MSP YEAR THREE

Newsletter

volume 2. spring/summer 2017

January Workshop

The January workshop offered MSP teachers an opportunity to reconnect after the holiday break, and brainstorm new ideas for their 5E lessons. Several teachers stepped up to the plate to demonstrate their newly developed 5E lessons for their peers, and others also volunteered to share their draft lessons on the MSP website. On the final day of the workshop, a large portion of MSP teachers participated in the popular BreakoutEDU session. The group left the 3-day workshop with many new ideas and strategies.

July Workshop

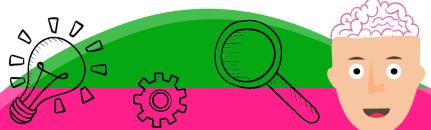
The teachers returned in July for the final MSP workshop. The session kicked off with Dr. Lou leading a celebration of the achievement gains of students in the MSP schools on the Florida statewide Science Assessment in spring 2017. Apart from receiving another round of science inquiry and content training from our MSP faculty, teachers participated in a series of round table discussions sharing their experiences and learning from other fellow teachers on a variety of MSP topics such as technology integration, use of data, 5E lesson implementation, etc. They also worked together in incorporating the MSP 5E lessons and games into the new science curriculum and pacing guide for each district. Towards the end of the second day, teachers completed the iSA post-test to demonstrate their current level of skill in science inquiry. The workshop concluded with a celebration and congratulations to all of the participants for three years of excellent work!

student Achievement Gains

Overall, a higher percentage of students in the MSP schools achieved Level 3 and above when compared to students in other schools on average. In 11 of the MSP schools, the percentage of students achieving Level 3 and above in 2017 was 6%-27% higher than in 2016. Teachers attributed their success to a number of MSP features they implemented in the classrooms, including: 5E lessons, Kagan cooperative learning strategies, games for science inquiry and content assessment, and sharing of what they learned from their grant participation with other science teachers in their schools.

5E Lessons

The July workshop offered an opportunity for our MSP faculty members to demonstrate some of their newly developed 5E lessons. Dr. Blanchard modeled a new example of 4 Question Research Strategy and demonstrated another lesson on planets and their orbital cycles. Dr. Prevost and Dr. Gemmell shared a lesson on energy and macromolecules. These and other new 5E lessons have been added to the S4I website! A total of 47 new 5E lessons have been published on CPALMS.





January workshop



July Workshop



student Achievement Gains



5E Lessons



MSP science inquiry games



workshop wrap up













MSP science inquiry games

During the January workshop, the MSP teachers had an opportunity to review the latest developments in Monster Genetics, Chicken Collision, and Sinkholes in the Sunshine State. By the time the July workshop came around, the MSP graduate assistants had made several significant updates to the three games, and were ready for teachers to play through another trial run. Overall, the feedback from the teachers was very positive, and the majority who participated stated that they plan to use the games with their students when teaching the relevant content and for review. The teachers agreed that the games are fun to play and do a good job covering both science content and inquiry standards. Final development and refinement of the games have been completed based on the teachers' feedback and students' pilot testing last year. The reporting of the embedded assessments and the players' learning and inquiry processes have been made more teacher-friendly for all seven MSP inquiry games. The games will remain available on the MSP website after the grant concludes.

















As the MSP workshop came to a close in July, Dr. Yiping Lou shared some of the group's many accomplishments, including several teacher and student points of achievement. At the beginning of each new year of the grant, teachers took the Science Inquiry Assessment to gauge their science inquiry skills. During each year of the grant, the teachers continued to improve upon their progress from the previous year. During the third and final year, the assessment scores were reaching well into the 90th percentile in almost every category.

- Identify Questions for Scientific Investigations
- 2 Design Scientific Investigations
- 3. Use Appropriate Tools and Techniques to Gather, Analyze and Interpret Data
- 4. Analyze and Describe Data
- 5. Explain Results and Draw Conclusions
- 6. Recognize and Analyze Alternative Explanations and Predications

Main skill comparison Report Science Inquiry Assessment (2015.8), (2016.9), and (2017.7)





Did You Know...



MSP RESOURCES

The MSP website has dozens of resources available to help teachers while developing new 5E lessons, or while making improvements to existing lesson plans in an effort to increase student engagement!

If you are looking for a new idea, check out the Resources tab on the MSP website. You will find information on these great topics:

- Science Inquiry Lesson Plans
- Technology-Supported Science Learning
- Technology to Support 5E **Lesson Plans**
- National Science Inquiry Standards
- Science Inquiry Assessment
- Technology-Supported Science **Inquiry Assessment**
- Florida Science Standards
- Game-Based Learning
- Other Web Resources for Teachers

Check them out at: http://science4inquiry.com/ resources.php

