MONTHLY NEWSLETTER

Apr. 2018 | Issue No. 3

The *AMSTI-USA Monthly Newsletter* is published on the first business day of each month. All issues are archived on the AMSTI-USA Wiki page HERE.
For questions or comments, please email Mike Degen at mdegen@southalabama.edu.

# *Professional Development News*

## *Summer Institute 2018 Registration Deadline Approaching*

Mike Degen | Professional Development Coordinator

The deadline to register for AMSTI-USA's Summer Institute 2018 is **May 1**.

Teachers may register online here: Summer Institute.

For **Compressed Training** (open *only* to those who have completed Summer Institutes in Years 1 and 2 within a grade grouping (K-5, 6-8, 9-12) CLICK HERE.

The Summer Institute provides teachers from across the region the foundational training necessary to effectively implement the AMSTI pedagogies and resources at their schools. All AMSTI schools commit to having at least 80% of their faculty in science and 80% of their faculty in Math to be fully trained (i.e. completing two years of Summer Institute training in the subject and grade in which they teach).

See the table below for an at-a-glance view of the trainings we will be offering this summer. Please note that Math training is in the pilot stage and will be offered during Summer 2019.

If you have any questions, please contact me at mdegen@southalabama.edu, or call (251) 665-4684. More information about Summer Institute 2018 may be found HERE.

| ***Training Offered*** | ***Location*** | ***Dates*** |
|---|---|---|
| K-5 Science Notebooks | Daphne High School | June 11 |
| K-5 Science Year 1 | Daphne High School | June 12 – 15 |
| K-5 Science Year 2 | Baker High School | June 18 – 20 |
| 6-8 Science Year 1 | Baker High School | June 11 – 15 & 18 - 19 |
| 6-8 Science Year 2 | Baker High School | June 11 – 15 & 18 - 19 |

# Materials Corner

## Kit Material Work Orders

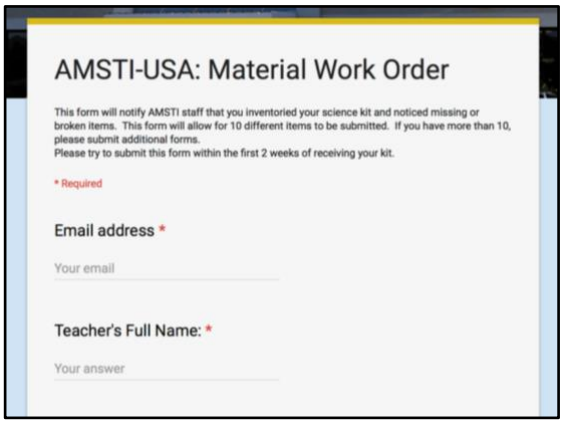
Susan Andress | Business Manager

Since becoming Business Manager in 2017, one of my priorities has been to standardize quality control. We have made several changes in our ordering and storage processes to ensure AMSTI teachers are getting correct, usable materials in their kits, including:

- Improvement to kit refurbishing cycles and rotation protocols
- Ordering fewer products more often instead of bulk ordering to minimize exposure to heat and other warehouse conditions
- Refurbishing kits with sensitive items (seeds, batteries, perishables) closer to delivery
- Storing sensitive items inside our climate-controlled refurb room
- Spot checking kits ready to ship
- Exporting packing slips from the database every time we refurbish a kit title to catch any recent updates made by the SDE
- More frequent meetings to keep staff aware of changes and expectations

Future plans involve scheduling time for our materials staff to attend compressed trainings and visit classrooms to see how components are used. We learn a lot from seeing the kits in action, like better ways to test their usability. We also may learn possible replacements to enhance the lessons. All these kit products can begin to look like "just stuff" until we see the magic teachers make with them.

Even with tighter procedures, we are only human and mistakes happen. To make it easier for teachers to submit Material Work Orders when a component is missing from a kit or arrives unusable, we created a Google Form (below) that may be submitted so we can mail or deliver the items quickly. When the form is submitted, a PDF is created and emailed to us. Then the item will be pulled, scanned out of inventory, and mailed or delivered to the teacher.


AMSTI-USA: Material Work Order

This form will notify AMSTI staff that you inventoried your science kit and noticed missing or broken items. This form will allow for 10 different items to be submitted. If you have more than 10, please submit additional forms.
Please try to submit this form within the first 2 weeks of receiving your kit.

* Required

Email address *

Your email

Teacher's Full Name: *

Your answer

**Direct link to the form**:
https://goo.gl/forms/x1Q069q8k1IJiSD93
Or you can find the link on our Wiki Home Page: https://amsti-usa.wikispaces.com.

Note: USA campus only picks up our mail on Tuesday and Friday, so submit early for quicker delivery.

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## *The Potential of Professional Learning Communities*

By Jennifer Fagerstrom

Working with educators in a Professional Learning Community (PLC) is an opportunity for teachers to share expertise, while working collaboratively to improve teaching skills and the academic performance of students. The core structure of PLCs is represented in three "big" ideas:

1. The focus is on student learning at high levels.
2. Members work collaboratively and take collective responsibility for each student's success.
3. The work is based on student evidence, or results.

PLCs are an ongoing process in which members are expected to act on new information, and job-embedded learning can have an immediate impact on instruction and student learning.

Four questions drive the conversation and collaboration during PLCs. They are: *What do we want students to learn? How will we know if they have learned it? What do we do if they do not learn it? What do we do if they do learn it?* These fundamental questions keep the focus on student learning at all times. For more information on PLCs I recommend checking out: DuFour, Richard, et al. *Learning by Doing: A Handbook for Professional Learning Communities at Work*.

On Pi Day, celebrated on March 14, students at Dunbar Magnet brought in pies, and other circular treats, to measure and arrive at the ratio leading to Pi.

## Notes from the Field

By John Rice

As spring arrived, I shifted gears to focus on end-of-year student performance, while placing an eye to exciting years ahead that will see a renewed and increased AMSTI presence in math classes at several Mobile County middle schools and a few Washington County high schools. While getting to know new faces and navigating new school buildings, administrators and teachers met me with an enthusiasm that makes me believe they are open to embracing changes that will positively impact students.

I also experienced my first statewide staff meeting. Not only did I get a chance to work with some awesome specialists from across AL, we all participated in a fire drill that saw us evacuate into a steady rain. Fortunately, everyone was safe, no major damage was done to AMSTI-JSU, and we were able to complete our meetings.

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# AMSTI Comes Alive at Thomasville City PBL Expo

By Chelsea Bailey

I was recently invited to attend a Project Based Learning Expo at Thomasville City Schools. The event was held in the Thomasville High School gym.

Every class from every grade level, K-12, had a project displayed much like a science fair for parents, stakeholders, and community members to see the greatness that was happening in the school. I was amazed at the high level of learning as evidenced by discussions with the students as they explained their projects.

Many of the projects started with AMSTI kits. I saw displays on habitats, ecosystems, genetics, tons of math, and demos by an amazing robotics team.

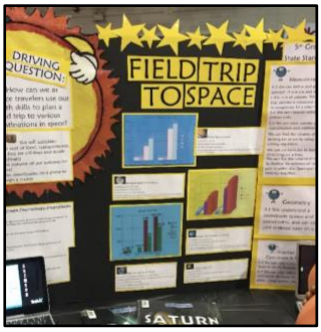
The amount of technology used in these projects was incredible.

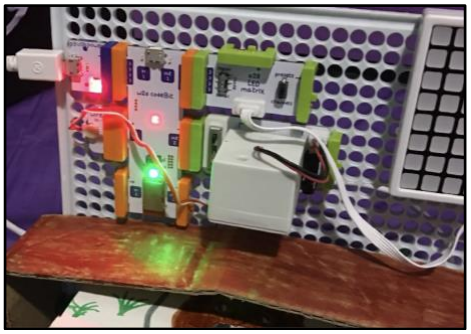
So how do you turn an AMSTI kit into PBL? Try something like this: turn the ideas from the kit into a task or problem—an explicit goal—and have students work together to provide a solution.

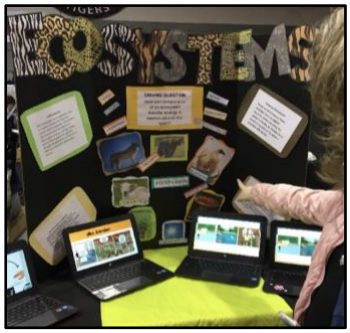
When using PBL, you, the teacher act more as a facilitator rather than instructor, letting groups choose their own methods and use their own ideas.

The idea is that the project becomes the main executor of the curriculum; in order to complete the project, students must employ principles from *all* subject areas, teaching themselves and learning as they go.

Don't think just because you don't have a lot of technology in your room, that you can't do PBL. Let your students figure that part out. They will surprise you!





Examples of student projects presented at Thomasville City's PBL Expo. Many of the display topics were inspired by AMSTI lessons.