin Year Two with renewed focus—ready to take on more leadership opportunities and share what I've learned with others. I'm incredibly thankful for the chance to reflect, refine, and reimagine what science education can look like in my classroom and I can't wait to continue this journey. Thank you, Wipro!

Tracey Ananmalay
Gr. 4 / 5 Combo
San José Unified School District

Decades into a teaching career, it's easy to fall back on well-oiled routines and habits. So, I was delighted when our district's secondary science coach approached me about the Wipro program and the opportunity to collaborate with science teachers across grade levels.

As a Wipro Fellow, I've connected with teachers in the cohorts described below, but also 1:1 during in-person sessions. The atmosphere is one of collegiality and mutual respect, and every Wipro gathering leaves me energized and excited about my instructional practices. The feedback from other fellows has been uplifting in its positivity and usefulness.

My vertical collaboration involved a primary STEM specialist, and a high school science teacher who worked with newcomer students. By inviting each other into our respective classrooms through video-recordings, we quickly developed trust and confidence. Our focus (student assessment applied to interdependent relationships in ecosystems) demonstrated the considerable commonality in our work.

The second collaboration included a math specialist along with 3rd and 5th grade teachers. We delved into the practice of Data Analysis since it tied well into mathematics. We chose to explore the efficacy of first and second-hand data in the science classroom. Our respective lessons built on our shared learning, and I developed a richer understanding and opinion on the topic.

Perhaps my favorite aspect of this fellowship is that I am demonstrating to my students that learning, both formal and informal, is a lifelong journey. Anyone interested in a community of teachers fully engaged in their own learning needs to look no further than the Wipro Fellowship.

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 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.

We have eight team projects that just completed either in their first or second year of implementation. The team leaders chose their own projects based off previous Wipro work, selected their own team members, and then implemented that work. Some of these projects involve creating curricula while others focus on technology or promoting stem to various groups. Six of the eight teams are returning to complete their second year of the project. 2 of the teams completed their two-year project (we had one complete a two-year project last year) and both of them are submitting something this year.

For this past quarter, our main event was planning for our Celebration event on May 17th and working on communicating with fellows to recruit for our final cohort in Phase 2. The agenda for the celebration is located here: https://usf.box.com/s/8xwwimwmrfj087y98s01n4qtyn9kyrww

We spent part of our March meeting talking with the fellows about what they wanted their celebration to be in May. Thus, we had Dr. Eisenkraft come speak to us about Wipro and science education as well as Dr. Zafer Unal from USF St. Petersburg to talk to us about AI. in education and his platform teacherserver.org. We had two Fellows and one DSC from Texas as well as a fellow

from NY visit us for the celebration. The three Fellows presented on their work in NY and Texas. We also invited Pam Pelletier to come and join us for the event. We had a wonderful list of presentations.

Moving forward, we will not be having any meetings as it is the summer, but we are working on collecting applications for our fourth and final phase. Application deadlines are Monday, June 16th. We have about ten who have expressed genuine interest in submitting a proposal (and already have one submitted).

Summary of Current Project(s) and Goals

Our groups have been continuing their projects, and we have been supporting them however possible. Some of the groups just completed their projects while others are at their halfway points. This is a summary of the 8 projects we have:

Completed Projects

Title: Gifted but 'Off Track': Serving the Gifted Students of a Title 1 High School Team

Jacqueline Bromley, Phase I Fellow, led this project. It established an after-school club to support gifted students who have been designated either 'at-risk' or 'off track' according to Early Warning Intervention data. To mitigate potentially unsuccessful outcomes, they identifed and invited Gifted students to join a newly formed club known as 'Above Deck'. The purpose of this club is to support the unique social, emotional, and cognitive needs of this unique group of underserved students. Bromley will continue this club into the next school year.

Title: Working Across Grade Levels to Improve Grades 3-5 Science Teaching

This two-year project brought together grades 3-5 teachers in a V-CCLS to improve the teaching of science at their school. The team was led by Tara McClintick, Phase 1 Fellow. The team worked together to establish a science progression for the three grades, identify appropriate curriculum materials, and implement them.

Projects just completing year 1 and starting year 2

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

This project delves into research on science instruction in high school biology, focusing on enhancing scientific literacy across diverse content areas. The approach centers on utilizing storyline narrative-driven methods that interweave scientific content and practices into a cohesive and engaging learning experience. This project is led by Nicole Holman, Phase 1 Fellow. Holman is currently working on her PhD in science education at USF, and this project is the focus of her study.

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

This project is an extension of Bhagyashree Kulkarni's Phase 1 GPS project which are two separate but related projects. The team implemented flipped classroom strategy by using available videos or videos made by the teachers.

Title: Creating new teacher confidence

Chelsey Swats (phase 1 Fellow) led this project whose goal is to create more class time for classroom activities, which will facilitate learning and use traditional homework time for notes/lectures. The teacher work in different content areas, so many utilized different modes of note taking strategies for content knowledge. The training helped new teachers learn how to implement these strategies in and out of the classroom.

Title: Pasco Teacher Leader/Coach Elementary Science PLC

Lora Darby led this project. It focused on designing a scope and sequence for science in her school, a professional learning plan, and collaborative structure for a two-year Elementary Science Teacher Leader PLC for seven east side Pasco County Elementary schools experiencing high turnover. Part of the PLC was an interactive book study using either Ambitious Science or Students Constructing Explanations in Science paired with the district's coaching manual, Getting Better Faster.

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

Ileana Luna is leading this technology enhancement project which focused on developing the curriculum for the Chemistry classroom that will integrate the use of Virtual Reality (VR) for labs, simulation, and other hands-on activities.

Title: Problem Based Learning in Science

Dawn Avolt is leading this project which is an extension of her GPS project from Phase 1. The goal is to implement problem-based learning into a 4th grade environment so that students can better understand their science content. Elementary schools are currently provided curriculum from the district but it is lacking in different areas (vocabulary being one of them).

Highlighted Project

Nicole's Story telling project is being used by teachers across the entire district. She has presented this work multiple times at national conferences. She is currently working on submitting an article for publication. She expanded upon her work on the first project by expanding the number of stories being told across the curriculum. We are also proud to report she was recently offered the position of Secondary Science Supervisor for Hillsborough Public Schools.

Progress and Highlights

Undeniably, the highlight of the past quarter for the Florida Wipro Science Education Fellowship was hosting the end of year conference on May 17, 2025. Leadership and fellows alike placed an emphasis upon planning for the event, which was attended by Phase 2 fellows, some of their team members, fellows from New York and Texas, as well as fellows interested in proposing projects for the upcoming and final year of the current funding. Guest speakers included Dr. Zafer Unal (AI tools in education) and Dr. Arthur Eisenkraft. Dr. David Rosengrant served as the day's emcee and presented highlights of our success in Tampa Bay. David also ensured that the agenda included the voices of all attendees, including our guests from out of state and those who were considering a project for the upcoming year. Social events were planned for both evenings as well, which served as additional opportunities for collegial conversation. Materials and photos can be found in a Google folder created for the event.

Outside of planning meetings for the event, regular project meetings took place during the spring, which included fellows-only meetings with leadership in a virtual format, leadership meetings in a virtual format, DCS-only meetings in a virtual format, and one set of meetings in which leadership and DSCs met with fellows (and in some cases team members) at their work sites. This format continues to be a structure that supports a more intimate connection with the fellows and their teams. The entire cadence provides for strengthened lines of communication across the three large districts and university leadership.

The May 17th event also served as a close-out for some of the projects in Tampa Bay, all of which have led to district change ranging from site-based proof of concept to the evolution of district-wide curriculum. We are very proud of each of the fellows who have contributed to the community of practice that exists within our region.

Applications for new projects are due later in June, and IHE leadership along with DSCs will review projects prior to the beginning of July. The past fellows who pitched ideas at the May 17th event received valuable feedback in the roundtable discussions and others who were not able to attend received similar feedback from leadership and DSCs outside of the meeting. At first take, many of the projects appear to be fundable and include promising ideas for district change. We look forward to reporting upon accepted projects in the fall.

All fellows from Phase 2 have been encouraged to consider presenting or attending summer and fall conferences, including the NSELA Summer Leadership Institute, NSTA fall conference, Florida Association of Science Teachers (FAST) conference in October, 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 sharing of project success.

Local school districts begin the 2025/2026 school year during the first week of August, and meetings for fellows have been established for the fall. These important dates can be found in the table below.

Individual Wipro Fellow Highlights

Nicole Holman was recently promoted to the position of Supervisor of Secondary (9-12) Science in Hillsborough County Public Schools. This is a testament to Nicole's incredible leadership work in support of student achievement in science in one of the nation's largest districts. It should be noted that Nicole also successfully defended her doctoral proposal this spring as well. Other fellows continue to lead change in their districts in their current roles.

Kellie Delgado was just selected to participate in an immersive 6-day field experience to learn about the Lower Suwannee Watershed. She leaves for Georgia to travel to Georgia Southern University to participate in this experience called Swamp2Gulf.

Jacqueline Bromley recently went to NSTA to present her Wipro work. While she was there and networking she learned about, applied, and was just accepted to an NSF Funded Research Experience for Teachers at the National Magnet Lab in Tallahassee. She herself says she never would have known about or even be able to go on this opportunity had it not been for Wipro.

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.
June 16th	All	Applications are due for Cohort IV projects. These are one-year projects and will be our final cohort.
August 16th	All	Our first in person meeting of the semester. This will be held on the St. Petersburg Campus or in Pasco County. Expected time is 9 AM to 1 PM. For our new members, we will go over their submitted projects and tweak when or if necessary.
September 29th	All	Virtual meeting for our fellows to go over project status and learn more about Action Research.
October	All	This will be our us 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 TBD)

Vignettes

Laura Carlson
New River Elementary School
Pasco County Schools

My participation in the Tampa Bay Wipro SEF has helped me to become teacher leader in my school and school district (Pasco). I am the PLC facilitator for my grade level and on the leadership team. People will joke that I am the STEM coach and I am not that at all. This year, I was selected to help in deciding on which science textbook series to adopt for the district. In years past, I have worked during the summer for the district to help write playbooks for the teachers to use to teach science using the 5E model. By being part of Wipro, I was able to get others involved because of my project and then able to share with my staff other fellow projects in order to increase science education for our teachers and students. it is a very positive experience to be a fellow. I still communicate with many of the fellows as well to share ideas.

Kellie Delgado
Turner-Bartels K-8 School
Hillsborough County Public School District

My work in the Tampa Bay Wipro SEF has been a steppingstone in becoming a science contact teacher leader at my school for grades 3-5. Because Hillsborough County, is a very large school district (more than 200,000 students) one teacher leader in each subject is chosen from each school to represent those teachers as a contact leader. As the contact leader for Math/Science I attend science contact meetings monthly and share the content with all three grade levels. We meet twice a month to go over data and explore cross curricular standards and ways to help students. I am also in charge of judging our STEM fair boards, preparing them for the actual fair in Downtown Tampa at the convention center, taking them to the fair and setting them up. Each year students in grades 3-5 from my school have been selected as winners. I am proud to be a science contact teacher leader at my school, and I thank Wipro for helping me!

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 the transforming of 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 cohort 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 we have changed the grade band mix to recruit all grades, namely, K-12 teachers for both years. In year 1 they 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.

During this quarter (April – June 2025) Cohort 6 completed work on their H-CCLS segment of year 1. Cohort 5 has completed working on their lesson plans and is finalizing submission and scheduling professional development. We continued our segment on Physics + math activities for both cohorts, which consists 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. 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. Further details are included below.

In the next two quarters Cohort 6 fellows will begin their year 2 work, which consists of creating harmonized math-science lesson plans. We have sent out a call for a new opportunity for Cohort 6, which is to include one or two non-Wipro teachers in their team so that they can begin the process of district transformation this year. We expect to hear more about their level of interest in doing so over the next month. We will also be contacting Cohorts 4 and 5 to expand their Wipro work during 2025-26 by working on a group project with non-Wipro teachers in a similar manner.

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).

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

Megan Kulage, who is from St. Jacob, Illinois, graduated from SIUE in 2023, dove straight into the world of education. She is now in her second year of teaching 5th grade at Hallsville Intermediate School. One of her favorite parts of teaching is seeing her students' genuine curiosity and creative problem-solving in action. As project faculty we are impressed with how Megan, a relatively new teacher, one who may not routinely focus on aspects of math and science education at the elementary school level, has been drawn into integrating math and science (and possibly other subjects) due to her participation in the Wipro project.

The Wipro project interested Megan because she wanted to discover new ways to enhance her math and science instruction. She has found working with educators from diverse backgrounds to be an eye-opening experience, allowing heshe to see connections across all grade levels that she might otherwise have missed. For example, she learned that the challenge of making and analyzing graphs isn't limited to 5th graders; even middle and high school teachers notice the same issues. This insight has motivated her to integrate more graphing activities across various subjects, giving her students increased exposure and better preparation for future academic challenges.

Throughout the Wipro project, she has also had the opportunity to explore different teaching approaches for analyzing and interpreting data. Understanding common misconceptions—such as measurement errors, data interpretation difficulties, and issues with understanding variation—has helped her anticipate the challenges her students might face and craft questions to guide them toward problem-solving. She is excited to continue planning and implementing lessons that incorporate these insights, enhancing the curriculum we already teach in fifth grade.

Progress and Highlights

In this quarter Cohort 5 completed their Wipro Year 2 project work by completing their lesson plans and presenting them during the end-of-year conference on May 3. 2025. They will complete submission of these lessons and their professional development presentations to teachers in their districts over the summer. Cohort 6 fellows completed their H-CCLS work and presented them during the end-of-year conference. The Cohort 5 and 6 presentations were outstanding and showcased the work the fellows have been doing in their classrooms over this year. These activities are described below along with other activities during the end-of-year conference.

Attendees at 2025 Missouri Wipro Conference

End of the year Missouri Wipro Conference, May 3, 2025.

A major highlight for the Missouri Wipro Team was our annual Wipro conference, held this year on May 3. This conference was the third in Phase 2 of the Wipro SEF program in Missouri.

We welcomed our keynote speaker, Christi Bergin, MU Research Professor Emerita; Chair, Social and Emotional Research Group, AERA Director, Prosocial Development & Education Research lab; and Chief Scientific Officer, Prosocial Education Collaborative. She spoke on "Prosocial Education Supports STEM", discussing how students learn more when they behave in these "prosocial" ways, and presenting specific strategies that can be implemented in any classroom.

Dr. Christi Bergin

Other special guests were Dr. Arthur Eisenkraft, and Janice Washington and Raisha Allen from DeSoto ISD from the Texas Wipro program. Susan German, our Missouri Coordinator of Curriculum at the Missouri Department of Elementary and Secondary Education was also in attendance.

The full conference brochure is available here: https://tinyurl.com/WiproMOMay2025Conf

Presentation Abstracts:

Increasing student understanding through the use of the ACODESA collaborative model

Hannah Nandor, Maria Backes, Leslie Verslues, Collin Mayhan, Stephanie Worthen, *Columbia Public Schools and Helias Catholic High School, Diocese of Jefferson City, MO*

In our presentation we will discuss the ACODE-SA method, which has shown student improvement by utilizing collaborative learning, scientific debate, and self-reflection. We employed these best practices as lessons were customized over vast topics that range from chemical and physical phenomena and mathematical concepts. By clearly presenting a guiding question, our lessons confirmed that student collaboration and communication is an integral component in the development of each students' learning.

Solar Panel Functions

Kelli Anthes and Bryan Bolton, Hallsville Middle School-Hallsville R-IV School District, MO

We will be investigating how the Sun's path can impact Solar Panels and their effectiveness. Students will investigate how the distance and angle can affect a shadow's size. After gathering data, students graph the data and make conclusions. The graphs of the data should create quadratic equations, resulting in a parabola or an exponential growth graph. The students will use their algebraic knowledge to write an equation for the quadratic/exponential graph. They will discuss what the parts of the equation mean about the solar panel placement.

Building Blocks of Discovery: K-2 STEM Adventure

Janice Washington and Raisha Allen, DeSoto ISD, TX

K-2 STEM Adventures facilitated three interactive STEM projects: Marble Roller Coaster, Mechanical Hand, and Tornado Tower during the 2024-2025 school year. Participants included two teachers and one Academic Facilitator at Cockrell Hill Elementary in DeSoto ISD. We aimed to promote early STEM education, ignite curiosity, and cultivate foundational competencies in problem-solving, creativity, and collaboration, bridging the existing gap in STEM education, fostering teamwork, critical thinking, and self-assurance in science and engineering. We observed that students could think critically and problem-solve when confronted with challenges. Students and parents expressed heightened enthusiasm regarding the scientific knowledge acquired in the classroom through parent and student surveys.

If You Give a Student Pi

Jamie Metcalf and Sherry Schaefer, Oakland Middle School, Columbia Public Schools, MO

As part of a Solar System unit, we will be sharing a lesson investigating the relationship between circumference and diameter as students discover (or possibly re-discover) the mathematical implications of pi. Students will take measurements, graph data, and draw conclusions about the relationships between pi and measurements of a circle.

Elementary Data Process: Collection and Analysis

Amy Bartlett, Logan Durk, Kayla Eads, Desiree Pezley, Megan Kulage, Gwen Imhoff, Hallsville Intermediate School, Hallsville R-IV School District, MO

Teachers from Hallsville's 3rd and 5th grades will share their experiences integrating science and math through meaningful graphing activities in the elementary classroom. This session highlights how we applied insights from a research article to become more intentional in modeling and teaching scientific procedures for accurate data collection. We engaged students in a variety of data collection methods and supported them in organizing their findings using bar graphs and line plots. The most powerful learning emerged as students analyzed their graphs to draw evidence-based scientific conclusions. Join us to explore how purposeful integration of math and science can deepen students' understanding of both content areas while fostering critical thinking and inquiry.

Recognizing, supporting, and improving student perseverance in mathematical problem-solving: The role of conceptual thinking scaffolds

Anne Stacy, Amanda Wolfe*, Lauren Dyer, Kyle Chrisman, *Oakland and Lange Middle Schools, Columbia Public Schools, and Laura Speed Elliot Middle School, Boonville R-I School District, MO*

Promoting a culture of perseverance is essential to student success. Conceptual thinking scaffolds allow students to identify prior knowledge and aid in brainstorming a solution. Students are encouraged to make sense of the problem, determine appropriate strategies, apply strategies and assess progress, adjust approach, and reattempt if necessary. Our course of study revolves around analyzing and interpreting data, making sense of problems, and persevering, specifically focusing on problems involving graphs. Throughout our research and lessons, we discovered that scaffolding challenging questions led to a much higher level of comprehension.

Hallsville Elementary Team presents their findings on data collection methods

Jamie Metcalf and Sherry Schaefer explain their solar system unit

At the end of the day, we recognized our Cohort 5 fellows who are finishing their two-year Wipro term.

Cohort 5 Fellows being recognized at the end of their participation in the Wipro project.

Plan for the Next Two Quarters

Date	People	Activity
August 2025	Cohort 6	Introductory meeting for Cohort 6 Fellows and Associate Fellows
September 2025	Cohort 6	Leadership discussion; Science + math activity by a C4 or C5 team
October 2025	Cohort 6	Continue leadership discussion; Presentation by non-Wipro faculty member
November 2025	Cohort 6	Science + math activity by a C4 or C5 team
December 2025	Cohort 6	End-of-semester presentations

Vignettes

Ms. Friedrich helps students test their recipes for elephant toothpaste in her elective STEM class

Lauren Friedrich has been teaching middle school science for 7 years at Laura Speed Elliott Middle School in Boonville. She completed her undergraduate degree at the University of Missouri with the intent to pursue medical school, but plans changed, and she found her way to education. Already working closely with 6th grade math teacher, Kyle Chrisman, for several years, they decided that the Wipro program would help them to strengthen their craft and provide more tools to effectively teach their students and both applied as a team for Cohort 6.

So far in this program, Lauren has found that using tools in teaching can really expand students' ability to learn and remember the content they are being taught. She has also found that asking students guided questions only allows them to focus on limited thinking and answers, while asking open ended questions and wonderment questions helps students start to think deeply and really engage in the content. She has applied both ideas into her teaching and the students are doing much better than they had before. Lauren is excited to see what other tools she can use to help her students become better learners and investigators!

Maria Backes is a high school math teacher at Helias Catholic High School. Her classes include 9th grade Algebra 1 and 10th grade Geometry. She is participating in the Wipro program from 2024-2026 (Cohort 6).

At first, Maria was skeptical about being able to apply the scientific aspects to her Algebra 1 class but was open to ideas. Gradually as the math and science seemed to merge, the classroom applications became clearer.

As part of the Wipro program, she designed a lesson that involved experimentation. Students were given M&Ms in a cup which were shaken up and then spilled onto a plate. The number of M&Ms that were m-side-up were counted and that same number of M&Ms were added to the cup. The experiment was repeated until there were no more M&Ms to add. A table was used to record the number of M&Ms added each time. Graphs were used to model an exponential pattern between the number of trials and the number of M&M's. Students then used a spreadsheet to approximate the exponential equation of the relationship.

In addition to the lesson designed for the Wipro program, Maria learned about an activity a science teacher at another school was doing about the solar system and adapted the activity for her Geometry class during their unit about scale models and similarity.

Overall, the Wipro program has provided ideas for Maria to use in her classroom that would have never occurred to her otherwise.

Calendar

The face-to-face vs virtual meetings will be discussed in August. Tentative plans are shown in the table.

Date	People	Activity
August 2025	Cohort 6 Face-to-face	Introductory meeting for Cohort 6 Fellows and Associate Fellows
September 2025	Cohort 6 Face-to-face	Leadership discussion; Science + math activity by a C4 or C5 team
October 2025	Cohort 6 Virtual	Continue leadership discussion; Presentation by non-Wipro faculty member
November 2025	Cohort 6 Face-to-face	Science + math activity by a C4 or C5 team *Possible site visit*
December 2025	Cohort 6 Face-to-face	End-of-semester presentations *Possible site visit*
January 2025	Cohort 6 virtual	TBD
February 2025	Cohort 6 virtual	TBD
March 2025	Cohort 6 Face-to-face	TBD
April 2025	Cohort 6 Face-to-face	May conference presentation preparation
May 2025	Cohort 6 Face-to-face	May Conference

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 12 Alumni Fellow 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

On May, 29, 2025, the MSU group came together for the culminating event for Year 3. The theme for the event was "Inspire and Be Inspired". It took place from 4:30-7pm, with a light dinner provided. Of the 44 active Fellows, 36 attended:

13 of 13 Alumni Fellows

10 of 14 of NEW fellows

9 of 12 of experienced new fellows

4 of 5 of experienced new fellows who are now leaders

5 district administrators.

1 Mercy College Leader and 2 Mercy College Fellows

The agenda is below, with the PowerPoint attached:

4:30–4:45 Re-greetings

- Introductions
- Introducing visitors from Mercy
    - Carmen King
    - Antoinette Koehler
    - Anny Vanegas
- Arthur Eisenkraft
- Anna Monteiro–Knowles Teaching Initiative

4:45–6:05 sessions

- 8 groups in one room (7+ 1 visitors)
- 8 in the other

Instructions: (have order of groups prepared).

- Up to 7 minute per group
- Save all questions for the end

Part I: Then, Now, Next:

- Where we were before (this project)
- Where we are now
- Where we are going (in the next year and beyond)

Part II: A Gift for Others: We'd like you to prepare a "gift" for those attending that relates to your work this past year and will inspire others. Be creative! This gift can be in the form of a collage, image, video, poetry, playlist, student work, lesson plan, activity, mantra, for example, and should respond to the following questions:

- What inspires you?
- How do you hope to inspire others?

Don't overthink your gift. Go with what comes to mind and will inspire your Wipro peers. We hope that these prompts help you reflect on all that you have accomplished this year and the people around you who have supported your work.

Part III: Q and A and general discussion until 6:05 or so. Faculty and doc students can facilitate.

6:10–6:45 Dinner+Say one thing of gratitude from the presentation

Announcements

- Talk about last year: Is everyone continuing?
- Anne Gurnee announcements?
- Budget
    - Continuation of your project
    - June 30, 2026
    - What needs do you anticipate
    - Stipend
    - Sustainable
- Alumni Fellows: Please fill out this survey now: https://forms.gle/5avBUzNxGNTJWqgy5

Selected/Highlighted Projects

Below are the projects the Fellows are undertaking in Year 1 of their participation

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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
Tchalabi	Kearny	Garden Expansion Project
Graziano	Pascack Valley	Increasing 3-Dimensional Teaching Practices by Supporting Teacher-Leaders

Progress and Highlights

The research team presented a paper session at AERA 2025:

“Mapping Their Terrain: Using Social Network Analysis to Support Feminist Teacher Leadership and Promote Educational Renewal."

The team is also working on revisions to an article for submission to International *Journal of Teacher Leadership*: Self-Created Social Network Maps: A Tool to Advance Professional Development of Science Teacher Leadership.

Additionally, we are revising the 2024 AERA paper that was presented in order to submit it to *Studying Teacher Education.*

Plan for the Next Two Quarters

Date	People	Activity
September, TBA	All Fellows	Year 4 (Year 2 of their 2-year projects) kick off!

Vignettes

Al Cann
Pascack Valley Regional Science
Designing board game-based curricula in Science and Math classrooms

With factual knowledge at students' fingertips, rote learning is no longer practical in my opinion. Students are not developing skills such as cooperation, communication, problem solving, critical thinking, and planning as they should. Board games provide an avenue to acquire and better these skills in an environment that is fun, challenging and interactive. To this end, currently there are two courses that I have presented to the administration that have been designed and offered to students. One is called "Discrete Math" which teaches statistics, geometry, probability, algebra and practical math, all through board games. Assessments will include board game development, competitive and cooperative gaming, and game performance and fluency. In the other class, "Earth's Natural Disasters and Astronomy", students will be presented with games about disasters and their proficiency in handling the problems presented will be assessed. Part of their learning process will be research when they encounter unfamiliar phenomena such as lahars, regarding volcanos, and s and p waves, regarding earthquakes. Astronomy games involve planning space travel, colony creation, exploration as well as many other problems and puzzles too numerous to list here. I have recruited two other teachers to help me with this project and they will be spearheading the math class. I will be granted time off during the time of the math period to assist. We will be meeting weekly to discuss progress. We are hoping to recruit more teachers in other disciplines to do something similar in those classes.

The Montclair WIPRO team has been supportive and extremely enthusiastic about this project. The infectious optimism, and of course some financial support, have been instrumental in my success to date.

Author: Carmen King

Executive Summary Statement

"We can't become what we need to be by remaining what we are." – Oprah Winfrey

This quarter has provided opportunities for growth and transformation. Our fellows have seized those opportunities and have been committed to becoming. They have continued working on their projects; hosted school family nights; organized school events for students to experience Wipro Reimagined projects; provided professional development for their colleagues; and presented at cross-site Wipro STEM conferences. Collectively these activities have made a positive impact on students, educators, and the wider district communities. The Fellows have been on a transformative journey to stronger leadership and have spurred momentous transformation in their districts.

On May 1, 2025, we had our end-of-year meeting. We took time to reflect on and discuss our project achievements, group highlights, personal highlights, and ways we thought our projects impacted the districts and wider communities. Each group reported out the highlights of their projects. They then planned for project sustainability. Ultimately, they prepared an elevator pitch for funding, time, and support and shared those pitches with each other offering warm and cool feedback so that groups could lift the quality of their pitch.

In this quarter, our New Rochelle Arcade Challenge Team lead their Webster's Arcade. This was a culminating event of their project. The students were excited and engaged. The Fellows were pleased to see how well the projects were received and how proud the students who made the arcade games were of their work and themselves. The high school students that supported the

elementary students through this project were proud as well. The New Rochelle Code to Learn Team provided a half-day professional development session for all their building colleagues. It was an amazing success by all accounts. It whet the appetites of a wide variety of non-Fellow educators and helped them build confidence that they too could help their students with coding. Our Fellows felt the power of their project and their leadership. Our White Plains Fellows completed the second edition of their newsletter. It has been seen not only by the White Plains community but has been shared with people across many different countries. The newsletter spread the word about so many STEM activities, events, and people in the STEM fields. The community is now more informed about the STEM happening in the White Plains City School District and Westchester at large.

We have begun to plan our Fall conference and will continue that work through the next quarter. This year for the first time, it will take place across two days, Friday, October 17, 2025 and Saturday, October 18, 2025. Day one will be a STEM Professional Development Day with specialized workshops for educators. Day two will be the K-12 STEM Educators Conference. Each Wipro Reimagined Cohort 3 team will present on the 18th. A call has gone out for crosssite Wipro Fellows to submit a proposal for presentation as well. We are anticipating a robust day of learning on the professional development day. We are also looking forward to Fellow presentations during the conference. Our conference also serves as our first step in recruitment for our next cohort of Wipro Fellows.

Summary of Current Project(s) and Goals

"For the Arcade Challenge Team from New Rochelle, students explored the exciting world of arcade games while learning essential scientific concepts and engineering fundamentals. Over several months, elementary and high school students successfully partnered up to design and build arcade games, from classic shooters to innovative new ideas, using engaging STEAM materials and problem-solving skills. Everyone who has seen and been a part of the process is impressed by the outcome! The project not only fostered creativity and teamwork but also laid a solid foundation in engineering and science concepts through playful exploration. The construction of the arcade games using recycled materials enhanced students' understanding through hands-on STEAM based learning, while allowing their creativity to shine! Our school community played the games live during our STEAMposium and the creators were excited to show off their hard work."

"The Learning to Code-Coding to Learn Team focused on building cognitive skills using robots and coding. Students across grade levels were challenged to learn how to code robots. Through hands-on classroom lessons, students were taught the basic principles of coding. Students in grades 2, 3, and 5 used that knowledge to design projects for their peers. The projects aligned with the curriculum work done in the classroom. The team had an opportunity to develop and facilitate a Robotics Workshop for teachers and staff at Columbus. Teachers first had hand-on experiences with grade-appropriate robots. They then had the opportunity to work with their grade level to determine how to incorporate robotics and coding into their curriculum. Students developed a coding project as the culminating assignment. They aligned their work with their grade level curriculum. During the Science block, classes were invited to try-out the projects."

The STEM Spotlight Newsletter Team worked diligently on the second edition of their newsletter, collecting information for writing articles and doing research to discover the interesting STEM activities that happen throughout the district and the wider community. The newsletter shone a light on "incredible achievements in White Plains' Elementary, Middle, and High Schools, glimpses into the exciting careers of some STEM alumni, and provided a fun "Try it at Home" activity that the

whole family could enjoy! This second edition began by giving everyone a glance of the exciting engineering pathways that White Plains Tigers [student nickname] can follow as they progress through their academic career from K-12.

Progress and Highlights

In this quarter all the participants of Wipro Reimagined Cohort 3 are ending their projects for the school year and planning for project implementation for the next school year.

DISTRICT	TEACHERS	PROJECT TITLE/DESCRIPTION
New Rochelle	Antoinette Koehler, Anny Vanegas (Wipro Consultant), David Webb, Susan Siegel Erik Brillon Emily Schneeberg Sebastian Arango Sebastian Zamora-Giraldo Michael McGowen	**CODING TO LEARN-LEARNING THROUGH CODING: BUILDING COGNITIVE SKILLS USING ROBOTS AND CODING** Integrating robots into general and special education classes fosters critical thinking skills and supports student abilities, benefiting both general and special education students. The hands-on project using a variety of age-appropriate robots will allow students to complete coding tasks that encourage creative solutions. It will build students' computer science and digital literacy skills, specifically the subconcepts of digital use and computational thinking from grades K-5. Students will develop critical thinking skills when building codes for classroom projects. The project will expand accessibility of coding and exploration of robots to students in Special Education classes and primary grades.
New Rochelle's Coding to Learn Learning to Code Project April 2025–June 2025		
The Coding to Learn team (**CTL**) had their second Robotics Family Night on April 10, 2025. Sixty students and family members attended the event. Families had an opportunity to interact with Sphero, Ozobot, and Dash robots. They also watched a demonstration by the High School Robotics Team. Students continued to work on developing their final projects based on the work learned in class. They also continued to work on their' problem-solving skills. In May, students worked on completing their final gameboards or mazes in preparation for school presentations happening in May and June. They have used the principles of engineering and design to plan and build their projects. They have been engaged and excited whenever they have had the opportunity to work with robots.		

Members of New Rochelle HS Robotics Team presenting at Columbus Elementary second STEM Family Night

Mike McGowen helps student attendees begin their adventure with coding Dash

Columbus Elementary Wipro Fellow Presentation of Coding to Learn Professional

New Rochelle's Coding to Learn Learning to Code Project January 2025 – March 2025

The Coding to Learn team (**CTL**) and their students showcased their Wipro Reimagined project during the school-based Board of Education Meeting (February 11, 2025.) They invited their students to teach the Board Members what they were learning. The Board was impressed with the knowledge, skills, and confidence the students demonstrated. CTL also hosted the first of two Robotics Family Nights (February 13, 2025.) Over two hundred adults and students attended the event! CTL was most surprised by the level of interest in their project shown by the community and are hoping that this family night will lead to more engagement in school events in the future. It is looking promising as the sign-up for the second Robotics Family Night (April 11, 2025) is robust.

Learning to Code a Dash Robot

CTL hosts its first Coding and Robotics Family Night

White Plains	Mike Nangle Aldwin Martinez Jordan Garcia Kim Fleming Damien King Susannah Genty-Waksberg Jakki Forbes Machado	**STEM SPOTLIGHT NEWLETTER** The STEM newsletter is designed to highlight the exciting world of Science, Technology, Engineering, and Mathematics within the WPCSD community. Each issue will feature a diverse range of STEM-related activities, projects, and achievements from students at all grade levels. The newsletter will highlight the outstanding work of students, teachers, and staff in all STEM disciplines across WPCSD and celebrate successes, breakthroughs, and innovative projects. It will foster a passion for STEM by sharing engaging stories, profiles, and resources and providing valuable information about STEM-related topics, news, and events for students, teachers, and parents. To promote STEM equity and inclusion it will highlight the contributions of diverse individuals to STEM and share resources and initiatives that support equity and inclusion in STEM education. It aims to bridge the gap between schools and the community by featuring local STEM initiatives, partnerships, and events. The hope is to encourage collaboration and engagement between students, teachers, parents, and the broader community.

White Plain's STEM Spotlight Newsletter Project April 2025 – June 2025

The STEM Spotlight Newsletter team (SSN) finalized and sent their Newsletter to White Plains City School District. They were gratified in seeing how all the pieces came together and how rich and robust the final product was. They are ending this leg of the journey with a feeling of satisfaction and gratitude for the newsletter they were able to produce because of their team effort and diligence. The response from the community has been overwhelmingly positive and the team feels proud of the stellar newsletter they were able to create and share all in service of students and STEM. So far there have been over 1600 views from all around the world! https://secure.smore.com/n/n2w37

Try It At Home!

Welcome back to "Try it at Home," our feature dedicated to bringing hands-on STEM excitement right into your living room! We've been absolutely thrilled with the response to our first edition, and it was fantastic to see all the amazing STEM adventures happening across the White Plains City School District.

You shared your discoveries! We received some incredible pictures of students diving into the "Blobs in a Bottle" lava lamp experiment, the Catapult STEM Kits and the dazzling results from the Fiber Optic STEM Kits.

Ready for more STEM fun?

Dive into Online Discoveries: Launch a Balloon Rocket!
This month, get ready for liftoff without leaving your house! Explore a treasure trove of exciting STEM activities using everyday household materials on the **Science Bob website**. For this edition, we highly recommend trying the **"Balloon Rocket" experiment!** It's a fantastic way to explore principles of propulsion and Newton's Third Law with just a few simple items. Get ready to build, create, and discover together!

Lucas Polizzi

Carter Goldman

Ananth Sivasubramanian

Joshua, Hannah, and Calvin Huh

WPCSD STEM Spotlight Newsletter Spring 2024-45 "Try It at Home!" Section

https://secure.smore.com/n/n2w37#bnmq45z24a

STEM Spotlight Newsletter Map of Locations Where the Newsletter Has Been Accessed.

White Plain's STEM Spotlight Newsletter Project January 2025 – March 2025

The STEM Spotlight Newsletter team (SSN) was thrilled to launch the fall edition of their newsletter. In it they share some of the amazing STEM happening across the schools in the White Plains City School District. The newsletter highlights captivating experiments from the elementary classrooms to cutting-edge projects at the high school level. SSN's hope is to showcase the ingenuity of the district's students and teachers and engage the entire White Plains community by shining a spotlight on the incredible achievements of the students and the exciting STEM careers of some alumni. The newsletter has sections for each school level, a section for teacher tips, the STEM director's corner, and upcoming events. One of the highlights of the project is the provision of "Try it at Home" activities that the whole family can enjoy. More than sixty families have already signed up for "Try it at Home" materials. The newsletter has been well received so far, and SSN is already working on the spring edition

Welcome to the WPCSD STEM Spotlight Newsletter!

Hello STEM enthusiasts! Get ready to explore the exciting world of Science, Technology, Engineering, and Math in our very first district-wide STEM Newsletter! This fall has been buzzing with innovation and discovery, and we're thrilled to share some of the amazing STEM happenings from across our schools. From captivating experiments in our elementary classrooms to cutting-edge projects at the high school level, get ready to be inspired by the ingenuity of our students.

Inside, you'll find spotlights on incredible achievements in our Elementary, Middle, and High Schools, a glimpse into the exciting careers of some of our STEM alumni, and a fun "Try it at Home" activity that the whole family can enjoy!

Want to get your hands on some STEM fun? Register through the link in the "**Try it at Home**" section to receive a **FREE STEM kit** to take home! And don't forget to snap some pictures or videos of your STEM adventures – you might just see them featured in our Spring edition!

STEM Spotlight Newsletter Introduction

Student Spotlight

Leila Tomlin - A Force for STEM and Community

Meet Leila Tomlin, a senior at White Plains High School, who embodies the spirit of STEM and community service. With a remarkable GPA, she's a true inspiration!

- **STEM Leadership:** Founder of Girls4Tech and President of Junior Engineering Technical Society (JETS).
- **Community Impact:** President of Key Club, Community Service Liaison for NHS, and founder of the Debate Club, along with extensive volunteer work.

Leila's dedication to service is evident through her involvement with numerous organizations, including the Pink Lady Box Project, My Sister's Place, The Ronald McDonald House, and Lifeline Humanitarian Organization. She has also secured 2 $10,000 grants for her Elementary school, and her high school, and went on a Mission trip to Serbia and raised 30,000 dollars for a new playground.

Want to learn more about Leila's inspiring journey? Read the full interview and dive deeper into her incredible achievements!

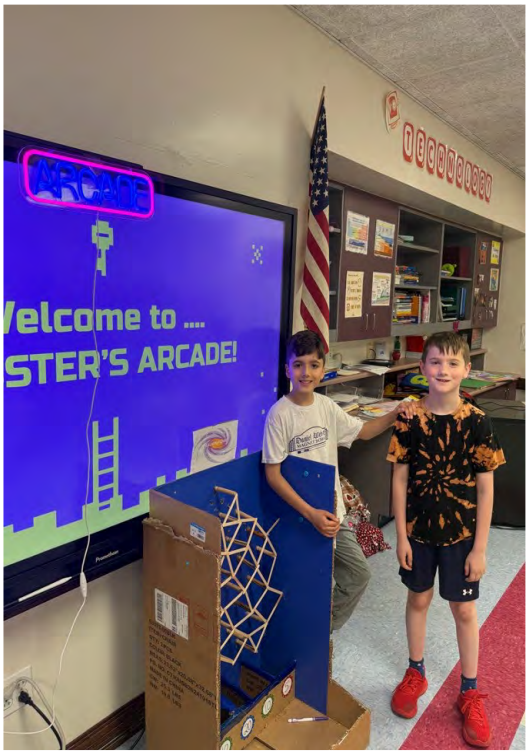
STEM Spotlight Newsletter- Student Spotlight

New Rochelle	Kathleen Coyne Samantha Eisenberg Sandra Galano Melissa Landau Zachariah Biondo	**ARCADE CHALLENGE** Students will step into the exciting world of arcade games while exploring essential scientific concepts and engineering fundamentals. Over several months, they will design and build arcade games, from classic shooters to innovative new ideas, using engaging STEAM materials and problem-solving skills. Through this experiential process, students will deepen their understanding of energy conversion, motion, and design principles while collaborating with peers and mentors from higher grade levels. Participating students will engage in lessons and hands-on activities to develop their understanding of key science concepts. Students will design and create arcade games that convert energy and/or use the effects of force on the motion of an object; use the iterative process to test and refine their arcade games; explain to others the engineering design process that they engaged in; collaborate and work across grade levels and schools within the district to align with district wide STEAM goals.

New Rochelle's STEM Arcade Challenge Project April 2025 – June 2025

New Rochelle's Arcade Challenge team (AC) have watched their students flourish as they have researched, planned, collaborated, designed and redesigned, created, and finally implemented their arcade. After so much work, how satisfying it was to bring the Fellows and their students' ideas to fruition. The Arcade challenge was nothing short of amazing.

,June 6, 2025 Webster's Arcade Challenge Event



Arcade Challenge Lunchtime Club Members

Grades -5 Arcade Fun

Sustainability – Students harvest their hydroponically grown spinach
Webster Elementary Wipro Reimagined Project – Cohort 2

New Rochelle's STEM Arcade Challenge Project January 2025 – March 2025

New Rochelle's Arcade Challenge team (AC) began their Webster Arcade Club. Students learned about the club through an assembly program. 3rd-5th grade students had their first meeting with New Rochelle HS students on February 13th. There was a high level of student enthusiasm about engineering their own games. They were excited to participate. In fact, so many students showed interest that Fellows had to institute a lottery system for student selection. Recycled materials are being used for the arcade builds. There have been 2 sessions with New Rochelle's high school students who have volunteered to serve as a science and engineering support team. They have been instrumental in helping students follow their plan, work on building their game, and trouble shoot any problems that arise as they design and build. The elementary students get excited when the high school students are slated to come, and the high school students have served as good engineering role models.

3rd, 4th, & 5th graders brainstorm the potential materials they could use to design and engineer their own arcade game.

New Rochelle High School students support Webster Elementary students with their arcade builds.

Plan for the Next Two Quarters

Vignettes

Susannah Genty-Waksburg

Our Fellow, Susannah Genty-Waksburg, presented her Wipro Reimagined team project at the cross-site conference at Stanford. The title of her presentation was "STEM Spotlight: Cultivating Engagement Through a Districtwide Newsletter: Lessons Learned and Best Practices". The STEM Spotlight Newsletter's aim was to showcase STEM achievements in the district and inspirr and encourage STEM interest in students. The newsletter served to inform and educate students, teachers, and parents about STEM-related topics, news, and events. The hope was that the newsletter would help promote STEM equity and inclusion, and connect the White Plains community, bridging the gap between school and the community by featuring local STEM initiatives, partnerships, and events. Susannah enjoyed her experience presenting and attending Fellow presentations. "I had a great time at the conference. I loved meeting the other Fellows and hearing about the impact their projects have made on students this year. Thank you to the Stanford Wipro team at CSET for hosting a fantastic day of learning and collaboration. [The conference had] a very warm and friendly vibe."

Antoinette Koehler and Anny Vanegas

Antoinette Koehler and Anny Vanegas presented their team's project at the Montclair State University Wipro Conference in May. Antoinette told the origin story of the project. "We are a math science and technology school. 85% of our students take part in free or reduced lunch. About 87% of our students are ELL, second language learners. As a math, science, and technology school, what we realized is that we were not doing enough in terms of coding and robotics. There were not enough teachers in our school that were STEM Ambassadors, that were Wipro Fellows. I became a STEM Ambassador (a Mercy University STEM program.) I then went to the Saturday huge Mercy STEM conference, and there I became inspired by another school district and their work with their teachers. I spoke with Anny and then spoke to several teachers in our building, and I said, "OK. Listen. This is what I'm thinking. Coding. Robots. And working with the kids in order to create activities…" Our first-year teachers were very excited, because they don't know any better. But we were able to get four fifth grade teachers, one third-grade teacher, myself, a second-grade teacher, and our technology person, and an ABA teacher all involved in our project." This is a wonderful reminder of how our conferences can serve as seed, soil and sun for STEM educator growth, leadership, and district transformation.

Calendar

Date	Mode	Activity
10/17/2025	In Person	Mercy STEM Professional Development Day – Mercy University
10/18/2025	In Person	K-12 Educators Conference – Mercy University
October 2025	Virtual	Wipro Reimagined Zoom Information Session
November 2025	N/A	Proposal Submission Deadline
December 2025	N/A	Proposal Acceptance Announcement
January 2025	In Person	Initial Wipro Reimagined Face-to-Face Whole Group Meeting

TEXAS - UNIVERSITY OF NORTH TEXAS - DALLAS

Author: Dr. Ratna Narayan

Executive Summary Statement

The Wipro SEF Innovation Phase at UNT Dallas is in its third year. This year, we have funded school projects, collaborative and individual projects focused on district transformation through teacher leadership. New science TEKS have been implemented since fall 2024 and most of these projects address the changes made.

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 are between Fellows in the same school, ISD or different ISDs collaborating on a project of common interest. Individual projects enable Fellows to work on projects they are interested in and still be a part of Wipro and impact students. This year, 2024-2025, I am funding a total of 10 projects, 4 schools, 3 collaborative and 3 individual projects.

This quarter is the STAAR Testing Quarter and as a results schools are primarily in testing mode. The testing frenzy often disrupts classes, but my fellows are pros, and I did not hear reports of any major issues with interrupted data collection. On April 7th, I met face to face with the Fellows and DSCs at UNT Dallas. The focus of the discussion was their projects, submitting proposals at CAST and presenting at the June Annual Wipro Conference. For the former, the audience is science teachers, and their presentation is with regards to the application of their research projects to the science

classroom. The CAST proposals were due May 31st, the date extended to June 10th, abstracts for the conference were due June 1st. 9/10 CAST proposals have been submitted, the pending one will be submitted soon.

I sent Raisha Allen (DSC) and Janice Washington from DeSoto ISD to Missouri, Faith Milika (DSC), Robert Matthews and Latrice Cooks from Lancaster ISD to FL. Jeremy Hesse (DSC), Kellie Burchfield from Cedar Hill, Sherry Thompson from Irving ISD will be presenting at the CA Wipro event.

The next quarter. I will be busy with the One-day Wipro annual conference, helping Wipro fellows complete their websites with all the required components. I also hope to send the RFP for the 25-26 year much earlier by the middle / end of June and talk to teachers and receive proposals earlier that will start in September.

Summary of Current Project(s) and Goals

A	School Projects		
1	Effects of Collins Writing in Science: Cedar Hill ISD The goal of the project is to improve 5th grade, 8th grade Science and Biology STAAR (State of Texas Assessment of Academic Readiness)/(EOC)End Of Course scores across Cedar Hill Independent School District. Collins Writing: CHISD District Initiative We might lose one of our fellows due to illness.	1 DSC 7 alums Third year of funding	2 elementary 2 middle 1 high school
2	From Concrete to Abstract Science: Grand Prairie ISD They are combining the development of English and Spanish language speakers with STEM (Science, Technology, Engineering, Math) through the Grand Prairie ISD Dual Language Program. An English 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	4 alums 2 new Second year of funding	6 teachers paired up at Ellen Ochoa
3	STEM Sensation: 3D Toys for the Senses: Irving ISD This project aims to engage 3rd grade students in designing and creating a 3D printed game that can be 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	1 DSC 2 alums 1 new	Stipes Elementary
4	STEAMing Year Round: A LISD Elementary Initiative: Lancaster ISD	1 alum 2 new	Pleasant Run, Rosa Parks, West Main,

	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.		and Belt Line Elementary
B.	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.	1 alum 1 new	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 with specific attention being given to Engineering 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 engineering practices	1 DSC 2 alums	3rd graders at Pleasant Run Elementary 6th graders in George Washington Carver 6th grade center

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 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.		Pleasant Run Elementary
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	1 alum	Elsie Robertson middle school
3	Using the Engineering Design Process to Increase Student Engagement in Physics, Robert Matthews, Lancaster ISD 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.		Lancaster ISD STEM High School

Selected/Highlighted Projects

STEM Explorations for Gifted Minds: A Framework for Innovation and Excellence

A collaborative project from Lancaster ISD

Brittany Preston & Saundria Jackson

This research study aims to implement the TEA STEM framework in the Gifted and Talented (GT) classroom for students in grades 3rd through 5th. We will focus on creating interdisciplinary, project-based learning activities that integrate science, technology, engineering, and math based on grade level content. By providing these project - based learning activities, students will explore real-world experiences and connect it 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.

The subjects of the study will be Gifted and Talented students in grades 3rd through 5th at two campuses in Lancaster ISD. (52 students total between the two campuses) We will pull students from regular classes twice a week for an hour at different scheduled times.

For each unit, we will select a topic for each grade level and collaboratively develop lesson plans tailored to the content/topic. Prior to starting the project, students will complete a Google Form to assess their prior knowledge. Every project will be linked to a STEM career, providing students the opportunity to explore different career paths. The challenge will then be introduced, and students will follow the TIGERS design model, which aligns with the engineering design process, to complete their tasks. They will present their work, make revisions as needed, and engage in peer reviews, and post-project evaluations for reflection as well as teacher reflections

Progress and Highlights

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 have an understanding of 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 have 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 in 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!

Plan for the Next Two Quarters

- Wipro Annual conference at UNTD on Fri June 13th, 2025
- Complete Projects and websites
- Ensure all 10 projects have submitted a conference proposal to present at CAST 2025 in Dallas
- Send out the RFP for 2025-26 proposals, talk to fellows and DSCs regarding their proposals, receive proposals, send them to my committee for their feedback and perusal, send out

feedback and acceptance letters eventually

- September, we will meet on a Saturday for Mock CAST presentations for Fellows who have been accepted, so they know how to run a CAST presentation
- First meeting for Fellows accepted for the 25-26 round of funding, provide plaques to P3Y3 participants

Vignettes

Rosalyn Miles, Grand Prairie ISD

I am a proud graduate of the University of Missouri-Kansas City, where I earned my degree in Elementary Education. Over the past eleven years, I have had the unique opportunity to teach in three different states: Missouri, Louisiana, and Texas. This journey has allowed me to work with a diverse range of students and communities, enriching my perspective and approach to education. Throughout my career, I've taught a wide span of grade levels, from third grade all the way to high school seniors, which has given me a deep appreciation for the continuum of student learning and development.

The Wipro Science Education Fellowship has had a significant impact on me as an educator. It has not only strengthened my understanding of science content and pedagogy but has also encouraged me to become more reflective and intentional in my practice. Through collaboration with peers and professional learning experiences, I've been able to implement more inquiry-based and student-centered science instruction. The fellowship has reignited my passion for science education and empowered me to cultivate curiosity and critical thinking in my students, shaping them into lifelong learners and problem solvers.

wipro Science Education Fellowship

June 2025

Community Matters

Welcome to the Wipro Science Education Fellowship (Wipro SEF) Community Matters Newsletter. We are excited to share updates on the remarkable contributions of our fellows to STEM education. Our program has supported science teachers and districts for over a decade, benefiting nearly 750,000 students. Our partnering universities include: UMass Boston, Stanford University, University of Missouri, University of South Florida, Montclair State University, Mercy University, and UNT Dallas.

IN THE NEWS

New Seminar Series for DSC: Exploring AI in Education
Throughout the seminar, we examined how Chat GPT can enhance science education, explored strategies to improve student engagement, and connected with peers to exchange insights and best practices for integrating AI into teaching.

The Wipro SEF Learning Community is driven by educators committed to fostering meaningful change within their classrooms and districts. They prioritize student success while equipping fellow teachers with innovative instructional strategies. Through their leadership, STEM education continues to improve, engaging local communities in dynamic learning experiences, both formal and informal.

This issue highlights a range of STEM initiatives across the nation, including the St. Petersburg Science Festival in Florida, the Wipro SEF Fellows Retreat in New Jersey, and New Rochelle's STEM projects in New York. It also highlights research presentations by our Wipro Fellows at the National Science Teaching Association (NSTA) conference, held in March 2025 in Philadelphia, PA.

Acknowledgements
We want to thank Wipro, our corporate sponsor, for their continued support of science education efforts as well as the teachers, district science coordinators and university faculty who improve student learning daily.

Community Building Events

FLORIDA: ST. PETERSBURG SCIENCE FESTIVAL, 2025

The St. Petersburg Science Festival, was held on February 7-8. Over the two days, Wipro fellows and USF leadership engaged school groups and the general public alike with science and STEM-based activities.

NEW JERSEY: WIPRO SEF FELLOWS RETREAT

New Jersey Wipro SEF Fellows came together for Renew, Refresh, and Re-energize Retreat that was held in the beginning of the year at Montclair State University

NEW YORK: NEW ROCHELLE'S STEM PROJECTS

The Coding to Learn team (CTL) and their students showcased their Wipro Reimagined project during the school-based Board of Education Meeting on February 11, 2025.

The New Rochelle Arcade Challenge team started the Webster ArcadeClub, exciting 3rd-5th graders about making their own games. They use recycled materials to build. High school volunteers help with design and problem-solving.

PLEASE VISIT OUR WEBSITE: https://wiprostemprogram.com/

NSTA Conference and Wipro Members Recognition

Wipro Fellows from Massachusetts, New York, New Jersey, and Florida presented their work at the National Science Teaching Association (NSTA) conference in March 2025, sharing their contributions to science education. Photos from left to right: Abbey Gilligan and Dr. Leana Peltier (New York) and Tara McClintock (Florida).

Dr. Arthur Eisenkraft was the recipient of the 2025 Outstanding Leadership in Science Education (OLISE) Award during the NSELA Annual Conference in Philadelphia, PA.

Julian Yacho from Lively Elementary School, Irving ISD recieved 2025-2026 Irving ISD Elementary Teacher of the Year Award

Dr. Billy Johnson, (former Wipro Fellow), was awarded DeSoto ISD's Top Educator Achievement award for 2024-25.

PLEASE VISIT OUR WEBSITE: https://wiprostemprogram.com/

Reflections from Wipro SEF Fellows

CALIFORNIA: STANFORD UNIVERSITY

RON HAMBY, SCIENCE INSTRUCTIONAL COACH, SAN JOSE UNIFIED SCHOOL DISTRICT:

Throughout the Wipro Leadership Program, I was constantly challenged by my way of thinking about science education, how to conduct educational research, and how my teaching affected my students. We've discussed everything from how to create engaging PD to how to approach best staff/admin relationships and how to build personal learning communities both in departments and schoolwide. I left the experience rejuvenated and ready to take my teaching to the next level, bring these new practices to my science team, and start to build personal learning communities at my school.

FLORIDA: UNIVERSITY OF SOUTH FLORIDA

KHADIJAH GASKINS-JONES, DISTRICT RESOURCE TEACHER (DRT) FOR 9-12 SCIENCE, HILLSBOROUGH COUNTY PUBLIC SCHOOLS

Supporting WIPRO Fellows has allowed me to support teachers in, yet another, capacity and has afforded me opportunities with state and national organizations such as FASS, FAST, NSTA, and NSELA. I was elected to the NSELA Board as the Region C Director. I'm honored to serve on a national board, but I'm most enthusiastic about how this will lead to additional support and leadership opportunities for our teachers. I'm grateful for the opportunity to support our WIPRO Fellows, and I look forward to the continued collaboration to support them and our HCPS students.

MISSOURI: UNIVERSITY OF MISSOURI

AMANDA WOLFE, 8TH GRADE SCIENCE TEACHER AT OAKLAND MIDDLE SCHOOL

Amanda feels the Wipro program activities have improved understanding of the relationships between math and science practices in her classroom. Collaborating with her Wipro group members at various grade levels has inspired conversations about how they can support foundational skills that students of all ages can benefit from. Amanda has developed lessons and resources to better support her students' ability to identify prior knowledge and apply this to new situations.

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NEW JERSEY: MONTCLAIR STATE UNIVERSITY
CLYDE GRIFFITH, SCIENCE, K-12, PLAINFIELD SCHOOL DISTRICT
By working together—both within our district and with educators across the state—we are shaping a more cohesive and effective science curriculum that prepares our students for future success. As we continue this journey, we remain committed to refining our approach, leveraging innovative resources like OpenSciEd, and advocating for high-quality science education in collaboration with the WIPRO fellowship.
NEW YORK: MERCY UNIVERSITY
AIMEE FERGUSON, CURRENT NEW ROCHELLE DC, WIPRO SEF AND REIMAGINED FELLOW
Aimee continues to exercise teacher leadership and spur district transformation with her persistent pursuit of opportunities to help educators grow. In her DC role Aimee has arranged, facilitated, and/or supported: an educator science event at the Westchester Children's Museum, Maria Walsh's, STANYSevent: Building ThinkingClassrooms, and The Cornell Lab of Ornithology interactive webinar exclusively for Wipro Fellows nationwide
TEXAS: UNIVERSITY OF NORTH TEXAS-DALLAS
RAISHA ALLEN, DISTRICT SCIENCE COORDINATOR, DESOTO ISD
Raisha has been in education for 8 years. She was a WIPRO Fellow in cohort 2 at UNT Dallas focusing her research on concept mapping and argument and argumentation in the science classroom. Her work ethic and experience has allowed her to be promoted to DeSoto's K-12 Science Instructional Facilitator and the District's Science Coordinator with WIPRO. She is excited about this new journey and ready to impact student engagement in the Science Classroom. She is also a Doctoral student at Baylor.
CONTACT INFORMATION
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Monthly Evaluation Updates

ANNE GURNEE
CONSULTING, LLC

Wipro Science Education Fellowship

Evaluation Update

March 2025

Activities this Month

- Submitted summary of mid-year survey data. (Submitted March 13, 2025)
- Drafted DSC leadership session survey - one, so far; awaiting comment.
- Drafted year-end DSC and Fellows surveys - will submit for review by April 4.

What's Next?

During the month of April, AGC will be working on the following:

- Finalizing all DSC leadership session surveys as needed.
- Finalizing year-end surveys – will be administered May 6-20).
- Finalizing plans for year-end interviews.
- Participating in any scheduled/needed meetings for the project.

***Note**: I will be traveling abroad April 19-May 5 with limited connectivity. I will be checking email/texts only when I have Wi-Fi.*

ANNE GURNEE
CONSULTING, LLC

Wipro Science Education Fellowship
Evaluation Update
April 2025

Activities this Month

- Completed and began administration of year-end surveys for DSCs and Fellows. Surveys will be up from May 6-20, 2025. Three states (CA, FL, and MO) chose to add 1-2 specialized questions.
- Completed and administered four post-program surveys for DSC Leadership Session.
- Observed Cornell webinar for Wipro SEF Fellows on April 8, 2025.
- Observed the sessions #1 and #2 of the DSC Leadership Virtual Conferences on April 9 and April 15 and sent quick survey reports to project leadership shortly afterward to help inform the future sessions.
- Participated in the Wipro Leadership call on April 15, 2025.
- Drafted DSC leadership session survey - one, so far; awaiting comment.
- Drafted year-end DSC and Fellows surveys - will submit for review by April 4.

What's Next?

During the month of May, AGC will be working on the following:

- Completing the administration of the DSC and Fellows year-end survey.
- Arranging travel and planning for site-visit to Texas for year-end conference June 12-14, 2025.
- Sending out request to all sites for site leadership and suggested administrators for year-end interviews.
- Beginning analysis of year-end surveys for annual report.
- Participating in any scheduled/needed meetings for the project.

ANNE GURNEE
CONSULTING, LLC

Wipro Science Education Fellowship
Evaluation Update
May 2025

Activities this Month

- Completed administration of year-end surveys for DSCs and Fellows. Began analysis of year-end data.
- Planned travel for Texas conference and arranged for group meals for June 12 & 13. Assisted Ratna with some questions about conference planning.
- Gathered information from most sites about year-end interviews for DSCs, IHE leads and district administrators.
- Drafted all year-end interview scripts. Send invitations for year-end interviews.
- Provided raw data report to project leadership about DSC virtual leadership conference sessions #3 and #4.
- Participated in the Wipro Leadership call on May 20, 2025.

What's Next?

During the month of June, AGC will be working on the following:

- Continuing the year-end survey data analysis.
- Participating in the Texas conference (June 13, 2025).
- Creating & administering a post-conference survey for Texas conference.
- Continuing interviews with DSCs, district administrators and IHE leadership.
- Participating in any scheduled/needed meetings for the project.