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

WIPRO SEF

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QUARTERLY REPORT

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INTRODUCTION

Wipro SEF Program Overview

The Wipro Science Education Fellowship (SEF) is a two-year program 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 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.

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 and culminates with a report and presentation of a poster session 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.

HOW TO READ THIS REPORT

This report captures the work of the Wipro SEF program from March 16, 2020 through June 15, 2020. During this time, all sites met the challenges of maintaining and adapting the Wipro SEF program during the Covid-19 pandemic. The chart below summarizes the activities of this quarter and the activities that will take place in this school year. If you are unfamiliar with the Wipro Science Education Fellowship, please begin by reading the Introduction and Program overview. 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 Wipro Fellows read the sections entitled "Featured Fellows." To learn about how the Horizontal Collaboration Coaching and Learning in Science (H-CCLS) has impacted fellows look for the section titled, "Fellows Reflections on the H-CCLS teams." Throughout each site's 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

Table of Wipro SEF sites

	Cohort 1	*Cohort 2*	*Cohort 3*	*Phase II*
Year 0	Recruitment			
Year 1	Collaborative coaching and learning in Science (CCLS)	Recruitment		
Year 2	Growth Plan System (GPS)	CCLS	Recruitment	
Year 3		GPS	CCLS	
Year 4			GPS	
Phase II				Activities proposed by individual sites.

Key to yearly activities

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

On March 5, 2020, the governor of Massachusetts declared a state of emergency due to the Covid-19 pandemic. By mid-March school districts across the United states closed and moved to on-line learning for students. Universities in the Wipro network also moved to on-line learning. With little time to adjust to on-line instruction k-12 teachers and university faculty faced the challenge of providing instruction while learning to navigate unfamiliar on-line platforms. Many students did not have access to computers or a stable internet to complete assignments. For many poor students, school is also a source for basic nutrition. Providing nutrition, access to the internet, access to computers, and scheduling classes were the immediate concerns. Decisions regarding curricula and teacher-student interactions evolved over the next months. The inequities in our society became more and more visible during this time.

The Wipro SEF network is coordinated by UMass Boston leadership. In addition to monthly Zoom calls, sites are regularly visited by Dr. Eisenkraft and by university site leaders within the Wipro SEF network. With the arrival of the pandemic site visits were cancelled and network meetings needed to be conducted via Zoom. Each site faced a different set of circumstances depending on the particular state and on the reach of the pandemic in that state. Activities of the fellows of necessity needed to be placed on hold or modified to reflect the changes in the way fellows were teaching their classes.

During a March 18 Zoom call site leaders discussed what to do going forward and how best to complete this year's Wipro SEF program. Some of their concerns are summarized below:

- *"This is a stressful time for everyone and more stressful for some than for others. We have to take this into account and work with the fellows who are overwhelmed and provide flexibility while not putting the whole program on hold for those most stressed. We all have experience with situations like this where a student in our class is experiencing difficulties and we make accommodations for that student for work, deadlines, etc. while not compromising the teaching for all students. We can use our collective experiences in teaching to better navigate the unchartered waters we are now traversing."*

- *"We want to give our Fellows the full Wipro SEF experiences during these trying circumstances."*

- "We *want to keep our programs' momentum going forward and plan for the future as well. For example, we have to consider that if we start postponing conferences, we run the risk of having too much to do in the fall semester (beginning a new cohort and new GPS while the past semester conferences are not yet completed)."*

- *I have always reminded myself when I teach that learning physics is not the most urgent or important thing for most (if not all) of my students. That helps with the compassion side of my teaching. I counter that with my belief and philosophy that education is probably the most viable solution to many of the world's problems. And my commitment to education and my love for physics helps with the passion side of my teaching. Similarly, Wipro is not the most urgent thing on anybody's plate while, simultaneously, being a solution for many of our teachers and districts in helping our students. We have an opportunity for Wipro SEF to be a bigger part of that solution than originally intended.*

The monthly Zoom calls have continued through-out the quarter. The calls have helped to keep the network informed of how each site is working with their fellows. Sites have learned from each other and shared tools that make on-line meetings more productive. Three of the sites, CA, FL, and TX have decided to postpone their end of the year conferences, while Missouri has decided to conduct their conference virtually.

CALIFORNIA- STANFORD UNIVERSITY

Covid-19

In California, and specifically in Santa Clara County and San Francisco County, schools began shelter in place in mid-March 2020. From mid-March through the beginning of April, Wipro partner school districts were preparing for unprecedented distance learning for all students. During this time, teachers were scrambling to learn how to use distance learning platforms (like Google Classroom) and put together virtual lessons. Districts were busy distributing devices (iPads, Chromebooks, etc.) and internet access to families who needed them. Formal distance learning for most districts began in early April and lasted until the end of the school year.

Assessments were, for the most part, canceled for the remainder of the school year. Depending on the district and grade level, various policies were put in place for grading practices. State assessments were not given, but most students at the high school level still had final exams in some way.

Fellows' meetings (Cohort 1&2)

IHE Meetings

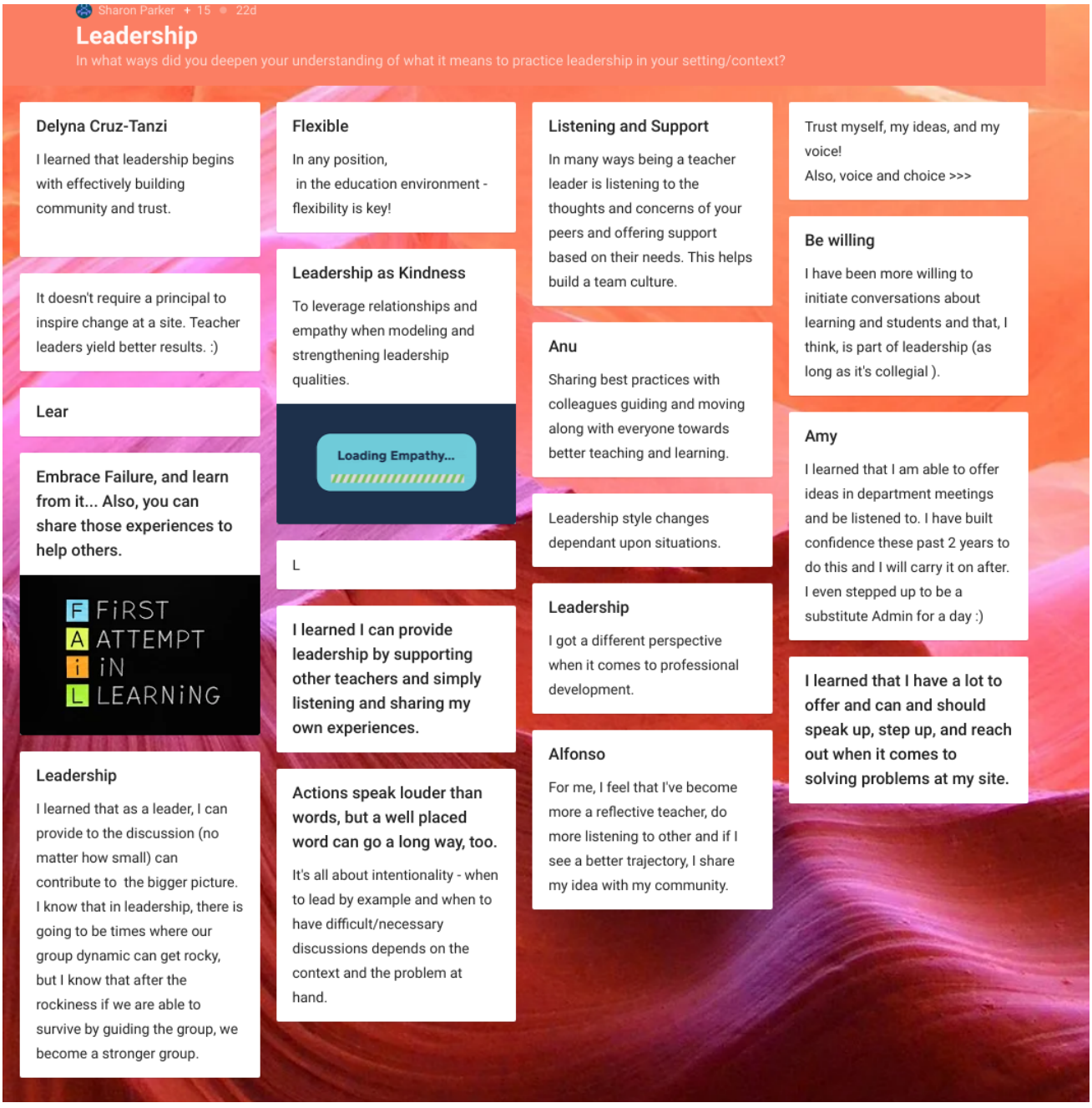
From March through June of 2020, the CA Wipro Fellowship Program was able to continue professional learning sessions for both Cohorts 1 and 2. Each cohort participated in two learning sessions in April and May, that lasted 1.5 hours each session. The focus for each session as well as links to the slide decks can be found in the table below.

	Date	**Agenda**	**Link to Slide Deck & Learning Reflections**
Cohort 2	4/23/20	Opener, Norms, Agenda Survey Feedback Best Practices for Remote Learning Authentic Science Experiences Equity & Access: Resources Online Tools Roadmap, Next Meeting & Announcements	Slide Deck

		Closing	
Cohort 2	5/14/20	Welcome, Agenda, Norms Opener (Maggie) Reflections on Year 1 Looking Ahead at Year 2 Announcements Closing	Slide Deck Padlet 1: Reflective Practice Padlet 2: Adult Learning Padlet 3: Teacher Leadership Padlet 4: Equity
Cohort 1	4/30/20	Opener, Norms, Agenda Equity Podcast & Discussion Authentic Science Experiences-Discussion Best Practices for Remote Learning • TIP Resource • Equity & Access • Online Tools GPS Projects & Practicing Leadership Roadmap, Next Meeting, & Announcements Closing	Slide Deck
Cohort 1	5/21/20	Welcome, Agenda, Norms Opener Looking Ahead to the Summer & Fall Announcements Reflections on Wipro Year 2 Closing	Slide Deck Padlet 1: Leadership Padlet 2: Science Teaching and Learning Padlet 3: Equitable Opportunities For All Padlet 4: Building Community

Cohort 1 Professional Learning Session on Zoom (5/21/20)

The California team used an app called Padlet to capture Fellows ideas. Here is a sample from one reflection.



Cohort 2 Professional Learning Session on Zoom (5/14/20)

Within districts (DSC's and Fellows)

The Wipro CA Team met over Zoom with the District Coordinators as a group in April, although they had been in communication with them since the shelter in place order in March. The purpose of this meeting was to check-in with each coordinator and give them a chance to share what was happening within their own districts. This was also an opportunity for the Wipro CA Team to share plans for the remainder of the school year for each Cohort, including the plans for fellows' H-CCLS work (Cohort 2), GPS work (Cohort 1), and Professional Learning Sessions (both cohorts). The recruitment timeline was also discussed so that District Coordinators could do some personal recruiting during this time.

Leadership meetings

The focus of the Wipro CA Team leadership meetings has been to plan contingencies for all events and all professional learning sessions during a very uncertain time. The team discussed how to stay true to the program elements and support each fellow individually during a very stressful time. Mentors continued to meet with fellows and offers of support were given regularly to fellows in both cohorts.

End of the year Host Conference

The End of Year Conference for the CA Wipro SEF Program has not officially been rescheduled yet. The ideal time would be early November because this would give all H-CCLS groups in Cohort 2 a chance to complete their cycles since these cycles were interrupted last spring. All Cohort 1 Fellows have a September 4, 2020 deadline to submit their GPS Portfolios and Posters. Posters will be printed for all Cohort 1 Fellows in the early fall. If COVID-19 restrictions are lifted by the November date, the CA Wipro site plans to hold an in-person conference. However, if restrictions are not lifted by this time, the CA team is ready to shift to a virtual conference with all fellows recording their presentations.

Site location (State)	Date of Conference	Conference Location
CA	TBD- Early November	Preference: in-person at Stanford University Contingency: Virtual Conference

Planning for Cohort 2 GPS

The CA Wipro Team plans to rollout GPS Projects in the fall of 2020. In a regular year, Cohort 2 fellows would have been introduced to GPS Projects in the spring of their first year of the program and would have listened to GPS presentations at the End of Year Conference. However, because of COVID-19, the CA team decided to postpone GPS rollout until the fall because of the following reasons. First, a majority of Cohort 2 fellows had not completed their H-CCLS cycles, so this was still a main focus for them. Second, teachers were extremely stressed with the transition to distance learning in the spring and could not handle anything "new" being added to their plates. Third, because of the unknowns for the fall, the CA Team thought that it would be difficult for fellows to decide on a project since the possibility of their daily school routine changing was very high. According to District Coordinators, most school districts will have a better idea of what the school year will look like by mid-July. Knowing more solid details will help Cohort 2 Fellows make decisions around that GPS projects that will align with both district and personal leadership goals.

Cohort 1 Involvement Next Year

University Level

The CA Wipro Team plans to keep Cohort 1 Fellows involved in the several ways. First, the team has encouraged Cohort 1 fellows to continue their professional growth by doing a book study. Each fellow was told that they can choose a professional book (example: Ambitious Science Teaching) and that we would encourage them to form small groups to

study these books together. Second, the CA Wipro team encouraged Cohort 1 fellows to continue to develop their leadership by submitting conference proposals and that the CA Wipro site would pay for their conference registrations. Both of these options would, of course, have some limits and the CA Wipro Team is currently creating a document that would clearly outline how Cohort 1 could take advantage of these opportunities. (Please note that the CA Team has found an additional funding source to support these opportunities since these were not part of the original Wipro budget.)

Furthermore, the CA Wipro Team has been considering another option for select Wipro Cohort 1 Fellows. These past two years, each fellow has been assigned an instructional coach and mentor from the CA Wipro Team. This has been a great way to support fellows individually on all aspects of the Wipro program for both Year 1 and Year 2. The CA Wipro Team is considering asking one or two strong Cohort 1 fellows to coach and mentor several teachers from Cohort 3. This would not only alleviate some of the coaching load from the CA Wipro Team staff, but it would also continue to build the capacity of select Cohort 1 fellows, especially fellows who have taken up coaching roles at their school sites or districts.

District Level

District Coordinators have been meeting regularly with their fellows in many ways, depending on the unique context of each district. Fellows have been involved with everything from delivering district professional development sessions, rollout of instructional materials, and advisory groups for science teaching and learning. All District Coordinators, as far as the CA Wipro team knows, is still planning to stay connected with all fellows, including Cohort 1, in ways that make sense for their district and will be tapping their expertise and leadership in different ways to further their district science goals.

Recruitment and Induction of Cohort 3

Recruitment Efforts

When the shelter in place order was put into effect in mid-March, this was right in the middle of the CA recruitment schedule. At that point in time, some teachers had already submitted their applications and District Coordinators and current fellows were in the middle of telling teachers in their districts about the program. During the next few months, District Coordinators expressed the need to extend Wipro recruitment into the summer so that they could focus on the immediate needs of their districts and teachers in terms of distance learning. They also felt that asking teachers to apply to a two-year program in the midst of the COVID-19 pandemic might be too stressful for teachers.

Currently, there are 19 applications for prospective Cohort 3 fellows. Most of these applicants are teachers that either District Coordinators had recommended, or current Wipro fellows had recommended. For the CA Wipro Program, the recruitment goal for Cohort 3 is 24 teachers.

Applicants/district

District name	Number of Applicants up to 6/15/20. Recruitment has been extended until targeted number of fellows is reached.
Campbell Union High School District (9-12)	2
Moreland School District (K-8)	5
Mountain View Whisman School District (K-8)	4
San Francisco Unified School District (K-12)	6
San Jose Unified School District (K-12)	2

Applicants by grade level

Grade level	Number of Applicants
K-5	9
6-8	3
9-12	7

Matrix of fellows by district and discipline

This matrix will be ready by mid-July because of their rolling application and acceptances.

Induction Ceremony

The Induction Ceremony for Cohort 3 has been rescheduled for the Fall of 2020. There are currently two different dates reserved for this event: September 1, 2020 or September 8, 2020. Although the CA Wipro Team would prefer to hold this event in-person, there is a high probability that this will not be possible. Therefore, the team has a contingency for this event and will be ready to hold the Induction Ceremony virtually.

Next Year's Calendar

Plans for next year

The current plans for the CA Wipro SEF Program for the following school year include regular monthly professional learning sessions for both Cohorts 2 and 3. All postponed events from the Spring of 2020 will also take place in the Fall of 2020 including the Induction Ceremony for Cohort 3 fellows, the End of Year Conference for H-CCLS Presentation and GPS Poster Presentations, the Pinning Ceremony for outgoing Cohort 1 fellows, and Board Meeting Presentations at each district to present a framed certificate to each Cohort 1 fellow. All of these events will follow state and county guidelines for COVID-19, should we still have restrictions into the fall of 2020.

Calendar

Tentative CA Wipro Professional Learning Schedule 2020-2021

Note: These dates have not been finalized. Depending on the circumstances, some of these sessions may take place virtually. Therefore, times have not yet been indicated because virtual sessions will be much shorter than in-person sessions.

Cohort 2	**Cohort 3**
9/12/20*	9/12/20*
10/15/20	10/8/20
11/12/20	11/5/20
12/10/20*	12/10/20*
1/21/21	1/16/21 V-CCLS Presentations
2/18/21	2/11/21
3/18/21	3/11/21
4/22/21	4/15/21
5/22/21* End of Year Conference	5/22/21* End of Year Conference
6/17/21 Pinning Ceremony	6/10/21

*Combined Cohort 2 and 3 Session

CA Featured Fellows

Theresa Lester, K-3 STEAM Teacher, Mountain View Whisman School District

Teachers from my school encouraged me to apply to The Wipro Science Education Fellowship Program after they participated in the first cohort. I asked them several questions and was encouraged by their positive answers. My coworkers were right! I'll try to briefly highlight ways that this program has contributed positively to my professional growth as an educator:

- The idea that you should 'surround yourself with people on the same mission applies! It has been so refreshing to participate with a group of educators who desire to push themselves to improve their professional practice, grow as leaders, and increase student engagement and achievement in the sciences. While some months we have met after school and other months we have spent Saturdays together, the energy and enthusiasm for our work is palpable.
- In the Fall semester, my V-CCLS group consisted of a 6th grade Science Teacher, a 9th grade Honors Biology teacher and me, an early elementary STEAM teacher focusing on Kindergarten. We did lesson studies together that followed the Life Science strand of Cell Structure and Function. Our instructional practice focused on Equity of Voice, specifically related to teacher vs. student talk time and how to increase focused student talk and lower unnecessary student and teacher talk. This pushed us to carefully evaluate our own classroom talk and we used researched based practices to implement academic conversations more carefully. We were also greatly encouraged to learn more about the Life Science scope and sequence from K-12 and how our classroom instruction was more similar than we expected - students are students!
- During Spring semester, each group was asked to choose a Science and Engineering Practice (SEP) from the NGSS to focus on during our lesson studies. Our H-CCLS group consisted of two 5th grade elementary classroom teachers and myself focusing on my 3rd grade STEAM group. We chose Data Analysis and were working through the first of our three lesson studies when the Shelter in Place protocols were implemented. Our Wipro coordinators and director adjusted our expectations and led us through some very valuable and authentic online

meetings that reminded all of us of our focus on providing excellent science instruction, serving students authentically and using best practices no matter the circumstances.

- My coordinator has pushed me to meet the needs of students more effectively at my school. Some of my students arrive with a surprisingly broad depth of background knowledge in the sciences because their parents work in local tech or science fields. While this would seem to make my work easier, I have been pushed to determine the needs of these learners and to engage them while considering my students who do not have this background knowledge. How can I meet these very different needs while still being cognizant of equity of voice and student engagement? This is just one sample of an area of focus I will study more deeply due to my involvement in the Wipro Fellowship.

I already look forward to Year Two and to the new questions that arise and areas that I will need to address on my journey as an educator. Thank you, Wipro, for this opportunity!

Sohum Bhatt, High School Chemistry, San Francisco Unified School District

After teaching for 5 years, I found myself running into the same issues. Teaching is hard and even though you are surrounded by students, the job itself can be lonely. In an attempt to meet other educators, I joined the Wipro program in the fall of 2019.

My experiences in Wipro have been a breath of fresh air! The program structure has shown me what productive professional development looks like. The VCCLS collaboration was so enlightening - never had I had the chance to think about scientific concepts as a through line from elementary to middle to high school. We focused on applications of energy transfer in the physical and life sciences and while it was neat to explore this theme in different contexts, the parallel focus on equity of voice in the classroom underscored our work. Getting time to access research articles that discuss best practices and methods to teach science in equitable ways informed our group's plan and we all grappled with unique teaching methods to increase equity of voice in our own classrooms. The constant reflection and structured conversation built into our workflow really allowed us to dig deep and learn from each other. I remember walking away from our first group conversation feeling excited and refreshed to be a part of a group of thoughtful, empathetic and self-driven educators.

The end of semester conference was another unique learning opportunity for me as I watched other VCCLS groups present their work. At the end of the conference I felt that Wipro had raised the bar for teacher development. Other career paths (whether it be in medicine, law, or engineering) make use of large conferences as platforms for collaboration and used research to inform their practice. It felt appropriate to give teachers the opportunity to do the same.

I appreciate Wipro and their stance on education because they allow time and space for teachers to improve their practice in a judgement free space. Teaching is personal and our Wipro facilitators have normalized a space where we can be vulnerable without feeling evaluated. My first year has been interrupted by COVID-19, but I am so excited to continue with our HCCLS experience when time allows. Like I said before, teaching can be lonely, and I am excited to get back to my community of fellow educators so we can continue to work!

FLORIDA- UNIVERSITY OF SOUTH FLORIDA

Covid-19

All districts moved to distance-based, online instruction after spring break in mid-March. The fellows were teaching virtually, through a variety of platforms. This instruction varied greatly between districts as each provided different types of resources and supports. State science assessments were cancelled.

Fellows' meetings (Cohort 2)

The USF leadership team has met weekly via Zoom.

Meetings within Districts

The monthly meetings have been held via Zoom. The Florida leadership team took advantage of the ability to break out into rooms for small group discussions.
The TB Wipro monthly meetings focused on building the Fellow's understanding of the science and engineering practices broadly, as well as their understanding of specific practices, both those that the HCCLS groups were focused around, as well as other practices that were not being addressed in the HCCLS groups. Additionally, time was spent focused on beginning to understand the GPS projects, GPS sharing and brainstorming, future leadership scope for cohort 1 and, the district initiatives to which those projects could connect. Support guidance was provided and all aspects distance/online-based learning was discussed.

The TB Wipro DSCs and Fellows have continued to focus this spring on how best to apply and extend the work of the TB Wipro project to the Fellow's schools and districts, in order to continue broadening the impact of the project.

The DSCs and USF team continues to meet at least monthly via Zoom.

Leadership meetings

The leadership meetings for the first part of the spring were focused on the progress of the H-CCLS groups, the cohort 1 GPS projects, and planning for the monthly meetings. The meetings also focused on the recruitment of the third cohort of fellows, and how best to solve recruitment issues that were arising. Due to the COVID-19 pandemic, the recruitment application deadline was extended to July 15th. Moreover, discussions centered on how to support the fellows in connecting and disseminating their Wipro work to the districts more

broadly, and potential avenues for that dissemination to occur. Leadership team's role in assisting fellow's distance/online learning was also discussed.

End of the year Host Conference

At this point Florida Wipro SEF has not made any plans to reschedule their conference.

FL did not hold a conference due to Covid-19. Fellows are recording their presentations for a possible future virtual conference. Florida leaders will be attending the Missouri conference to gain insight into how this could be done. One Florida team will be presenting at the Missouri conference.

H-CCLS Presentations (Cohort 2)

Team name (include grade span)	Team members	Science/ Engineering Practice	Presentation title
Elementary 1	Sherri Alvarez Teresa Buckman Jennifer Cogan Tara McClintick Richard Card	Engaging in arguments from evidence	We do not have presentation titles because fellows have not yet finished/given their presentations.
Elementary 2	Carrie Donatelli Anita Ventura Michele Wiehagen Ann Salazar Cayla Repass	Planning and carrying out investigations	We do not have presentation titles because fellows have not yet finished/given their presentations.
Middle	David Seis Karen Bulino Latasha Seay Jennifer Griffone	Constructing explanations and designing solutions	We do not have presentation titles because fellows have not yet finished/given their presentations.
High	Brett Goodrich Bhagyashree Kulkarni Daniel Rice Julie Fine Sonila Toska	Analyzing and interpreting data	We do not have presentation titles because fellows have not yet finished/given their presentations.

Planning for Cohort 2 GPS

The Florida team has provided the fellows with a document detailing expectation for their GPS plans and a brainstorming document to help them get started. They will also be hosting a Zoom meeting for any fellows who have questions about their GPS topics, the expectations, or the GPS plan in general. The next step will be for the fellows to complete a brainstorming activity so they can begin to develop an overview for their plan. This brainstorming is due June 22, at which time the DSCs and IHEs will review those documents and provide feedback to the fellows. The fellows will then have until July 27 to complete the formal proposal. These will again be reviewed by the fellow's DSC and the IHE and additional feedback will be provided at that time.

GPS Poster Session (Cohort 1)

Florida did not have a GPS Poster Session this year because of the COVID-19 pandemic. They expect to have a conference sometime during the fall semester of 2020. The Florida leaders presented the Cohort 1 Fellows with the following options for the completion of their GPS projects:

Option 1 - Complete your GPS project this year. You may already have collected the necessary data, or you may wish to modify the data required while maintaining the fidelity of the project.

- Create your poster.
- Complete your portfolio.
- Submit these items by August 1st. Your final payment will be processed once the final products are received.

Option 2 - Modify your GPS plan to meet the current situation of e-Learning/virtual instruction.

- Submit your new idea to Wipro leadership and your district coordinator and receive feedback.
- Create your poster.
- Complete your portfolio.
- Submit these items by August 1st. Your final payment will be processed once the final products are received.

Option 3 - Extend your project into the next year.

- Summarize current progress and create a plan for detailing work that will be completed next year. Submit to Wipro leadership and your district coordinator and receive feedback.
- Complete GPS project during Fall 2020.
- Poster and portfolio will be due on December 1st. Your final payment will be processed after the completion of your responsibilities.

Cohort 1 Involvement Next Year

University Level

There are four Wipro fellows (Jessica Strauss, Tonia Flippen, Tabitha Whaley, Ann Salazar) who are working with Dr. David Rosengrant for an international STEM Education project. The Organization of American States Inter-American Teacher Education Network (OAS ITEN) leads the efforts. This is part of a team that is partnered with educators at Sam Sharpe University in Jamaica. The team is

designing a resource website around STEM across the grade levels and we are currently designing some professional development modules that we can implement to help pre-service educators.

District Level

Pinellas County (report from DSC Fawnia Schultz)

- Loretta Lamore has been and will continue to facilitate a group of chemistry teachers on developing chemistry curriculum.
- Sarah Swoch is a SIM Coordinator for her school. She trains teachers at her school on how to implement various Content Enhancement Routines under the Strategic Instructional Model (SIM). At her school she also organizes and facilitates planning sessions for the teachers that are implementing the routines.
- Karen Bulino will be facilitating professional development this summer for 9-12 science teachers on standards-based grading.
- Dianna Mills, Sarah Swoch, and Loretta Lamore have facilitated sessions at district-wide trainings for science teachers in August and February.

After the May fellows meeting the district science coordinator sent out an email listing some opportunities for teacher leadership and facilitation of professional development.

- Embrace Pinellas: deliver professional development to new science teachers in the district. (July 22nd)
- High School-15-30 minutes to speak to new teachers during the science content day
- Middle School- Reach out to Robin Ford to co-plan the session with her
- Fall District Wide Training: deliver professional development and/or facilitate planning with other teachers. (August 6th)
- High School – lead a 60-90-minute sessions for high school teachers.
- Middle School – might be a virtual Teams meeting but Mr. Doughty is not sure yet.
- High School Science Department Chairs will have monthly Microsoft Teams meetings in the 2020-21 school year. Ms. Craven would be happy to collaborate with any Wipro fellow to provide periodic updates or short virtual PD sessions to department chairs.
- Mark Narkier, the director of professional development, has advised to look at the Chalk Talk for professional development opportunities you may be interested in getting involved with. I can coordinate with him to help organize your involvement.
- Leadership opportunity: Ms. Craven would like to invite Wipro fellows to participate in the FLDOE STEAM quarterly calls for the 2020-21 school year. There will be an interactive call in the next week or two for STEAM leaders across the state.

Pasco County (report from DSC Lesley Kirkley)

Both the Cohort 1 & 2 Fellows serve as a sounding board and feedback loop for Pasco Science. We frequently reach out to seek their input and participation in District decisions or activities. The Elementary Fellows were to take part in a Leadership group this summer getting them ready to be Science PD Facilitators and Model classrooms for new teachers. Unfortunately, our current situation canceled those sessions in the short term. We are working on what opportunities may

look like next year once we have additional details closer to July 1st. We will continue to reach out to seek input and offer opportunities to serve as Science Instructional Leaders.

Hillsborough County – Florida leadership reached out to our district coordinator, but they have yet to provide information of how they intend to continue building on and leveraging the leadership of the cohort 1 fellows. The district has recently undergone a major restructuring which has changed the responsibilities of the district coordinator.

Recruitment and Induction of Cohort 3

Recruitment Efforts

Recruitment continues to be a challenge. The application has been distributed to teachers since the beginning of January and has been sent out multiple times through the required district channels. Current fellows have been encouraged to share the application with teachers they know who would be good for the program. District coordinators and project PIs have all reached out to specific teachers they know to encourage their application. Due to Covid-19, Florida leadership has extended the application deadline to July 15th, and intend to select and notify the final cohort of fellows before the beginning of the upcoming academic year in early August.

Applicants/district

District name	Number of Applicants
Hillsborough	**9**
Pinellas	**4**
Pasco	**1**

Applicants by grade level

Grade level	Number of Applicants
K-5	**5**
6-8	**0**
9-12	**9**

Matrix of fellows by district and discipline

Florida has not yet finished recruiting cohort 3. The table below includes only cohorts 1 and 2.

	Biology	Chemistry	Physics	Earth
Elementary	Tabitha Whaley - Cohort 1		Cayla Repass - Cohort 2	Carrie Donatelli - Cohort 2
	Jessica Strauss - Cohort 1	Elizabeth Casey - Cohort 1	Jennifer Cogan - Cohort 2	Tara McClinktick - Cohort 2

	Cheryl Slaughter - Cohort 1	Stephanie Gardner - Cohort 1	Michele Wiehagen - Cohort 2	Teresa Buckman - Cohort 2
	Tonia Flippen - Cohort 1	Melissa Triebwasser - Cohort 1		
	Stacy Hoffman - Cohort 1	Richard Card - Cohort 2		
	Ann Salazar - Cohort 2	Anita Ventura - Cohort 2		
	Jennifer Griffone - Cohort 2	Sherri Alvarez - Cohort 2		
Middle	Dianna Mills - Cohort 1	Katie Slifkin - Cohort 1	Karen Bulino - Cohort 2	Latasha Seay - Cohort 2
	Amanda Hamilton - Cohort 1	Jessica Maxwell - Cohort 1		
	Kenny Coogan - Cohort 1	Sarah Swoch - Cohort 1		
	David Seis - Cohort 2	Jennifer Rivera - Cohort 2		
High	Melissa Taylor - Cohort 1	Jacquie Bromley - Cohort 1	Daniel Rice - Cohort 2	Julie Fine - Cohort 2
	Lindsay Guntner - Cohort 1	Omari Baines - Cohort 1		
	Sonilla Toska - Cohort 2	Loretta La More - Cohort 1		
	Brett Goodrich - Cohort 2	Bhagyashree Kulkarni - Cohort 2		
	Hillsborough	Pasco	Pinellas	

Induction Ceremony

Florida plans to hold the induction ceremony on Friday, August 21st.

Next Year's Calendar

Plans for next year

The leadership team anticipates that year 3 will run very similarly to year 2 for cohort 2 (all depending on how the districts and university respond to the COVID-19 pandemic), with the monthly meetings focused on supporting the fellows in expanding their practice and understanding of how to provide quality science instruction in their classrooms, while also providing time for the fellows to touch base about their CCLS work and district initiatives. For cohort 2, we expect the meetings they attend to focus on sharing their progress toward their GPS goals, as well as providing the opportunity to discuss and problem solve challenges or issues that have arisen as they are conducting their work. We will also include cohort 1 at appropriate meetings.

Calendar

August 21st – Induction ceremony for Cohort 3
August 22nd - Cohort 3 only
September 12th - Cohorts 2 and 3
October 3rd - Cohort 3 only
November 14th - Cohort 2 and 3
December 5th - Cohort 3 only
January 9th - Cohort 2 and 3 – VCCLS Presentation
February 20th - Cohort 3 only
March 6th - Cohort 2 and 3
April 17th - Cohort 3 only
May 15th - Conference and Pinning Ceremony – Cohort 2 and 3

DSCs meet with their Fellows at the meetings when both cohorts attend.
The IHE and DSC teams meet monthly by arrangement.
Cohort 1 Fellows will be invited to the V-CCLS presentations, induction ceremony for cohort 3, and end of year conference. They will also be invited to meetings where their expertise would be useful.

Featured Fellows

Jessica Strauss
Elementary
Hillsborough Public School District

After finishing my 15th year of teaching, I can honestly say I never teach the same way twice. I regularly seek opportunities to grow as an educator, both in my classroom teaching and my leadership skills. Wipro has afforded me opportunities to analyze my own teaching and learn from so many other, enthusiastic educators. It is easy to get complacent, to think you've done all the growing you need to. But I am extremely passionate in showing students that learning is a life-long endeavor and that we are truly never done growing as individuals. And what better way to show this than to live this. Wipro has gathered amazing science leaders from around the area to team up, share their collective knowledge, and help one another improve. And every time I think I do enough or have learned enough, I am introduced to another amazing teacher that makes me say, "I can do and be more!" Year 2 has been the most eye-opening experience as we were challenged to take our passions and create leadership and growth opportunities for ourselves and our districts in the area of science. For my GPS I created my own website in order to disseminate space science education, lessons, and grants to other teachers in my district (https://straussjessica.wixsite.com/teachingspace). Not only was my website able to reach those in the Tampa area, but also other states in the country! Another amazing experience Wipro afforded me was to travel to Missouri to learn what other Wipro cohorts were doing and present our own findings from research and professional development. Often, we go to our classrooms, close the door, and forget how vital it is to remember we are professionals that should share our experiences and knowledge with others. Wipro has been a catalyst in my search to better myself and become a more prominent figure in STEM leadership. I am so grateful for the last two years working alongside Dr Feldman, Dr Jung, Wipro Cohort 1, and all the other community, faculty, and district supporters that have made my personal and professional growth a success. Thank you for sharing your knowledge and passion and reminding me how many like-minded educators are out there!

Diana Mills
Middle School
Pinellas County Schools

I have been teaching at a public middle school in St. Petersburg for 12 years. Before that, I substitute taught in Michigan for a year and a half. That experience, having to teach various grade levels, subjects, and manage classes unfamiliar to me, helped me survive those first years in my own classroom. I am the teacher I am today because of my students and colleagues. We have grown together, learning from one another. As educators, we must be able to adapt to various situations to maintain equitable teaching and share our knowledge with others. This switch to digital learning has proven just how flexible and willing to share teachers are. Being a part of the Wipro Fellowship helped me become a leader in my district, landing a spot as a top 10 finalist for Pinellas County School's 2020 Teacher of the year.

As I near the end of my time as a Wipro fellow, I feel a sense of sadness. The relationships I have made have been invaluable. Videoing myself teaching, watching those videos, and having others give me warm and cool feedback is eye-opening. I have learned so much from everyone and have enjoyed sharing the knowledge gained from self-reflection and our group studies through conferences and professional development workshops. To culminate what I've gained from this program, I decided to focus my GPS project on creating meaningful learning experiences for my students. I have always strived to be like Ms. Frizzle and make science come alive for my students at a level they can relate to and appreciate. This year I was able to incorporate more field trips, speakers, and various methods of delivering the content to challenge my students' critical thinking and creativity. As a result, their scores on district tests were above the district average. More importantly, though, they are becoming science literate members of our community. The personal goal of my GPS project involved me becoming a mentor to new science teachers at my school. Wipro gave me the confidence and resources to step up and lead others.

MASSACHUSETTS- UMASS BOSTON

Covid-19

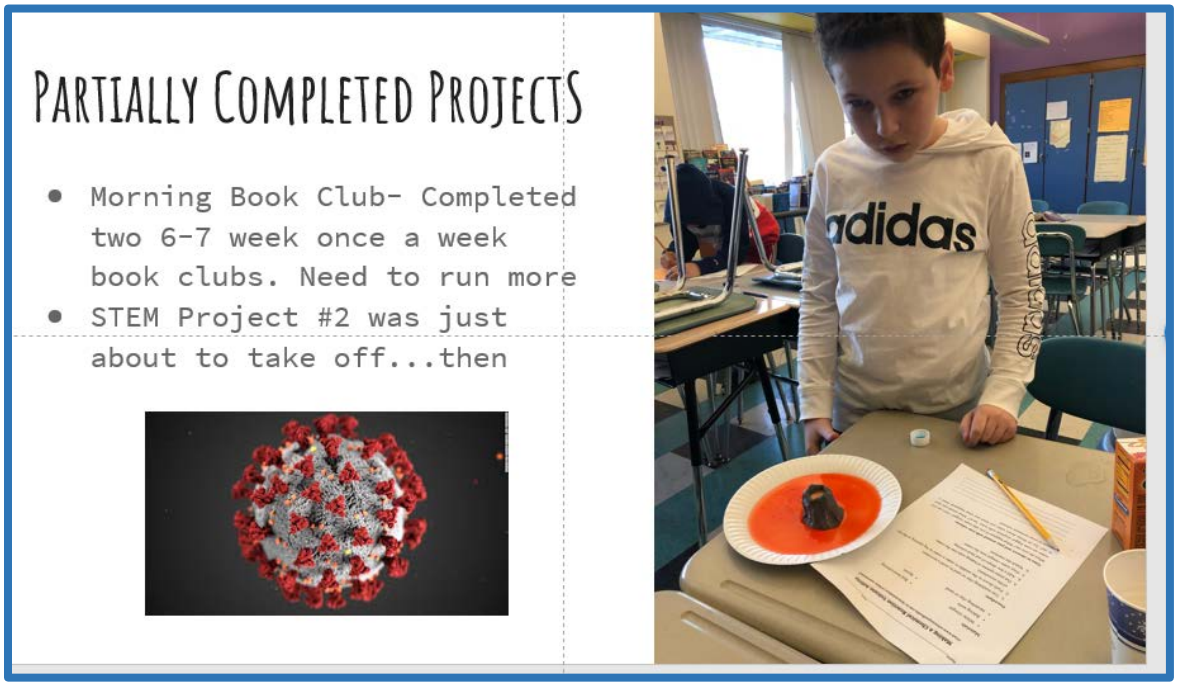
In mid- March 2020, the Governor of Massachusetts declared a state of emergency due to the Covid 19 pandemic. Public Schools as well as the University of Massachusetts began to instruct students on-line. For our Wipro fellows this presented a number of challenges. They had to quickly develop on-line lessons for their students and at the same time manage their own children being home. The involvement of students varied from district to district and were very dependent on the availability of computers, iPad, and stable internet. Some districts provided students with Chromebooks and there was an effort to make sure students had internet access. The ability of students to stay involved with school also depended on the capacity of the adults in each household to support students.

Phase II Activities- Fellows

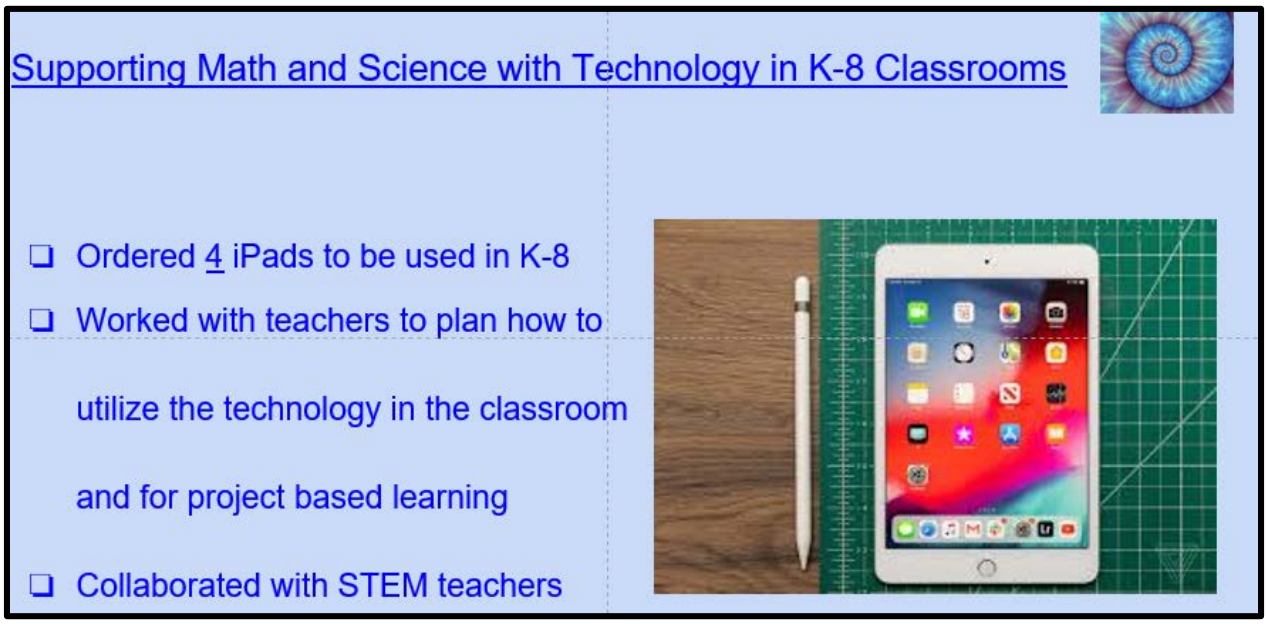
Seven fellows were funded to do Phase II projects. In early June, a zoom call was organized so that fellows could share their projects with each other. Each project was asked to share one or two slides highlighting the work that had been accomplished.

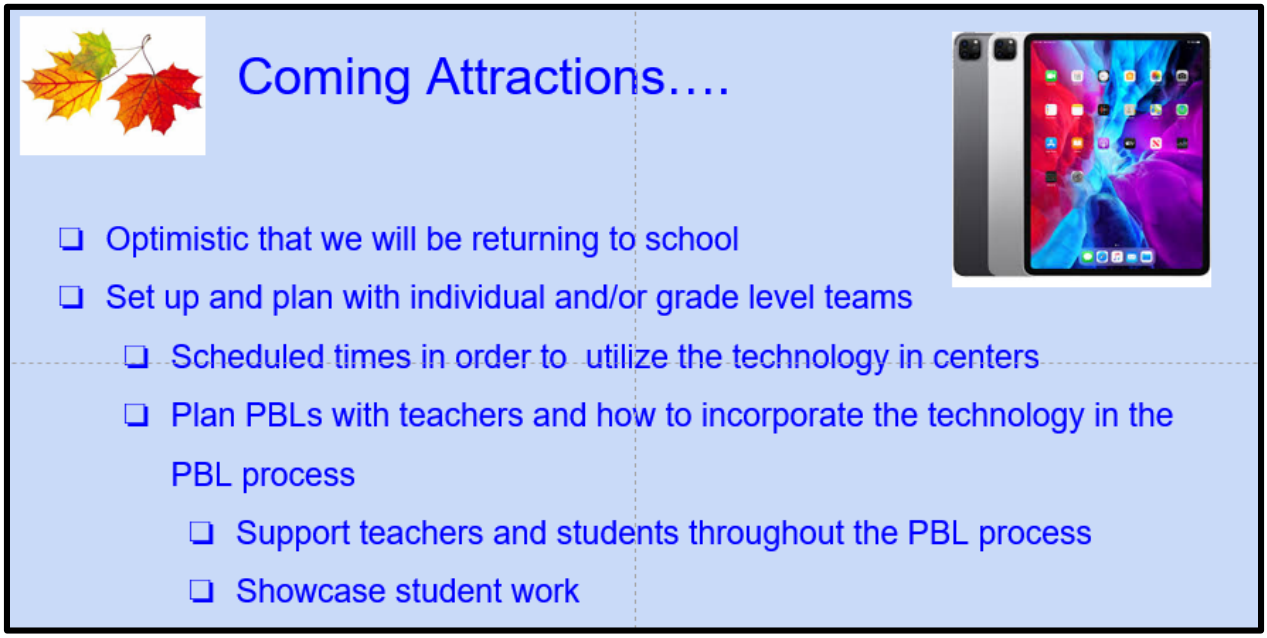
Michelle Curreri's project included the creation of a STEM Library and 2 STEM projects. She was only able to complete the Ice Pop challenge and will complete the 2nd project next year.

The Ice Pop challenge was a great success. Students developed their own recipes, tested them, and then shared with younger students.

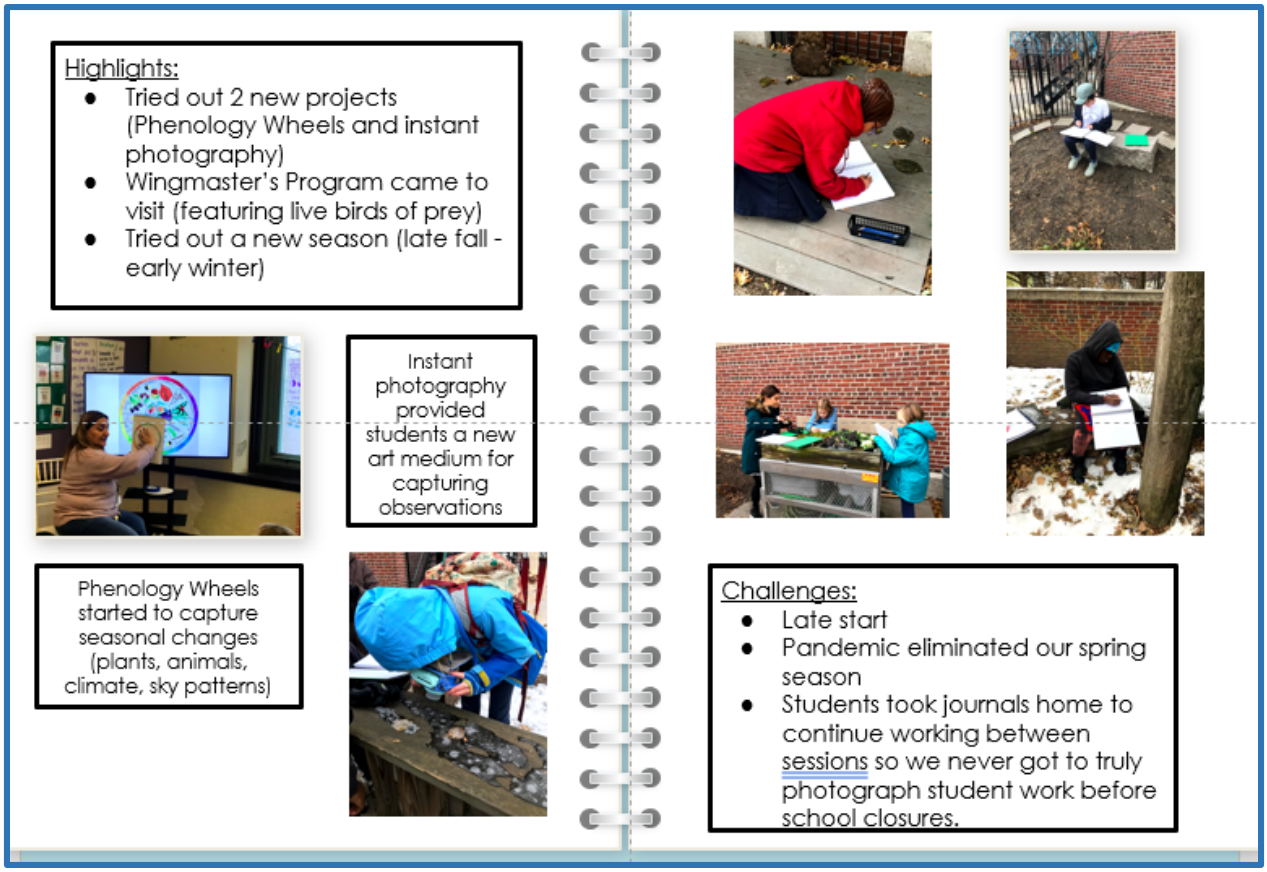


Laura Degelmann and Kim Gibbs submitted several projects together. Both Laura and Kim had an incredibly difficult years and were unable to complete their projects. Laura's project involved implementing a robotics project which could not be done remotely. Kim's project involved supporting other teachers developing Project Based Learning (PBL)units using technology.





Elizabeth Hadly's project was to offer a Nature Journaling club at her school. The spring semester club was just about to start when school was shut down. She will complete her project in the fall.



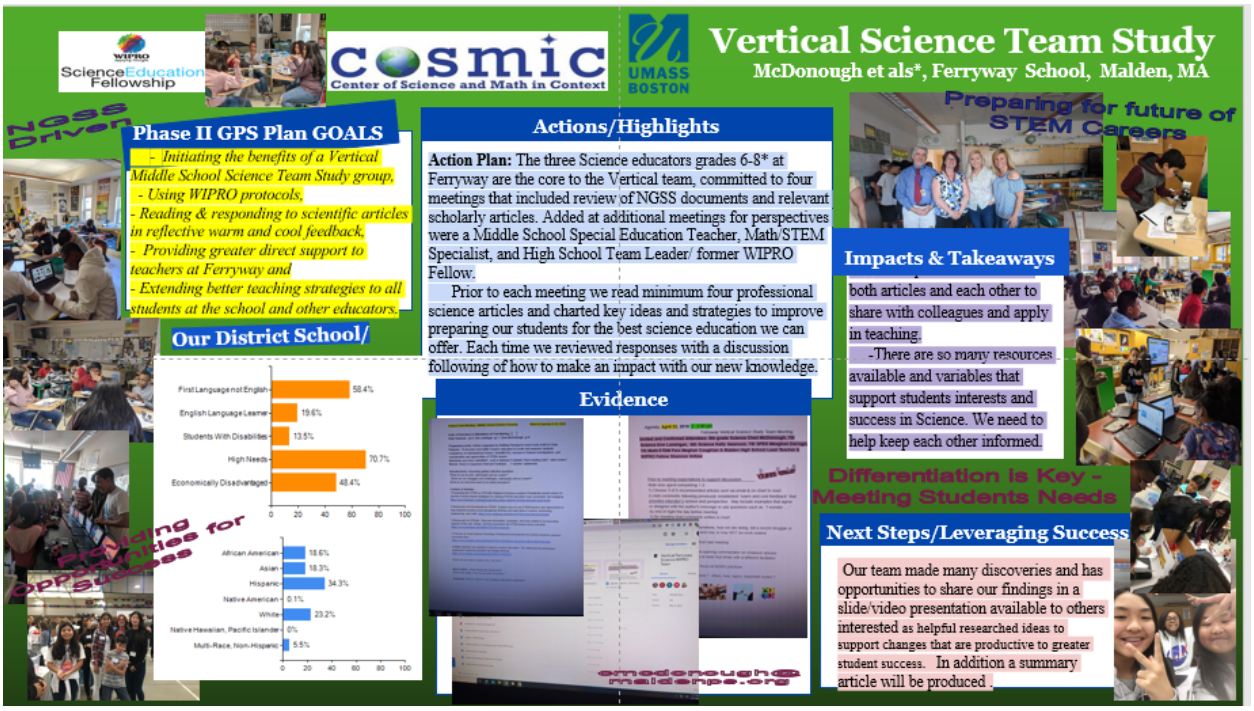
From a Parent:

"Thank you for your efforts in running Nature Journaling Club. Mark was unsure whether he wanted to do it at first, but he has really enjoyed it. He's been so excited to talk about what he did in the club every Friday. Tonight he showed me his notebook of everything the club has done over the past 4 weeks, along with the owls he drew today. I really appreciate everything you do to run such an educational, high quality club outside of the normal school day."

An appreciative parent wrote this note about the Nature Journaling Club.

Judy McClure used her Wipro GPS to develop her skills as a writer. For her phase II project she visited 3 fellows' classrooms, Richard Kelly, Kindergarten, Michelle Curreri, Grade 5 and Elizabeth Hadly K-5. This summer she hopes to find a publisher for her writings.

Cheryl McDonough modeled her project after the work that she did in her first year of Wipro SEF, Vertical Science Team Study. She recruited teachers from middle and high school. Together they selected and read research articles about science teaching.



Tal SebellShavit's project used Wipro SEF norms to example student skills from 9th grade to post-graduate. Teachers included a 9th grade English Language Arts teacher, an 11th grade history teacher, a 9th and Advanced Placement physics teacher and a post-graduate program teacher. (for special needs students). The teachers used Wipro protocols and thought the project was very worthwhile. Here are some of their comments:

- Time to process teacher perspectives on a lesson that isn't necessarily coming from a content lens. **I enjoyed hearing peers speak more to pedagogy** and less of curriculum. Having time with adults who are interested in inquiry, communication and pedagogy is refreshing.
- I honestly really loved the idea of pulling apart an image and thinking about how we gather information with what we know what we perceive and what we assume. **I also really feel validated** that others could see that my students were learning about collaboration and being able to communicate in verbal and nonverbal way.

- The conversation where we heard more about student entry points and thinking about how we structure lessons to accommodate and challenge all students.
- Listening to the questions and comments of my colleagues during the protocol. They either mentioned things that I had forgotten stuck out to me or said something that I hadn't thought of before **which enhanced my own learning.**
- Studying the paper copies of student work was also extremely helpful, **the before and after examples showed how student thinking changed as they engaged further with the lesson.**

Closing thoughts from one participant

"The Student Skills Choice PD has been **one of my most positive, productive professional development experiences since joining the district four years ago.** Tal's thoughtful design ensures that every meeting is a fruitful one. The protocols allow us to each take a turn steering the conversation, sharing our expertise, sharing our concerns, and **opening up our classroom.** The clear, collaboratively determined goals pay homage to the structure of our current evaluation system while adding a much needed dose of practicality as the group narrows their focus to a goal that can be discussed and developed in the time we have. The 2-2.5 hour meetings that occur monthly, are long but **necessarily full and are consistent enough to develop and implement a plan for growth.**

Phase II Activities- District

Braintree Public schools focused their work on the American Modeling Teachers Association (AMTA) chemistry course that one of their teachers had taken last summer.

Overview

The direction and focus of our work in Phase II shifted for the 2019-2020 school year. We started to focus much more on learning about and adopting the Modeling Pedagogy based on the course with AMTA. Our Modeling PLC at Braintree High School involved chemistry and biology teachers. We shared out about the process and started to implement strategies in our classes.

The project was unable to be completed this year due to Covid 19 but will continue this summer and in the next academic year.

Next Steps

- Two Chemistry teachers are taking the Chemistry II Modeling course this summer virtually through AMTA.
- Two Middle School teachers are hoping to take the Middle School Modeling course over the summer.
- I'm hoping to encourage more chemistry or physics teachers to also take the course.
- We will resume the PLC as soon as possible during the 2020-2021 school year.

End of the Year (Visitor) Conference Participation
Several Massachusetts fellows have signed up for Missouri's virtual end of the year conference. A report on their experience will be included in the September quarterly report.

Conference Location	Date of Conference
Missouri (Virtual)	**June 2020**

Participant's First Name	Participant's Last Name	Institution (district, university, etc.)	Role in the project
Cheryl	McDonough	Malden	Fellow
Scott	Hubeny	Boston	Fellow
Arthur	Eisenkraft	UMass Boston	Project lead
Marilyn	Decker	UMass Boston	UMass staff
Tal	SebellShavit	Cambridge	Fellow

Featured Fellows

Judy McClure, Boston Public Schools, Retired

During my fellowship, I focused on writing about my experiences as an elementary science teacher. That work resulted in the publication of an essay entitled *Genius Granted*. In 2016, I presented at the Massachusetts Association of Science Teachers conference leading other teachers through several writing experiences designed to help them reflect on and improve their teaching. I am currently writing a piece about three other Wipro fellows who teach science to elementary school students.

I worked closely with my district's science department during and after my fellowship, especially as we transitioned to new STE standards. I was a member of the Outdoor Classroom Working Group and reviewed and updated the 5th grade Ecosystems unit. I also developed and carried out my own three-year study investigating elementary students' understanding of the science and engineering practices, using students' drawings as an assessment tool. I presented this work to my school's faculty and at the MAST conference in 2017.

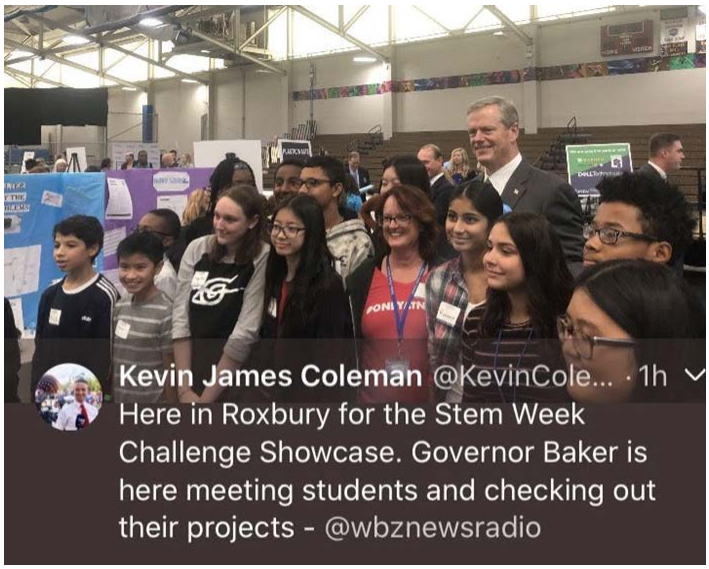
Cheryl McDonough, Ferryway School, Malden, Massachusetts

"BEST PD"

I was first introduced to WIPRO back in 2014 by a sixth-grade science teacher at another school in my district, having just earned my CAGS in Educational Administration, looking to make a positive difference for both students and educators. My current Department Head, the third I have had in three years, recommended I apply to be a UMass WIPRO Science Education Fellow, as it was a professional opportunity claimed by many to be "like no other." I had shared my experiences working as an overnight STEM instructor for 10 years at the Boston Museum of Science and was longing to be more active again with other Science education professionals. Six years later, not only am I still benefiting from my involvement as a WIPRO SEF, but I have been able to share my experiences with countless others educators as I still serve in my district, yet welcoming challenges at another school and having transferred to both eighth and seventh grade levels.

Exponential impacts have occurred as I have reached out to risk, learn, reflect, share, evolve - not always in that order- in a process engaged with others as I seek to model what we want both our students and leaders to do. I took advantage of opportunities to take leadership roles as a Middle School Science Curriculum Coordinator, a New Hire Mentor, a representative to a five-District Partnership of Urban School Districts, a Teacher-Evaluation Leader, and a representative to District Initiative Teams. I piloted multiple outside software educational programs and helped redesign and evaluate new NGSS Curriculum Materials.

My students recognize in regular reflective feedback the value of their experiences, in being given many choices on how to learn and achieve successes, and appreciate the partnership programs I bring into the classroom to provide real life challenges that develop their skills. My students with Governor Baker and their bridge design project.



I have been honored to present several Professional Development sessions in district PD and at regional STEM Conferences in Massachusetts as well as New York and New Orleans. These sessions have focused on Science Strategies in the Classroom, Student Choices, Integration of Technology, and Differentiation - especially with High Needs Students including ELL students (as Malden is the most diverse district in the State). Furthermore with the encouragement and support of my current Superintendent, new STEM Department Head, and Principal two years ago, I was awarded a coveted Honeywell Educators Space Academy Scholarship to a week long experience (that many call "life altering") in Huntsville, Alabama in attendance with Science educators from 45 states and 35 countries!

The advocacy of support I have as part of the WIPRO SEF includes not only the knowledge and skills I have acquired but also the ongoing advocacy of mentors Arthur Eisenkraft and Marilyn Decker, providing the resources, confidence, and moral support I have needed to continuously become the best science educational leader I can be. This year, with an additional grant award, I was able to lead my own Vertical Science team study following the same protocols I was introduced to in my first year with WIPRO. As teachers joined the group with their varying perspectives they were energized and empowered to learn and do more. In four scheduled sessions,

six educators, collectively read, reflected, and discussed 20 professional research articles, addressing topics of interest such as project-based learning, Science skills strategies, STEM careers, Biases and implications of race, sex, poverty, Special Needs, and English Language Learners, examining test data and being part of an urban public school in the US, and what research indicates about the best professional development. Which brings me back full circle… "the best professional development". There simply is no one size fits all, everyone has different needs and wants…. being able to meet these in collaboration with other educators is the BEST* PD.

I will forever be grateful for my involvement as a WIPRO Fellow, the cornerstone of the BEST professional development. Sharing this experience as a leader of a ***B**eneficially **E**mpowered **S**uper **T**eam** has been extremely rewarding, helping to me to make positive differences for both my students and fellow educators.

*Best - Beneficially Empowering Super Team

MISSOURI- UNIVERSITY OF MISSOURI

Covid-19

All districts in the Missouri partnership closed around March 18. For many districts this was a few days before spring break, which allowed teachers time to set up online contact with students before spring break and allowed teachers time to prepare lessons before they were supposed to begin instruction again. Instruction was mixed – some districts (e.g. Boonville) conducted classes for 2-3 hours online. Other districts ran into problems within a week or so. Homes were not prepared for multiple students being online, and parents reported feeling overwhelmed with the additional instructional help that their children needed. By early April teachers in some districts reported that their districts were not allowing teachers to teach new content or enrichment activities, but only allowing review of previously taught material. Advanced Placement courses were exempt, though. Toward the end of the semester (mid-May) many teachers reported that students had "checked out" and only a few signed into their Zoom rooms. State assessments were cancelled on March 20, and students received grades based on work they had completed before schools closed.

Fellows' meetings (Cohort 2)

The Missouri team had only one planned monthly meeting (on April 9) after stay-at-home orders started (the state's order was in place from April 6-May 3, however, the University closed on March 13). They modified the agenda and met via Zoom for 1.5 hours.
The focus of the meeting was to discuss how teachers would wind-up their HCCLS work, an introduction to GPS, and what and when they would like for the Wipro Conference. The meeting consisted of whole-group Zoom segments and breakout room segments with report-backs.

About 6 of the 20 Fellows had not completed their video recordings, and we discussed how each of them could complete the HCCLS work – one or two of them opted for using their online classwork, and the others used work that had already been completed, for which they had available student work.

For the GPS introduction, site leaders prepared a video that the fellows had to watch before they came to the meeting, and assigned two GPS documents that they had to read (Examples of GPS Goals and Description of GPS). Discussion on GPS consisted of questions from the Fellows. The leadership team plans on having Zoom office hours in July that focus on GPS.

Discussions about rescheduling and reworking the conference took about a third of the time during the meeting. The MU team had put forth one possible online format which consisted of two Zoom meetings. When the teams returned from their breakout rooms, however, all teams had come up with similar suggestions for the format: to have a virtual meeting, to have it in June, and to make a lot of the activities asynchronous, and then have a wrap-up Zoom meeting. Since the Fellows had been using the Torsh platform for their classroom videos and debrief meetings, they felt confident that a conference would work using Torsh.

The status of the conference is described in the section below.

Leadership meetings

IHE meetings have focused on the structure and management of the conference. The program coordinator (Kate Kelley) and PI meet 3-4 times a week on Zoom to work on organizational issues. Kosztin, Kelley, and Chandrasekhar have met several times with representatives from Torsh to discuss the needs of the conference and related technical details. The whole team has met to discuss managerial issues and how the responsibilities should be divided among the team.

The PI and DCs met via Zoom on March 27. Since that was still early in the stay-at-home phase, they did not know much about how things were going. They discussed possible August Cohort 3 meeting dates and planned to move it to a weekday early in August, since MO schools now cannot start before Aug 24. Later in April they discussed the new format of the conference via email.

End of the year Host Conference

This conference will be held virtually, with asynchronous presentations and warm/cool feedback, followed by a wrap up Zoom meeting. The conference will take place throughout the month of June. Since it is currently in progress, the process and schedule are described below. The results will be described in the September report.

Site location (State)	Date of Conference	Conference Location
Missouri	Over the month of June 2020	Online at https://torshtalent.com

Conference Description

A short video showcasing Week 1 of the conference: https://youtu.be/HMkLoffpwDA

The 2020 Missouri Joint Virtual Wipro Conference will take place throughout the month of June 2020. Conference information has been placed in this shared google drive folder https://20MoWiproConf.

Eight HCCLS teams will present- one from CA, one from FL, four from MO and two from TX. 18 GPS fellows from MO will also present. Attendees across the 7 sites have been invited to participate. As of the writing of this report, 87 Fellows, 11 IHE faculty/staff, one evaluator, 6 district coordinators, and 5 GPS advisors will attend the conference. Each attendee is expected to view and provide feedback on 4 HCCLS presentations, 4 GPS presentations, and respond to questions on two forums. One forum addresses teaching during Covid-19, and the other discusses unexpected leadership opportunities during Covid-19.

The conference will be hosted on the Torsh platform, https://torshtalent.com. HCCLS teams will upload their presentations as 15-20-minute videos, while GPS Fellows will upload their posters and a short 3-7-minute video. Attendees will view the videos asynchronously during a viewing period and provide warm/cool feedback on the site. Toward the end of the period, presenters are expected to read all feedback and summarize their takeaways, similar to the process during live HCCLS presentations. The conference will end with two group Zoom meetings to summarize the takeaways.

The Conference schedule is as follows:
June 3-16: Upload of videos of presentations + pre-presentation form for HCCLS; and short video + poster GPS.
June 17-24: Asynchronous warm/cool feedback from all attendees.
June 26/29: Wrap-up Zoom call with participants.

Planning successes:

Two google doc-based surveys of Missouri Fellows were conducted in late April when Fellows made the decision that they wanted to conduct the conference virtually in June. The surveys asked for their opinions on format, timing, and dates of the final Zoom meeting. Cohort 1 fellows were asked about what deadlines they wanted extended. The responses to the surveys were very helpful in establishing the format of the conference, and how to proceed with wrapping up of the GPS projects. The Missouri site leaders convened a conference advisory board consisting of one district coordinator (Cynthia Dwyer from Boonville), two cohort 1 Fellows (Jacki O'Donnell from Eldon and Betsy O'Day from Hallsville), two cohort 2 Fellows (Seth Willenberg from Columbia and Teresa Edwards from Maries R-2), four MU Wipro staff (Chandrasekhar, Kelley, Kosztin, and Siegel). They met weekly for four weeks on Zoom (May-June). In the first week or two discussions focused on tasks that needed to be done– such as setting up a google folder

with all conference information, determining what information it should contain; how many presentations they should require attendees to watch – in other words, what was a reasonable workload; and what kinds of help attendees might require since this was a new format for many of them. In the later weeks the Conference Advisory board had fellows critique the documents that had been set up and discussed the format of help that might be needed (email vs. Zoom, etc.). This advisory board was helpful in providing not only more voices and eyes, but also in making sure that the decisions that were made were grounded in terms of the internet availabilities of the participants.

The platform chosen for the virtual conference, https://torshtalent.com has been found to have all the capabilities needed, after they upgraded to the premium subscription level. Cohort 2 has been using this platform for a year now. Conference attendees were added on for a one-month subscription at a minimal cost of about $15/person. The personnel have been helpful and responsive.

A team of Torsh Ambassadors was set up to provide help over the course of the conference. The Ambassadors are six Fellows, four from MO and two from CA. They met for a one-hour orientation meeting, on June 2, and from June 3 onward they have been available by email to all presenters, and for hour-long Zoom "office hours" daily, on a rotating schedule. Missouri leaders expect traffic to increase this week as people begin to set up their accounts.

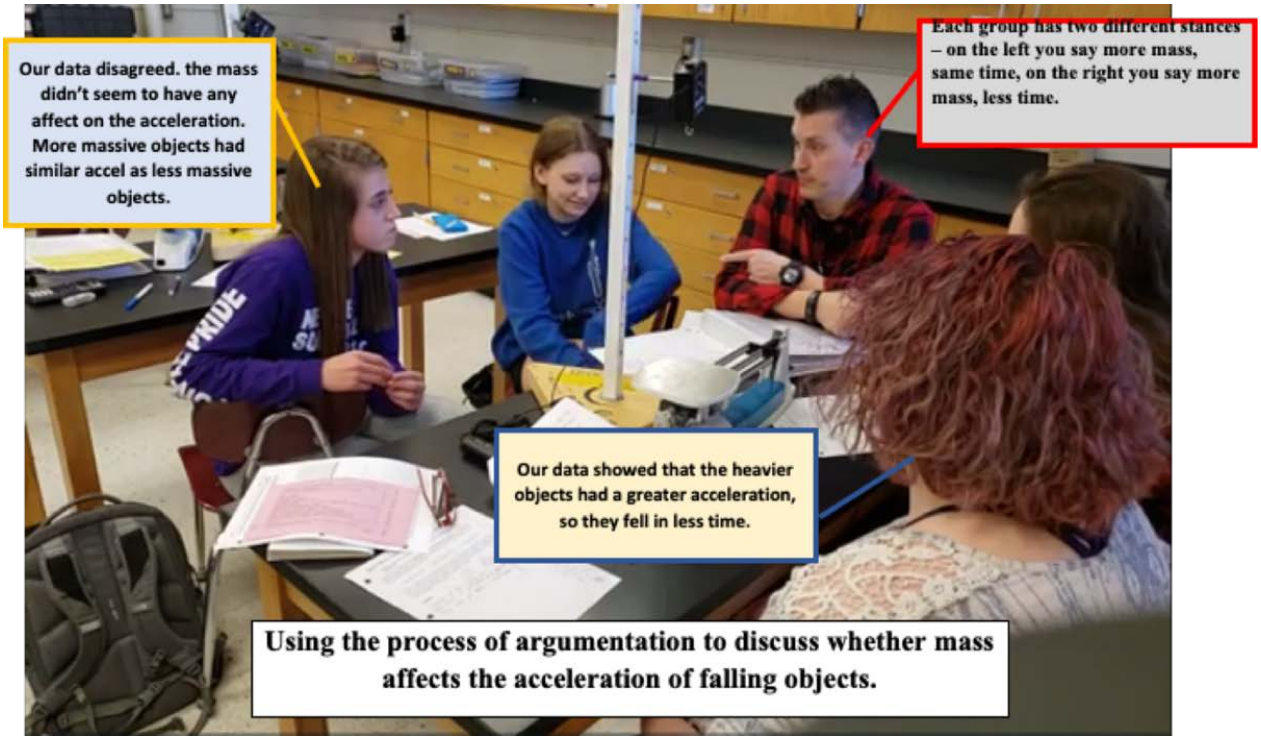
Presenting fellows were asked to provide information and pictures for the conference program presentations in a google doc, and they have been responsive and on time.

Challenges:

Organizing a virtual event was challenging, since none of the site leaders had organized such an event before. In the face-to-face conference last year, the first 15 minutes of the day was devoted to housekeeping, which helped smooth the flow of the conference. In the virtual event they will rely on organizing documents so that attendees can read them efficiently, as well as know where to go for help. As the weeks progressed and the team got more familiar with the organizational processes, they often worried that our familiarity with the process would make it harder for them to help a new attendee navigate the platform.

So far (i.e., one week into the conference) it appears that participants are able to navigate the conference site without too many problems. The help line is underutilized thus far, but the team will know more as they get closer to the deadlines.

H-CCLS Presentations (Cohort 2)



(Above) Seth Willenberg works with his 9th grade physics class

(Left) Candace Campbell's elementary school class designs and builds rockets

Team name (include grade span)	Team members	Science/ Engineering Practice	Presentation title
MO, Grades K-2	Stacey Bishop, Candance Campbell, Becky Eckerle, Rachael Nichols, Kelsey Strubel	Planning and Carrying out Investigations	Wipro's Next Top Model
MO, Grades 3-5	Jennipher Adams, Amy Bartlett, Maggie Hunter, Jessica Johnson, Melissa Milius	Analyzing and Interpreting Data	Improving student success with NGSS Science practice of Analyzing and interpreting Data
MO, Grades 6-8	Teresa Edwards, Beth Newton, Gable Nichols, Lucy Shrout	Planning and Carrying out Investigations	Students' Understanding of the Role of Scientific Models in Learning Science
MO, Grades 9-12	Stephanie Harman, Kristen Harris, Rachel Tinsley, Susan Saracini-Cram, Liz Schwab, Seth Willenberg	Engaging in Argumentation from Evidence	Teaching Teens to Argue Scientifically
CA, grades1-3	Kelsey Magana, Gina Maschio, Satomi Fujikawa	Using Mathematics and Computational Thinking	Creating opportunities for Math in Science
FL, Grades 5-8	Karen Bulino, Jennifer Griffone, Lesley Kirkley, Latasha Seay, David Seis	Constructing Explanations and Designing Solutions	Impact of Problem Based Learning on Student Achievement
TX, Grade 5	Shelby Allen, Sherry Thompson, Olaide Ajakaye, Tiffanie Johnson, Julien Yacho	Constructing Explanations and Designing Solutions	Research Lead Learning
TX, Grade 9	Yesenia Vasquez, Marsha Bolden	Asking Questions and Defining Problems	Using Socratic Seminar to Engage Discussions

Conference Reflections

Since the conference is in progress at the writing of this report, reflections will be provided in the September report. They do not have a keynote speaker for the virtual conference. Originally, this year's keynote speaker was Prof. George Smith, 2018 Nobel Laureate in Chemistry, who will speak at the 2021 conference.

Planning for Cohort 2 GPS

Cohort 2 Fellows were introduced to the GPS at the April 9 virtual monthly meeting. What would usually be an hourlong discussion was modified, and before the meeting, Fellows were provided with a 15-minute video introducing GPS, and a 15-minute video introducing Wix, their portfolio platform. They were also given two documents to read – the GPS description that included the coming year's calendar, and a sample of GPS goals. At the meeting Missouri leaders fielded questions about their GPS project based on these resources.

The cohort will meet with the site leaders on Zoom in July, when they will also invite one or two Cohort 1 fellows to answer questions. The GPS calendar for next year will be similar to that used last year. A draft of their goals is to be turned in, in August.

GPS Poster Session (Cohort 1)

Site Location (state)	Date of Poster Session	Number in Attendance
Missouri	June 2020	Approx. 110

Fellow's Name	Title of Poster	GPS Description
Jamie Blackburn	Integrating Science and ELA	Used reading and writing parts of school's Benchmark curriculum and connected them to science units related to water.
Quincy Carver	Implementing Genius Hour	Students worked on project of their choice one day/week, developing research skills, presentation and individual skills.
Caitlynn Cunningham	Utilizing Flexible Seating in a Classroom	Modified learning environment so students could control their learning environment, increasing motivation and engagement.
Susan German	Creativity and Computational Thinking	Students programmed Micro:bits in projects to assist with computational thinking, and the impact on students was measured.
Jennifer Hoecker	Creating a Second Grade Science Resource Library	The resource library created was tied to the school's curriculum and made available to other teachers.
Brea James	Implementing A STEM Mentoring Program	Created a STEM mentor program between high school students and two classes of first grade students.
Taylor Mislevich	Making Sense of Science: Interactive Notebooks	Implemented interactive notebooks through the science classroom and created a training program so other teachers could use them.
Lynn (Nail) Salzman	Claims, Evidence, and Reasoning in the Elementary Classroom	Developed and utilized science notebooks in elementary classroom with the help of high school science student mentors.
Caitlin Nichols	Science Integration is as Sweet as Honey	Taught literacy with science integration, specifically with the theme of honeybee and pollinator education for fourth grade students.
Betsy O'Day	Developing and Implementing Engineering and Assessment Tasks in the Classroom	Included engineering into 5th grade science curriculum and provided professional development workshops on three-dimensional assessment.

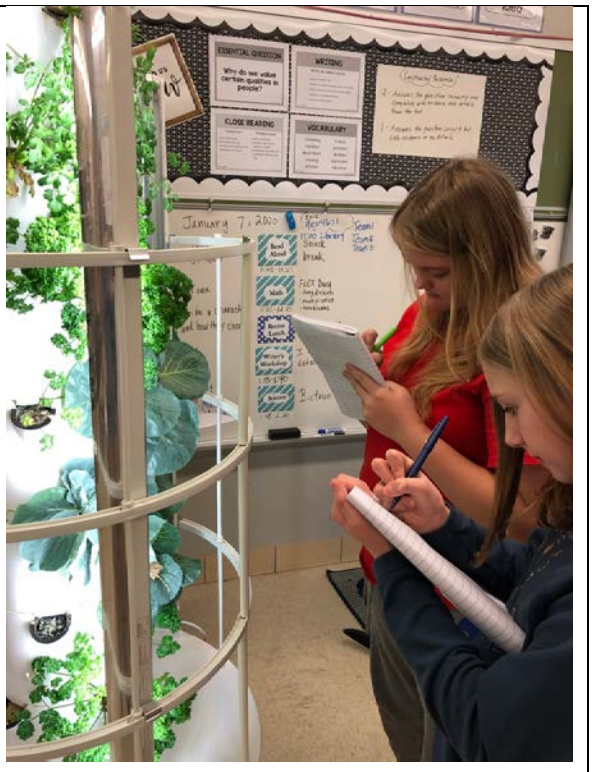
Jacqueline O'Donnell	Increasing Science Content Knowledge with Cognitive Acceleration & Career Research	Students conducted a research project and presented their findings about a career related to the course. Students showed gains in cognitive ability and these gains increase students' scientific literacy,
Kerry Poage	Integrating Robotics into the 5th Grade Classroom	Hosted a professional development opportunity for third, fourth, and fifth grade teachers interested in learning how to integrate robotics into their classrooms.
Amy Rapp	Implementing Google Classroom with my 1st graders	Created and implemented a journal chrome book through Google Classroom, that students used throughout our four science units, with help from high school student mentors.
Lindsey Schwarzer	Increasing Science Content Literacy through Graph Analysis	Worked with students on specific methods for analyzing graphs and applying their learning as they worked through readings in class.
Jennifer Szydlowski	Turning a Science Field Trip into a PBL Project	Students gathered data and took pictures during an annual trip to Rock Bridge State Park, and created a publication titled: "Why does Rock Bridge State Park look the way it does?" This publication was presented to community and parents.
Rebecca Turner	Enhancing Place Based Learning through Arts Integration	Empowered first graders through a Placed Based Learning approach, where students sketched, taped artifacts and/or wrote about their observations in their science notebooks.
Marsha Tyson	Oh! The Places You'll Go! Bridging Leadership, Literacy & Learning	Changed teaching practice based on how students engaged with reading comprehension strategies

		and created a team of support faculty.
Melanie Utterback	Building a Love of Science from the Roots Up	Increased scientific experiences in elementary school for students and teachers through opportunities to visit a high school classroom.

Posters will be posted after June 16, which is the deadline for submitting posters.

	The couches Caitlynn Cunningham added to her middle-school classroom create a great collaboration space for students and make the classroom more welcoming.
	Rebecca Turner's first graders discuss their observations.

Brea James' high school chemistry student, a mentor for Lynn Salzman's first grade class, works on testing ideas on force and motion.



Jamie Blackburn's 5th grade class uses a garden tower to make observations.

Cohort 1 Involvement Next Year

University Level

Cohort 1 fellows will be invited to the GPS planning meeting in July 2020. Site leaders will also pair up Cohort 2 fellows with "buddies" from Cohort 1, so they can consult with them over the school year.

District Level

This past semester has been challenging enough that these plans are not known at present.

Recruitment and Induction of Cohort 3

Recruitment Efforts

Applicants/district

District name	Number of Applicants
Hallsville	3
Comm. R-VI	1
Maries R-2	3
Columbia	2
Jeff City	1
Eldon	1
Boonville	5
Fulton	3
Fayette	1

Applicants by grade level

Grade level	Number of Applicants
K-5	**10**
6-8	**4**
9-12	**6**

Matrix of fellows by district and discipline

Grade / Subject	Biology	Chemistry	Earth - Env. Sci	Physics
K-2	Stacey Bishop Cohort 2	Becky Eckerle Cohort 2	Amy Rapp Cohort 1	Lynn Nail Cohort 1
	Christie Zoeller Cohort 3	Melissa Baker Cohort 3		Robin Bishop Cohort 3
				Natalie Dixon Cohort 3
			Rebecca Turner Cohort 1	
				Candace Smith Cohort 2
	Jennifer Hoecker Cohort 1	Brandy Albrecht Cohort 3		
		Rachael Nichols Cohort 2	Kelsey Strubel Cohort 2	

			Katy Canote Cohort 3	
3-5			Rachel Walk Cohort 3	
	Jamie Blackburn Cohort 1	Maggie Hunter Cohort 2	Kerry Franz-Quinn Cohort 1	
			Caitlin Nichols Cohort 1	
		Josie Hess Cohort 3		
				Amylia Hayes Cohort 1
	Melissa Milius Cohort 2			
	Kayla Miller Eads Cohort 3	Betsy O'Day Cohort 1	Jessica Johnson Cohort 2	Amy Bartlett Cohort 2
			Jennipher Adams Cohort 2	Nicole Golden Cohort 3
6-8				
	Beth Newton Cohort 2	Gable Nichols Cohort 2	Jennifer Szydlowski Cohort 1	
			Melanie Manning Cohort 3	
	Caitlynn Cunningham Cohort 1			
	Quincy Carver Cohort 1		Taylor Mislevich Cohort 1	
	Chelsea Simon Cohort 3			Lucy Shrout Cohort 2
				Susan German Cohort 1
		Jennifer Bacon Cohort 3	Teresa Edwards Cohort 2	Amanda Sauerwein Cohort 3
9-12		Brea James Cohort 1		
				Marsha Tyson (gr 12) Cohort 1

	Rachel Tinsley Cohort 2	Stephanie Harman Cohort 2	Rex Beltz Cohort 3	Seth Willenberg (gr 9) Cohort 2
	Melanie Utterback Cohort 1			
		Jacqueline O'Donnell Cohort 1		
			Liz Schwab Cohort 2	
	Erin Snelling Cohort 3			Steve McMullin Cohort 3
	Susan Saracini-Cram Cohort 2	Lindsey Schwarzer Cohort 1	David Ganey Cohort 3	Kristin Harris (gr 12) Cohort 2
				Kristina Wilhelm (gr 9) Cohort 1
	Tyler Helton Cohort 3			

School district key:			
Boonville	Columbia	Community R-VI	Eldon
Fulton	Hallsville	Jefferson City	Maries Co R-2

Induction Ceremony

The Induction Ceremony will be held at the end of the first meeting with Cohort 3 in August 2020.

Next Year's Calendar

Cohort 2 meeting dates:
Mid-July (Zoom): GPS discussions, meet with a few Cohort 1 Fellows
September 15, 2020: Speed dating to exchange GPS plans, Meeting with Advisors, Wix tutorial, Discussion of Teacher Leadership.
November 17, 2020: Meeting with Advisors, Wix questions, Assessment presentation by Kristen McKinney (DESE)- tentative.
February 16, 2021: Meeting with Advisors, Conduction PD. (Cohort 1 fellows and DC)
Early April 2021: Meeting with Advisors, talk by Marcelle Siegel, Work on Posters.

Cohort 3 meeting dates (some dates may change after the August meeting):
August 5, all day (in-person), or Aug 5 and 7, half days (Zoom): Wipro SEF program overview, Visit with a Cohort 1 fellow, Team development model, setting norms and expectations, Intro to VCCLS, Finding a content topic, finding a research topic, Intro to Torsh, discussion of Calendar, Induction Ceremony

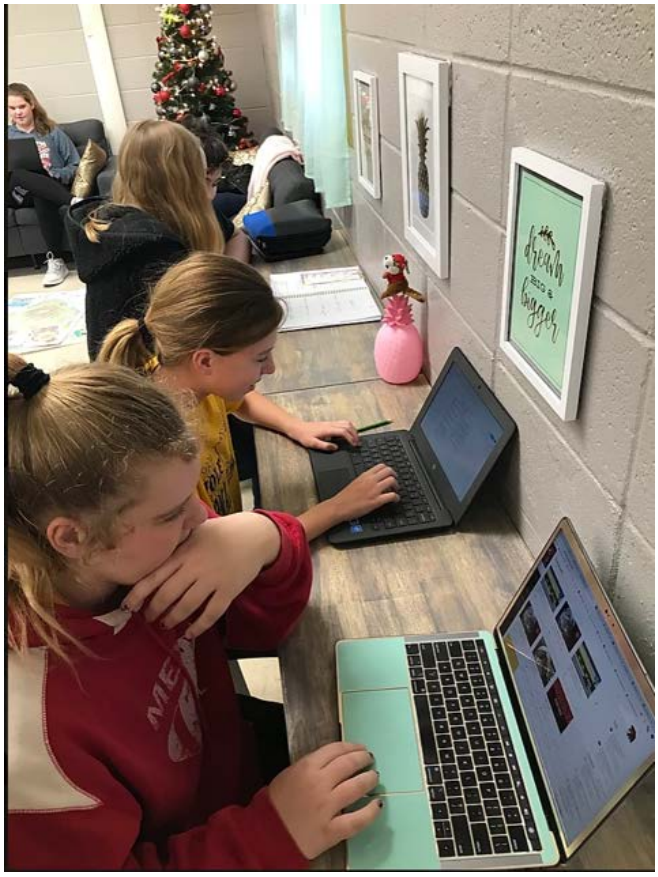
September 17, 2020: Review research article, Designing a PowerPoint presentation, independent work on VCCLS
October 8, 2020: Research Article presentation, Assessment presentation by DESE member (tentative)
Nov 19, 2020: Presentation by Cohort 1 or 2 HCCLS team, talk by Dorina Kosztin "Physics in movies," work on VCCLS presentation.
Dec 10 or 17, 2020 – VCCLS presentations
Jan 14, 2021: Invited lecture (tentatively Johannes Strobel), set up in HCCLS groups – SEPs and research article
February 18, 2021: Research article presentations, Presentation on Elements of Modeling
April 1, 2021: Intro to GPS, Intro to Wix, time to work on HCCLS presentations.
May – Wipro Conference and HCCLS presentations

Featured Fellows

Lynn Salzman, first grade, Hannah Cole Primary in Boonville R-1, Missouri

Lynn has been working hard and seeing success in reaching her GPS district goal to develop and utilize science notebooks in her elementary classroom. She achieved this by inviting a class of high school science students into her classroom. The high school students visited several times to conduct experiments related to the force and motion unit of her curriculum. The older kids and younger kids worked together to time cars going down a ramp and add weight to the cars between each test run. The younger kids really enjoyed working with the high schoolers who helped them collect and interpret data. They then used the data collected to create Claims, Evidence, and Reasoning charts in their science notebooks. Through this process, her students developed close working relationships with the high school students and, she reports, her first graders were able to better understand the basics of the scientific method and the importance of collecting and interpreting data. Lynne will present her GPS poster, "Claims, Evidence, and Reasoning in the Elementary Classroom" during the Missouri 2020 Wipro Conference.

Caitlynn Cunningham, Middle school, Community R-VI, Missouri



Caitlynn successfully transformed her classroom into an attractive and more effective learning space. Her personal GPS goal was to create a space where students feel comfortable by providing choices about their learning space. In doing this, she hoped to encourage students to be more motivated and engaged using flexible seating. Caitlynn states that when students are given choices and allowed to take control of some aspects of their learning, they are more likely to be motivated to achieve goals and to make smarter choices that will benefit them educationally. This will also help them recognize what a good learning environment looks like and how their best learning space might differ from that of their classmates. Students can then apply this information about in other classrooms. Caitlynn introduced two sets of seating options in her classroom early in October- tables with stools as a computer area, and two couches. She assigned groups that rotated through the seating areas each week. To measure her success, she surveyed students to see how they felt about the couches and tables. She used this data to improve seating options in the spring and to see what other options she could introduce in the future.

Covid-19

All school districts in NJ went online mid—March and will remain online through the remainder of the school year. All state assessments have been cancelled.

Phase II Activities

In light of the pandemic, the leadership team at MSU revised the calendar and set of expectations for the Fellows and DC's. In early April, the team met and subsequently sent out an email outlining these changes and offering support. The team also hosted an optional, informal Zoom meeting on April 21, 2020 to discuss the current state of the project and to describe these options in more detail.

Originally, the Fellows' posters on their independent projects were due in mid-May. Instead, the leadership team offered the Fellows the following options:

Option 1: **I'm already done!** You may have everything you need to begin working on your poster and have completed your project as proposed. If that is the case, you can take what you have and think of ways to share your outcomes through a poster (or other medium) presentation. The poster will not be due until November.

Option 2: **I can do this in the fall!** You may have events that you had lined up (e.g. Science Fair, Family Science Night) that were to take place in the next couple of months. If you would like, you can plan to postpone these activities until next Fall - as long as they can be largely completed by our November meeting.

Option 3: **I am doing something different this spring as a response to Covid-19 challenges!** You may be involved in leadership initiatives in response to this drastic change to teaching and learning. That initiative might be on a small-scale (related to your class, for example), or large-scale (involving other teachers, for example). You may even be documenting your work already. If you would like, you can count your work related to teacher leadership under these changing times towards your project. It may also be the case that your original project was amenable to an online forum. You might tweak your original idea and continue with it.

This option involves shifting your focus entirely, or in subtle ways, to a new or revised project that you can complete this spring.

Option 4: **I am shifting my lens to focus on documenting our work through the Wipro SEF community!** Considering that your Wipro SEF community is made up of teacher leaders, you might be interested in documenting the different ways in which teacher leaders adapt to online instruction and submitting an article or making a presentation at a conference about it. This might involve you collecting ideas, insights, or anecdotes from the SEF community (via Canvas Discussions, for example), or conducting short interviews of SEF Fellows about their experiences. Your poster presentation in this case would be based on your submission to a journal or conference proposal.

Option 5: **I don't have brain space to think about this and need to delay reflecting about this right now.** Knowing that we each are in different situations, if even thinking about Wipro SEF is too much right now, we are completely open to you ceasing participation and picking it back up in the Fall. In this case, you would let us know to be back in touch with you in late August, when we could help you think of how you can complete some project.

Option 6: ***None of the choices work for me. I need something different.*** You may have an idea that does not fit under the options we have generated. Feel free to pass the idea by your advisor for feedback.

A follow-up email was sent in mid-May, asking Fellows to check in with their advisors about their plans. Roughly a third of the respondents felt they had enough to report on, a third had considered adjusting to the online forum, and the other third had decided to postpone the resumption of their activities until the Fall.

Sustainability Efforts

With the no-cost extension, Phase II of the NJ project will extend through December 2020. The team has considered ways in which it might extend and expand the project beyond this period if further funding becomes available.

Conference Description

The NJ site has postponed the year-end conference and will instead hold it in November 2020. In addition to poster presentations of Year 3 Fellows, alumni of the program, as well as associated school personnel will be invited. This will be a culminating, celebratory occasion for Phase II participants.

Annual Conference

Site location (State)	Date of Conference	Conference Location
NJ	November (tentative)	MSU

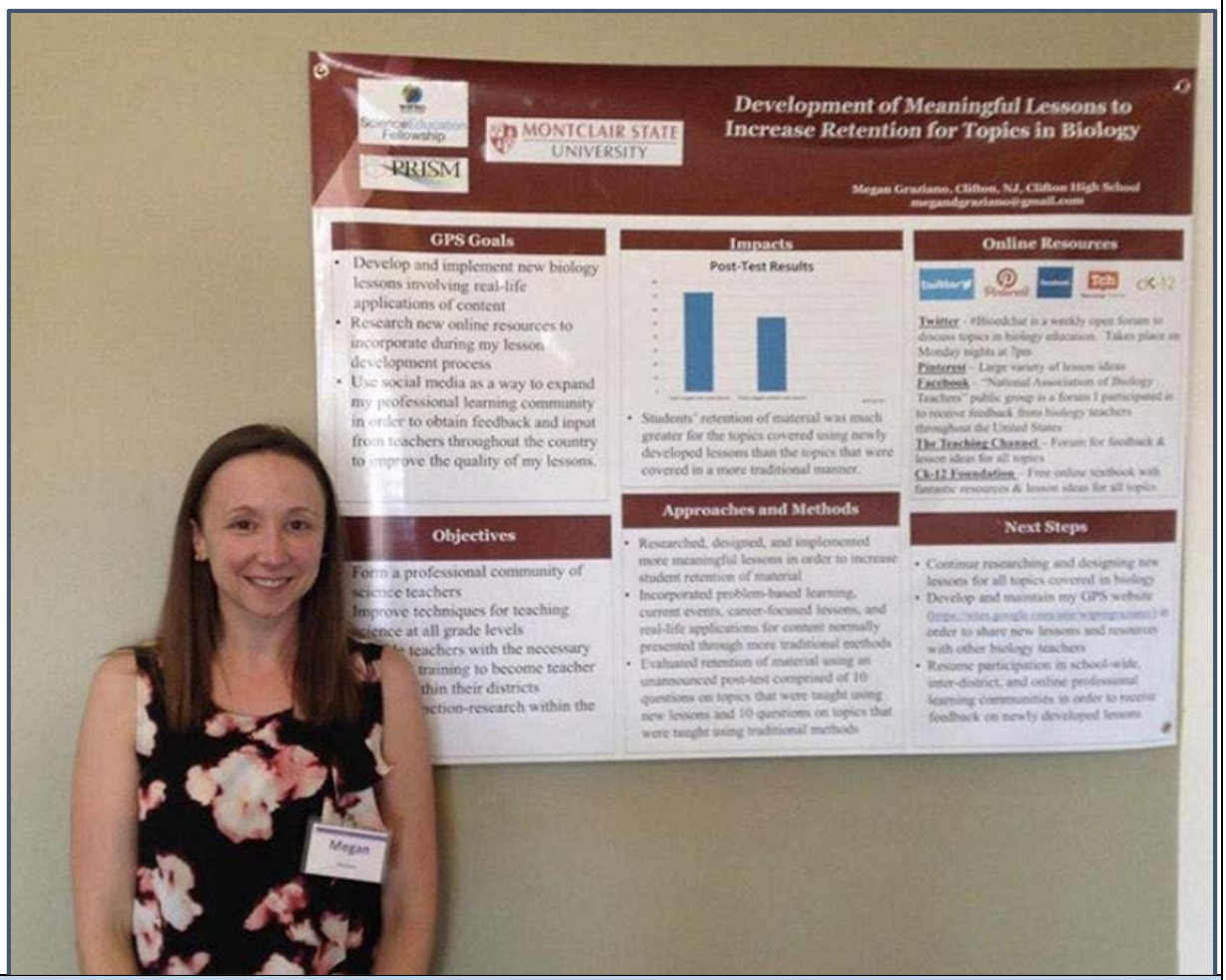
Next Year's Calendar

The Fellows will resume their independent projects during Fall, 2020. Depending on the situation at the time, the conference featuring their poster presentations will be held in November.

Featured Fellows

Megan Graziano, Clifton High School
9th Grade Biology, Clifton School District

Participation in the WIPRO fellowship program has provided me with so many opportunities to act as a teacher-leader. I am very proud of the action research projects I completed, the multi-district professional learning communities I was able to participate in, and the HCCLS groups I established at my own school. Thank you, WIPRO, for helping me to grow and develop as a science educator and teacher-leader!



Lorin Pontelandolfo, Woodrow Wilson Middle School
6th grade Science Teacher, Clifton School District

Wipro, I cannot thank you enough for helping me achieve my goal of becoming a Teacher Leader. My students love the enthusiasm I bring to the classroom. I have also enjoyed mentoring other teachers in the district.

Covid-19

New York State's Governor Cuomo closed all schools during this quarter. All five Wipro school districts directed teachers to provide distance learning. New York State Science Assessments, scheduled on or about June 2020, were cancelled. No make-ups are required for these cancelled exams.

In light of the coronavirus pandemic, Fellows were struggling with managing their online teaching loads. District meetings and leadership mini-grant projects were placed on hold. Staff from Mercy College Center for STEM Education will contact Fellows in the near future to plan next steps.

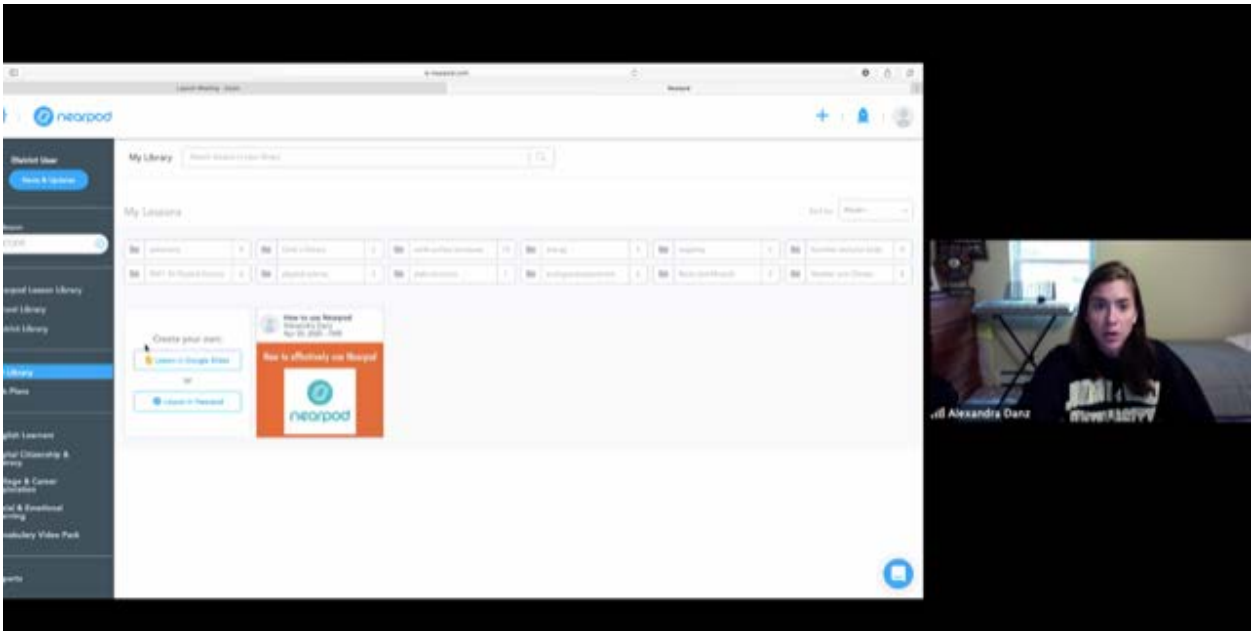
Phase II Activities

Fellow activities at the Greater New York site are ongoing. In response to the shift to online learning, the Mercy College Center for STEM Education (MCCSE) offered free professional development to support online teaching for Fellows and local teachers. This included workshops such as Google Classroom: Beyond the Basics, Self-Paced Instruction with Nearpod, A Teacher's Guide to Delta Math, and Place-based Education while Sheltering in Place. MCCSE's offering of Google Classroom: Beyond Basics was so popular that in order to accommodate all the teachers who requested it, four different sessions were provided through funding from the Wipro grant. School closings and the abrupt shift to distance learning has created new challenges for teachers. Luckily, a few Wipro Fellows have shared stories of how they met those challenges and assisted their colleagues along the way.

Leana Peltier, cohort I, was able to assist over 200 teachers and administrators within her school district. On March 18, Leana led two professional development sessions, via Google Meet, to instruct the K-12 teachers and administrators on the set up and capabilities of Google Meet. She was happy to help her district and was overwhelmed by their gratitude.

Alexandra Danz, Cohort II, served as a presenter for one of the online professional development workshops. The workshop, titled Free Self-Paced Instruction with Nearpod, was well-attended. Participants from all grade levels, including 7 Wipro Fellows, received training in the use of Nearpod as a way to enhance distance learning. The training centered on using Nearpod as a platform for sharing videos, diagrams, and PowerPoint presentations. One attendee commented, "*I commend the presenter for such a good*

presentation. It made a great difference.". Teachers were shown how to access pre-existing lessons as well as how to create their own lessons using Nearpod.



. Alexandra Danz orienting attendees to Nearpod.

Role of DSC's and Fellows

Elizabeth Barrett-Zahn, Cohort I and DSC for the New Rochelle School District, planned meetings for the Wipro team. There were several meetings held at Trinity Elementary School with Ann Marie Manganiello and Diane Delgado, both from cohort III. At these meetings, Fellows discussed their roles within the district as well as options for Fellows in the future. Around mid to late March, the Greater New York area, New Rochelle in particular, was severely impacted by the COVID-19 pandemic and no additional meetings were held as a Wipro team.

Although Wipro team meetings were no longer permitted, Elizabeth Barrett-Zahn continues her work supporting colleagues. She orchestrated weekly science chats using a virtual platform. Two Fellows, Ann Marie, Cohort III, and Aimee Ferguson, Cohort II, joined the chats on several occasions. Elizabeth has also run several workshops for the district. These workshops dealt with science, literacy, standards, distance learning, and resources. During these events, Fellows have been able to share ideas for teaching through distance learning models and more.

Leana Peltier, Cohort I and DSC for Tarrytown, was able to meet with 3 Fellows, Abbey Gilligan, Mayerlin Stripoli, both Cohort I and David Erenberg, Cohort II prior to the COVID-

19 pandemic. Karen keeps abreast of opportunities for Fellows and shares information via email. In terms of leadership, Leana continues to direct (year three) a small professional learning community in the Tarrytown school district. NGSS Science and Engineering Practices, inquiry teaching and learning is the focus of their community work. This group of eight, K-12 teachers meets every three weeks for two hours to share best practices, content, and lesson plans. In addition, the teachers engage in peer observations by visiting each other's classrooms and then sharing their experiences with the group. The group has started to co-construct understanding centered on culturally responsive teaching and practices that are germane to the tenets of this theory.

Leana has also submitted a proposal that was accepted for the group to present at a conference. This past October, her Science PLC presented a workshop at the NE-ASTE (Northeast Association for Science Teacher Education) at the University of Vermont. A group of elementary and high school teachers from this PLC designed a hands-on workshop for the participants to get a sense of what it is like to a member of this unique group. The teachers shared their own experiences during the workshop and answered the participants questions.

Leana presented her own research at ASTE in San Antonio, TX, titled "A Case Study of One Elementary Teacher's Experience in a Vertically Aligned Professional Learning Community". She was scheduled to present additional work at AERA in San Francisco, CA, a symposium titled: "Re-imagining Accountability for Democracy: Teacher Learning in the Third Space" and a workshop at NSTA in Boston ("Making Sense of It: The Power of Peer-to-Peer Interactions). The latter two were cancelled due to the COVID-19 pandemic.

Karen Lent, Cohort I and DSC for East Ramapo, reports that plans for a Fellow reunion were unexpectedly scraped in response to the COVID-19 pandemic. Despite the challenges of working in a high-needs district and transitioning to distance learning, Karen shares the following: "*my experiences as a Wipro Fellow put me ahead of the curve with regards to the intensively IT nature of collaboration and instruction"*.

Carmen King, this month's Featured Fellow, Cohort I and DSC for White Plains, was recognized in a local news report for her leadership work involving distance learning. Carmen shared her thoughts on being a teacher and former Wipro Fellow:
"*I am so proud to be a teacher at this moment. The teachers that I know and work with are all rising to the occasion. They are making a masterpiece out of the mess the pandemic has handed us.*". She attributes part of her success as a teacher leader to her participation in the Wipro Fellowship. "*Wipro SEF is a major reason that I have stepped outside of my comfort zone again and again to try to add to the good in the world.*' Carmen expressed sincere

gratitude toward the program for its impact on her professional life, "*Thanks for giving me the opportunity to grow as an educator and to try my wings out as a leader.*'.

Sustainability Efforts

The staff at MCCSE recently published research involving Wipro Fellows' learning in the Journal of Science Teacher Education. With an understanding that learning and leadership is a continual process, outreach to Fellows is ongoing. Fellows were offered opportunities to participate in the Center for STEM Education's virtual professional development sessions as both learners and instructors. Fellows also were invited to submit proposals for the Fall 2020 Saturday STEM Academy classes.

Conference Description

Annual Conference

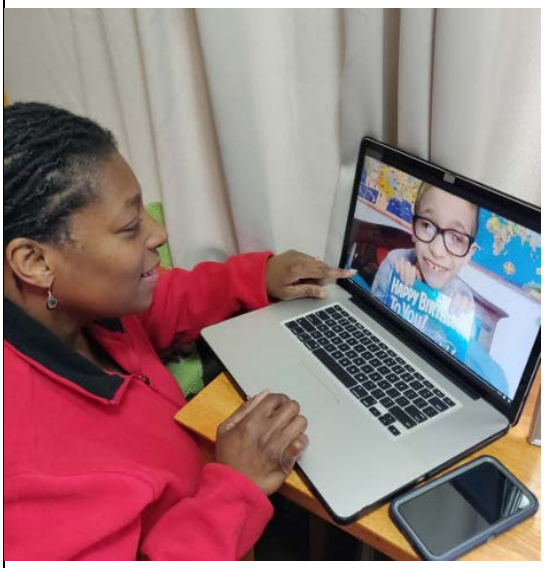
Site location (State)	Date of Conference	Conference Location
Dobbs Ferry, NY	Saturday, October 3, 2020	Mercy College

Featured Fellow

Carmen King, Grade 5, White Plains City School District
In February, I had the opportunity to attend the Wipro Science Education Fellowship Leadership meeting in Dallas, TX. I learned about a variety of innovative ways teachers and administrators are working on supporting science educators and improving science education in a way that positively impacts students. And then shortly after, the pandemic shut down brick and mortar schools. But, teaching and learning was anything but shut down.

GNY Fellow, Carmen King, networking at the Texas site visit

I tried to take this moment to be the teacher leader that I have been training to be (thank you Wipro SEF) in a digital world of teaching and learning for which most of us have not been trained. It is no easy task to make that switch. But, leave it to educators to engineer a digital classroom out of whatever materials were available to them. (All strong teachers are makers at heart!) I responded to a district "call for helpers on remote support" for our colleagues and led workshops on incorporating Nearpod, Padlet, and FlipGrid in Schoology. As a lifelong learner, I also attended many digital workshops to improve my own digital skills in this new way of teaching. I'm so thankful for working with such intelligent and dedicated colleagues. (Teachers rock!)



Much of my pandemic teaching has been a collection of recorded lessons, trusted websites (Mystery Science is a great one for elementary) and live sessions to continue to build connections between students and promote community in a time when community is so needed! Wishing for a brighter future quickly! Together we can make it!

Carmen King, cohort 1, checking in with a student virtually

TEXAS- UNIVERSITY OF NORTH TEXAS DALLAS

Covid-19

Beginning in March many school districts in the UNT Dallas area switched to on-line learning for students. UNT Dallas meetings for the remainder of the academic year were also held virtually using the Zoom platform.

Wipro Class zoom meetings Spring 2020:

March 23rd Wipro C2 Fellows Meeting

https://unt.zoom.us/rec/play/75Yuf-ys-G03HdfE4wSDAfF_W9S7LPms13Ib-fNfzhuzVnZWYVSvMLpGNOcKYRisusRpYEzf--6rHBEL?continueMode=true&_x_zm_rtaid=_ProZMPFRl2Kp-WKxsDMXw.1585075836132.dc732c0b6e9f015e88cb3f68e3605081&_x_zm_rhtaid=334
Total time for class: 01:03:52
In attendance, all Wipro C2 fellows, Kendra, Michael

March 30th Wipro C3 Fellows Meeting

https://unt.zoom.us/rec/share/9PVPDKuurztJWY3n8F3jC_IHBtq5eaa81icY-aIJzx7tt3UsOww_Wr8QgCidQnKz
29:04 It does not include time in meeting rooms
Total time for class: 93 minutes
In attendance, all C3 Wipro fellows and Kendra

April 6th Wipro C2 Fellows Meeting

https://unt.zoom.us/rec/share/uNdrdLOt72pLeJ3nuGzaRoEhIZnaX6a81HQd_KYLxBlZgp3VazRC-rTpThKwLCRU
01:08:26. It does not include time in meeting rooms.
In attendance, all C2 Fellows

April 13th Wipro C2 and C3 Fellows Meeting

https://unt.zoom.us/rec/share/5OZTK4Pr3G5Jc9bQ-Fz8V4g_Rbrhaaa81igX8qUPmB5USzAVmN-lRfBN4N7jUbKZ
(Access Password: b9&0219*)

01:30:31. It does not include 50 minutes time in meeting rooms.
In attendance, all C3 Fellows, Richard C2 Fellow absent

May 4th Wipro C2 Fellows Meeting

https://unt.zoom.us/rec/share/_PxoNp239E9IAavryxHbApYtQa7aX6a80CkXrPZenhnWh1jkoUpmKWgPTie_Zgje
Total time for class: 01:17:23
Richard C2 Fellow absent

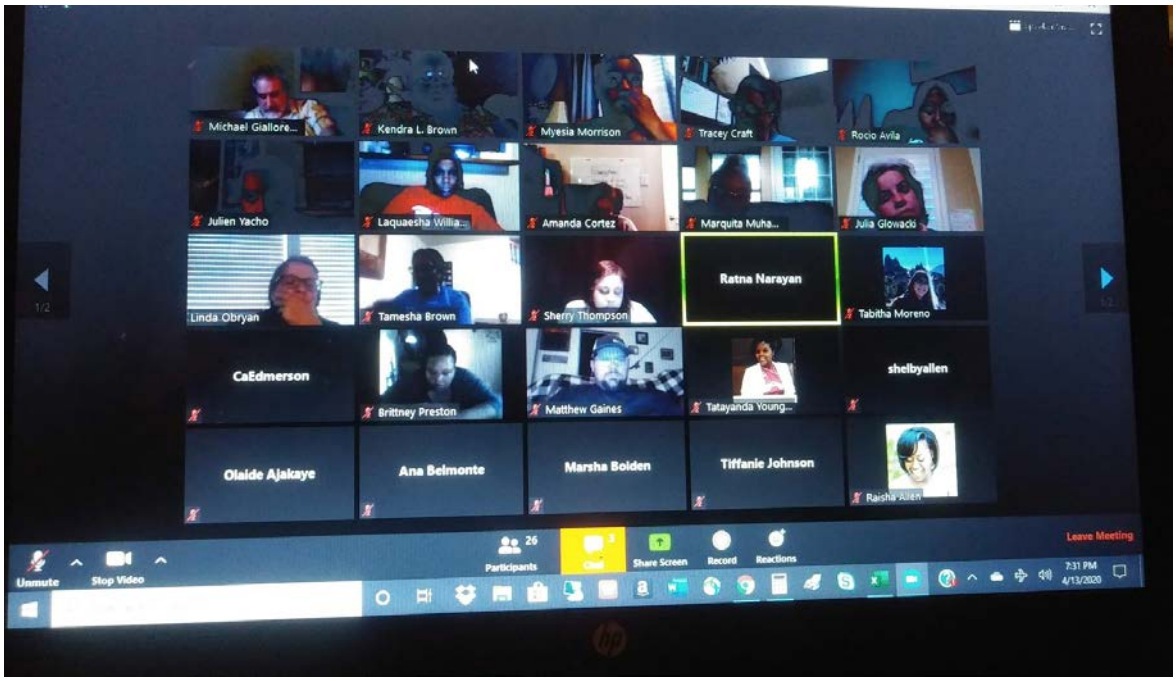
May 11th Wipro C3 Fellows Meeting

https://unt.zoom.us/rec/share/3dwpBari22JOc5Xzylr-UJdwMY7fX6a81ylNqaVemB1YX81Ykid_WIH2Wg2Jb2Mr
Total time for class: 01:23:56
All present

Dr. Narayan has been working individually with the C2 Fellows on aspects of their GPS via email, phone and zoom. She has been working with C3 HCCLS Fellows on their projects via email, phone and zoom

The next meeting for C2 and C3 will be June 15th /16th 2020

She is in touch with the DSCs over phone and text but there have not been any official meetings scheduled. No meetings have been scheduled with the informal science institutions due to Covid. Several informal science educators have been furloughed and have taken other positions. Once the Covid restrictions are eased, these relationships need to be re-established.



Zoom Meeting with Cohort 2 on Monday, April 13th, 2020

Zoom Meeting with Cohort 3 on Monday, March 30th, 2020

Leadership meetings

Right now, the focus for Dr. Narayan has been on providing as much support as she can to her fellows.

Planning for Cohort 3 GPS

Below is the table Dr. Narayan has developed a spread sheet to keep track of GPS progress. She has given the C2 Fellows soft targets and has been working with them individually to give them feedback and support on their goals

https://docs.google.com/document/d/1xta0iH6oimSfM6n4tMohy9VWxLp3V8D7nglzV1UznM0/edit

While Dr. Narayan has been able to communicate with all the C2 Fellows, one of them is currently incommunicado. Most of the fellows have either been working on their poster or PD and she has given them feedback on their product. The next soft target will be July 1st. The idea is to help them complete their projects on time. With regard to the posters, Dr. Narayan still plans to get them printed out. Currently the university has not decided about Fall semester instruction (online, hybrid or face to face). Once that decision is made, site leaders will also take into consideration what the ISDs are doing and work accordingly.

C2 GPS Goals

Fellow name ISD Grade	District related goal statement	Personal Goal Statement	Informal site	Poster source	PD source	Grant	Option
La Quaesha Williams Mesquite ISD HS Science/Math	To determine the impact of intervention strategies on 9th grade biology student's content knowledge. Have to uploaded on Wix	To learn about and implement strategies that will enhance my abilities as a science instructional coach. Completed but to be uploaded on Wix	Cedar Hill State Park Needs to be scaled back and complete	District goal Feedback provided	District goal To develop framework for PD offered face to face and online	Not started	Option 1
Matthew Gaines CHISD 5th grade	My district goal is to determine how 5th grade science content knowledge can be impacted by the application of the LRE Fishing Club activities and lessons at the local pond.	My personal goal is learning how to use quantitative data to monitor student comprehension and then adjust my interventions according to the data while still teaching a unit instead of	Texas Freshwater Fisheries Feedback provided	District goal	Personal goal To be completed: Develop a ppt and record self	Two grants written, both approved	Option 1

	Feedback provided	waiting to make modifications after the unit. In progress		Feedback provided			
Ana Belmonte Irving ISD 2nd grade	My district goal is to determine the impact of science talk on the science learning of my second-grade students. To be completed: completed, needs to be uploaded on Wix	My personal goal is to learn about STEM, STEM in the elementary classroom and to implement aspects of STEM in my 2nd grade classroom. To be completed: implementation aspect to be completed	Dallas Arboretum In progress, activity completed, materials to be purchased and uploaded on Wix	District goal Feedback provided	Personal goal To develop framework for PD offered face to face and online	Grant completed and accepted for earth materials	Option 1
Tracey Craft Irving ISD	My District goal is to develop an afterschool program to improve the instant challenge scores for elementary Destination Imagination teams. To be completed: write it up and put on Wix	My personal goal is to learn about Total Physical Response as a pedagogical strategy and implement it in the elementary classroom. To be completed: in progress	Ray Roberts State Park -Isle du Boi To be completed: to be edited and presented on Wix	District goal Feedback provided	Personal goal To develop framework for PD offered face to face and online	Not started as yet: materials for science after school program	Option 1
Candace Edmerson GPISD 9-12	Determine the impact of CER (Claims, Evidence, and Reasoning) as a Pedagogical Strategy on test scores of On Level Biology Students. To be completed: 2 CERs with high school group, post assessment	To learn about ADI (Argument Driven Inquiry) and its implementation and impact at the Secondary High School level. To be completed: in progress May 30th	Dallas Zoo To be completed: activities to be completed and shared with informal educator	District goal To be completed	Personal goal Feedback provided	Grant, written and submitted and approved to go to NSTA Boston.	Option 1
Rocio Avilla Irving ISD 5th grade ELAR and SS	To determine the impact that Close Reading has on students' abilities to do CER. To be completed: survey to be	To learn about Close Reading and how to implement in my 5th grade classroom. To be completed: Still in progress	Cedar Hill State Park To be completed: type out all the	District goal	Personal goal To develop framework for PD offered	Not started yet. Donors	Option 1

	administered via google form		material on Wix	Feedback provided	face to face and online May 30th	choose. Books	
Brittney Preston CHISD 6th grade	Determining what impact participating in field trips have on 6th grade students Science content knowledge To be completed: create and administer google form for participant survey regarding 2 field trips they took	Learn about gamification as a pedagogical tool and its application in the middle school classroom To be completed: Plan of action for its implementation in the middle school classroom	Frontiers of Flight Museum To be completed: Escape room in progress	District goal Feedback provided	PD regarding gamification completed and on Wix	To be completed	Option 1
Richard Anderson CHSID 9th Biology	To develop a series of online professional development for secondary science teachers based on content-specific best instructional practices for CHISD.	To learn about the fundamentals of hydroponics and its implementation in CHISD and in my classroom.	Dogwood Canyon Audubon center	District goal	Personal goal		
Raisha Allen DeSoto ISD	To determine the effect of Project based learning on students' district assessment scores in 8th grade science. Completed need pics of PBL at school May 30th	To learn about strategies that will help Special Education students in my 8th grade science class learn, interactive with, and retain content knowledge. Completed to be uploaded on Wix	Ray Roberts State Park -Johnson Interactive game, food web done, dichotomous key in progress, figure out who the informal is	District goal Feedback provided	Personal goal To develop framework for PD offered face to face and online	Not started: technology for classroom iPad's / chrome books	Option 1
Juan Morel Irving ISD	District Goal To design and implement playground physics activities for my high school students aligned with the unit covering the Law of Conservation of Mechanical Energy. Project completed, needs to be uploaded on Wix	Personal Goal To learn about the practical applications of behavior management strategies and their implementation in my high school science classes. Completed journal, reflection to be added, needs to be uploaded on Wix	Informal Site Frontiers of Flight Museum In progress	Poster Source District Goal Feedback provided	PD Source District Goal To develop framework for PD offered face to face and online	Not started	Option 1

Tabitha Moreno Irving ISD 1st grade	To learn about and implement pedagogical strategies directed to help my students in my first-grade science class. To be completed: Organize it and present on Wix	To learn about realia word walls and how to incorporate it in my first science grade classroom To be completed: Organize it present it on Wix May 30th	Texas Discovery Gardens In progress In contact with Informal Sc Ed	Personal Goal Feedback provided	District goal To develop framework for PD offered face to face and online	Not yet started. Donors choose science materials	Option 1
Myesia Morrison Lancaster ISD 9th grade	To create a STEM based YouTube channel that can be used as an ongoing resource for Teachers, Students, and community of Lancaster Independent School District In progress has videos, need to be edited and uploaded. Post survey needs to be administered.	To a). learn about Science Literacy and b). implement science literacy strategies that will impact my 9th grade biology students. 3 books, almost done with second, needs to work on implementation May 30th	DISD Environmental Education center To be completed, meet with Mark Broughton	District goal In progress, needs to complete, 50% done	Personal goal Completed needs to be uploaded to Wix May 30th	Grant written for biology class materials, LISD Foundation	Option 1
Julia Glowacki Irving ISD 10th grade	To design and test scenario-based, hands-on, exploratory IPC activities geared towards struggling 10th grade students Data collection completed, upload of Wix	To create an integrated, hands-on IPC curriculum focusing on the integration of Physics and chemistry through hands-on activities, developing the scope and sequence and activities for the first 6 weeks In progress	John Bunker Sands Wetland center To be completed	District goal To be completed	Personal goal To develop framework for PD offered face to face and online	To be written Irving school foundation, microscopes for teachers	Option 2
Billy Johnson DeSoto ISD 7th grade	District goal to determine the impact of using apps such as seesaw and Flipgrid with 7 grade students argumentation skills. To be completed: to administer survey to participants, organize and upload on Wix May 30th	Personal goal to learn about technology apps and websites that I can incorporate and implement and 7th grade science. To be completed: in progress, have the apps, need to select websites, incorporation in 7th grade science aspect	Perot Museum Activities complete, need further discussion with informal educator	District goal Feedback provided	Personal goal To develop framework for PD offered face to face and online	Grant written for 20 chrome books; donors choose	Option 1

Cohorts 1&2 Involvement Summer and Next Year

Southwest Dallas Collaborative Professional development June 2020

This project came up during the Wipro Leadership meeting in February in Dallas. The three DSCs (Cedar Hill, Lancaster, DeSoto) from Dallas in attendance planned to create a combined face to face summer Professional Development for the teachers in their districts in conjunction with Wipro and UNT Dallas. Then Covid hit and the team decided to take the project online. Dr. Narayan and the DSC's have met as a group almost every week and much progress has been made with the project.

Southwest Dallas Collaborative PD Flyer

Below is a table detailing all the Wipro presentations for the inter district summer PD. Dr. Narayan is working with each of the Wipro groups on their presentations to make sure they are interactive and meaningful.

Wipro Presentations for the Inter District Summer PD

Title of the Presentation	Description	Content and level	Presenters
Claims, Evidence, and Reasoning	This vertically aligned, interactive presentation will guide teachers on how to implement the pedagogical	Science Elem, Middle, High	Candace Edmerson (C2, Grand Prairie), Billy Johnson

	strategy of CER in their classrooms. Examples of CER tasks and student samples to elementary, middle, and high school levels will be shared.		(C2, DeSoto), Rocio Avila (C2, Irving), Myesia Morrison (C2, Lancaster)
Question Formulation Technique: Giving students opportunities to ask questions	In this vertically aligned, interactive presentation teachers of all levels will learn about QFT and how to implement it in their classes. Examples of QFT and student samples from elementary, middle, and high school levels will be shared	Science Elem, Middle, High	Tracey Craft (C2, Irving), Julia Glowacki (C2, Irving), Brittney Preston (C2, Cedar Hill)
Concept Mapping and Student Understanding	During this interactive session we will explicitly present concept mapping as a student practice for organizing, refining, and expanding student knowledge of scientific concepts and principles. Examples and student samples from elementary, middle, and high school levels will be shared	Science Elem, Middle, High	James Mining (C1, Irving), Tabitha Moreno (C2, Irving), Raisha Allen (C2, DeSoto)
Developing and using models	The focus of this interactive presentation will be help elementary teachers use and develop models to enable their students to gain/solidify their knowledge of science concepts. Several examples of models and how they can be used will be shared	Elementary science	Rocio Avila (C2, Irving), Ana Belmonte (C2, Irving), Tracey Craft (C2, Irving), Tabitha Moreno (C2, Irving)
Planning and carrying out investigations: Using Science Talk to plan and investigate	This hands-on, interactive session focuses on planning and carrying out investigations using a 5D component similar to the engineering design process. Attendees will leave the session with effective new ideas to try in their classroom that are research based and teacher tested	Middle school science	Matthew Gaines (C2, Cedar Hill), Billy Johnson (C2, DeSoto), Brittney Preston (C2, Cedar Hill)
Mnemonics	Presenters will guide elementary teachers through a wide variety of strategies of creative and innovative memory strategies relevant to the EC-6 curriculum	Elementary science	Marquita Muhammed (C3, DeSoto), Julien Yacho (C3, Irving)
Gamification as a pedagogical tool	During this hands-on, interactive presentation, middle school teachers will learn ways begin incorporating gamification in their classrooms. I will share strategies through which they can turn a lesson into an engaging, motivating experience.	Middle school science	Brittney Preston (C2, Cedar Hill)
Using Seesaw and Flipgrid in the middle school science classroom	In this interactive session, we will show you how to incorporate Appl such as Seesaw and Flipgrid into your middle school science lesson to increase student engagement and concept attainment	Middle school science	Billy Johnson (C2, DeSoto), Raisha Allen (C2, DeSoto)

A total of 34-36 presentations will be offered over 2 days (June 30-July 1st), of these 8 presentations are being offered by the Wipro Fellows (mainly C2, 1 C1 and 2 C3 are also presenting). The three DSCs chose the topics from a list of Wipro presentations Dr. Narayan provided as per the needs of their districts. UNT Dallas will be hosting these sessions via zoom, we are working with IT for Tech support and setting up these sessions. She will ask C3 Fellows to volunteer to facilitate some of the sessions.

Invitees to this combined online PD will include teachers from the 5 Wipro Districts (Irving, DeSoto, Lancaster, Cedar Hill, and Grand Prairie). Also invited will be UNTD alums and UNTD Preservice teachers going into their student teaching semester.

Most sessions will be capped at 300. The team is using Plan Hero to add the conference schedule and for participants to register. Dr. Narayan will share this information when it is ready.

Participating in the Missouri Conference June 2020

Two of TX HCCLS teams (7 Fellows) are presenting at the Missouri conference. One team has already uploaded its video and forms, the other team will do that before the deadline. Another 28 Texas Fellows will be participating in the MI conference. For the C2 and C3 Fellows who registered, Dr. Narayan has assigned them 2 specific HCCLS and 2 GPS presentations to watch and provide warm and cool feedback. In addition, she has asked them to select and respond to 2 HCCLS and 2GPS presentations of their choice. They will write a reflection which will be part of their Wix portfolio.

Conference for the Advancement of Science Teaching (CAST 2020)

CAST is an annual conference hosted by the Science Teachers Association of Texas. It is scheduled to be held in Houston in November 2020. At present site leaders do not know if the conference will be held online or face to face. All 4 C3 HCCLS and 4 VCCLS C3 groups have submitted conference proposals to present at CAST 2020. In addition, Dr. Narayan submitted a generic proposal regarding hands-on science that fellows can present at in case any of their proposals get turned down. Currently there is a hold on any travel at UNTD and so site leaders have not been able to take advantage of early registration for the conference.

Next Year's Calendar

Plans for next year

Below is a tentative calendar based on what was done last year. More decisions will be taken with regards to C3 and their GPS tasks post Covid and depending on what happens when schools, the university and informal science sites open.

Calendar

Tentative Calendar for Cohort 3 Year 2

Name of activity	Date of Activity	Description of activity	Target date for completion
Fellows enroll in EDCI 5900 003			
First draft of the GPS		**Goal statements for District and Personal goal (~100 words each)** **To be communicated with Dr. N and DSCs via email**	**July 21st 2020**
GPS feedback provided to fellows	**August 14th 2020**	**Feedback provided via email about District and Personal Goal statements (timeline, how to, resources, data, PD, poster)**	**August 14th 2020**
Revision of GPS, talk to Principals	**August 14th - August 26th 2020**	**Revise your GPS as per feedback provided and inform Principals and DSCs about your goals**	
GPS components and deadlines, CAST 2020, Wix portfolios	**Tue, Aug 26th, 2020** **5:30 - 8:20 pm**	**Class Meeting for Cohort 3 Year 2** **Location:** **GPS Components and deadlines** **Wix Portfolios** **C2 shares Goal statements for District oriented and personal goals, timelines, how to, warm and cool feedback** **CAST 2020**	
If necessary, I will set up a face to face/phone meeting with any fellow who needs more assistance. Fellows and their informal partners will set up a face to face or phone or zoom meeting with me to talk about their plans for the informal task of their GPS (this will be the first of three such conversations, Dec, May)			
Addition of material to Wix site		**Fellows add relevant material to their Wix site**	**Sept 15th 2020**
Professional Development	**Sept 22nd, 2020** **5:30-8:20 pm**	**Class Meeting for Cohort 3 Year 2** **Location:** **Session on Professional Development presented by the 5 DSCs and Dr. N** **What is PD, what does PD look like at their ISDs, How to set up and implement a PD at the ISD, at a conference** **PD requirements for the GPS**	

Grant Writing workshop	**Oct 20th, 2020 5:30-8:20 pm**	**Class Meeting for Cohort 3 Year 2** **Location:** **Grant Writing workshop** **Presented by Dr. Todd Will and Mark Broughton, Angela Force, and C1 Fellows/ DSC** **This session covers grants, types of grants, resources for writing grants in Texas, how to apply for grants at your ISD**	
1st Quarterly report due	**Oct 10th, 2020 on Wix**	**Provide an account of work accomplished to date and a summary of meetings with advisers** **Updated Quarterly Report Form will be emailed to you** **Please make sure that the following are completed on Wix / otherwise** **A. About Myself with pics** **B. My Team with pics and bio** **C. Initial qns answered for the personal and district-oriented goal** **D. Conference call with your Informal educator and you** **E. Budgets and timelines for personal, district goals and informal task** **F. Reflection for sept On Wix** **G. Met with your DSC and got feedback on your personal and district goals** **H. Dr. N will call DSC for Fellow progress report**	
Payment Installment 1	**Nov 1st, 2020**	**Provided fellow has submitted revised GPS, first Quarterly report and met with advisers**	
CAST Prep Poster	**Nov 3rd, 2020 5:30-8:20 pm**	**Preparation for CAST 2020** **Session on how to create a poster using the template provided**	
CAST conference	**Nov 5-7th, 2020**	**George R Brown Convention Center Hilton Americas Hotel** **Fellows submit at CAST, conference expenses to be reimbursed**	
Presentation of 1 completed goal	**Dec 8th, 2020 5:30-8:20 pm**	**Presentation of 1 completed goal, District or personal goal**	
Fellows will be assigned an incomplete grade for the course			
V-CCLS Presentations SATURDAY	**Jan 16th, 2021 9:00-3:00 pm**	**V-CCLS Presentations** **UNT Dallas**	
2nd Quarterly report due	**Jan 19th, 2021 on Wix**	**Provide an account of work accomplished to date and a summary of meetings with advisers** **Updated Quarterly Report Form will be emailed to you** **Please make sure that the following are completed on Wix/ otherwise**	

		A. Either your Personal Goal or your District goal must be completed and all documentation with budgets and timelines uploaded on Wix so either the Video-taped PD must be complete, or the Final draft of the Poster must be complete B. Reflection for Oct, Nov, Dec On Wix C. Grant Proposal uploaded on Wix D. Met with your DSC and got feedback on progress regarding your personal and district goals E. Dr. N will call DSC for Fellow progress report F. Conference call with your Informal educator and you G. CAST documents and reflection uploaded on Informal task page	
Payment Installment 2	**Feb 1st , 2021**	**Provided fellow has submitted revised GPS, second Quarterly report and met with advisers**	
March 9-13th 2021 Spring break UNT Dallas			
STEM	**March 16th, 2021 5:30-8:20 pm**	**STEM Poster Final Drafts AND Videotaped PD due to Dr. N**	
	April 20th, 2021 5:30-8:20 pm	**Adult Learning statement Impact and Leverage Statement Teacher Leader Continuum Cover Letter All materials for District and Personal Goals and the Informal Task to be ordered**	
3rd Quarterly report due	**May 14th, 2021 on Wix**	**Provide an account of work accomplished to date and a summary of meetings with advisers Updated Quarterly Report Form will be emailed to you <u>Please make sure that the following are completed on Wix / otherwise</u> A. Personal and District Goal to be completed and uploaded on Wix B. Draft of the Informal Task to be uploaded on Wix C. Reflection for Jan, Feb, March, April On Wix D. Met with your DSC and got feedback on progress regarding your personal and district goals E. Dr. N will call DSC for Fellow progress report F. Conference call with your Informal educator and you**	
	May 18th, 2021 5:30-8:20 pm	**Conference session practice, GPS submission deadlines and expectations**	

Payment Installment 3	**June 1st, 2021**	**Provided fellow has submitted revised GPS, third Quarterly report and met with advisers At this point the 2 goals and 1 task must be completed and posted on Wix GPS poster sent to printer**	
Wipro Science Education Conference June 12th 2021			
Review of Wix portfolio draft The portfolio draft MUST be completed with all earlier suggested changes made, to be shared with DSCs and Informal Science Educators and Dr. N for their feedback July 1st 2021			
Final Submission of GPS Portfolio : July 13th 2021			
Grades submitted August 15th 2021			
Payment Installment 4	**August 20th, 2021**	**Provided GPS portfolio has been completed and graded**	

Featured Fellows

Rocio Avila, 5th grade, Irving ISD
I am Rocio Avila and I am a part of Wipro Cohort 2 at UNT Dallas. It has been a learning adventure to be part of this fellowship. I am currently a 5th grade Bilingual/ESL teacher at Barton Elementary in Irving, Texas with an accountability rating of a "B". Most of the students at Barton Elementary are low-income. I have been in the education field for four years before I worked in the corporate world as a legal assistance. I feel that having experience in the corporate world lets me see the importance of preparing our students to become successful and gain knowledge about their surroundings in the world. Also, I am a full-time wife and mom to a 5-year old girl and a one-year old boy, who are my motivation and inspiration. Trying to manage my professional and personal life at times gets complicated, but at the end I seem to get through difficulties. I am a teacher that sets high expectations for both myself and my students, it all starts with a positive mindset.

I can say that Wipro has greatly impacted my life as a professional in the classroom. I have gained confidence in myself and recognize that I can achieve success by all means. Implementing various pedagogical strategies in my classroom made me grow and added more tools to my toolbox. I am a very shy person when it comes to talking in front of a group that is not my students, so presenting in Wipro has helped me battle this fear. I feel more confidence in myself when speaking. In addition, I will want to embark on a leadership position in the future in my career since Wipro has guided me to build the skills I need and recognize the potential within me. Administration has considered my participation in Wipro and changed my assignment from fifth grade English Language Arts and Reading to teach Math and Science in third grade the next school year. I am grateful for the opportunity given to me to be part of the Fellowship to grow as a professional.

Sherry Thompson, 4th and 5th grade, Irving ISD
My name is Sherry Thompson. I am a native of Jeanerette, Louisiana and have been a resident of Texas for 4 years. I obtained a Bachelor of Science with a concentration in kinesiology in addition to a Master of Education with a concentration in Educational Leadership from the University of Louisiana at Lafayette. Recently, I was chosen as Teacher of the Year for Thomas Haley Elementary as well as District Teacher of the Year for Irving ISD. I currently teach 4th and 5th grade math and science to gifted and talented students. I am humbled and honored to work alongside the greatest team/family. My students get my full attention, and it is never a dull moment while hearing their discussions when making connections to life and the world around them.

As an educator, professional development is essential to ensure you are providing content and pedagogical strategies that meet the needs of your students. After reviewing what Wipro had to offer and the selection process, I am honored to have been chosen as a fellow for the Wipro Science Education Fellowship Program. This program has supported me in my career by providing me the opportunity to work in vertically and horizontally aligned teams, present research-based pedagogy strategies, as well as attend attractions for possible field trips that I would have never visited. Through team collaboration, I have learned ways to incorporate project-based learning with my students and a variety of new ways to teach vocabulary. With the guidance of Dr. Narayan, I am grateful to have gained a plethora of new experiences.

PROGRAM EVALUATION AND RESEARCH GROUP (DHA)

A summary of the evaluation report follows.

Evaluation Update – March 2020

David Heil & Associates, Inc.

Tasks this Month

- Completed the data analysis for mid-year report and submitted on March 13, 2020.
- Participated in Wipro SEF Team conference call on March 18, 2020.
- Cancelled site-visit plans for Missouri in early May for year-end conference because of COVID-19 restrictions/closures. Continuing to communicate with Missouri leadership about alternative site-visit options.

What's Next?

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

- Continuing to assess the changing plans for the year-end evaluation in light of COVID-19 restrictions & school closures in consultation with Wipro SEF leadership.
- Begin year-end interviews with teachers and district personnel (late April - if able). Will be adapting questions to capture impact of COVID-19 in addition to usual year-end questions.
- Begin year-end survey administration (late-April – if able). Will be adapting questions to capture impact of COVID-19 in addition to usual year-end questions.
- Plan for virtual participation in year-end conferences.
- Remain in close communication with team leadership about shifting plans/schedules due to COVID-19 restrictions/closures.

Evaluation Update – April 2020

David Heil & Associates, Inc.

Tasks this Month

- Drafted new year-end surveys for all participants and follow-up surveys for NE Fellows. Made significant changes to the surveys to reflect the changing educational landscape since the COVID-19 crisis began. Survey will be administered from May 1-15.

- Participated in Wipro SEF Team conference call on April 1 and April 15, 2020 and provided feedback/insights as appropriate to Wipro SEF leadership.

What's Next?

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

- Submission of evaluation plans for 2020-2021 to Wipro SEF leadership.

- Continuing to assess the changing plans for the year-end evaluation in light of COVID-19 restrictions & school closures in consultation with Wipro SEF leadership.

- Begin year-end interviews with teachers and district personnel (mid-May). Will be adapting questions to capture impact of COVID-19 in addition to usual year-end questions.

- Complete the year-end survey administration (mid-May) and will begin with data analysis.

- Plan for virtual participation in year-end conference(s).

- Remain in close communication with team leadership about shifting plans/schedules due to COVID-19 restrictions/closures.

Evaluation Update – May 2020

David Heil & Associates, Inc.

Tasks this Month

- Completed administration and began analysis of Year-End Surveys for Fellows, DCs and ISE Partners and the annual Follow-Up Survey with northeast Fellows.
- Selected (at random) Year 2 Fellows from CA, FL, MO and TX for phone interviews to be completed in June.
- Worked with IHE Leadership in each region to identify district personnel for phone interviews to be completed in June. (Awaiting a few more names.)
- Continued to revise year-end interview scripts for upcoming interviews.
- Submitted draft of Wipro SEF Evaluation scope of work to project leadership. (May 26, 2020)
- Conferring with MO IHE Leadership about the evaluation plans for year-end virtual conference. Proposing two virtual focus groups (Year 1 Fellows and DCs), post-conference survey and observation of virtual conference.
- Participated in Wipro SEF team conference calls on May 6 and May 20, 2020 and provided feedback/insights as appropriate to Wipro SEF leadership.

What's Next?

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

- Complete year-end interviews with Year 2 Fellows and select district personnel. Will be adapting questions to capture impact of COVID-19 in addition to usual year-end questions.
- Perform virtual focus groups for MO Year 1 Fellows and DCs.
- Design and administer post-conference survey for MO year-end conference.
- Observe MO year-end virtual conference.
- Continue analysis of year-end survey data and begin drafting final report.
- Remain in close communication with team leadership about shifting plans/schedules due to COVID-19 restrictions.