



UNIVERSITY OF ARKANSAS

UA Center for Math & Science Education Fall 2018 After-Hours Professional Development

To register, access the link provided in the descriptions.

Contact Keri Book with any questions at keribook@uark.edu or 501-940-5714

Unless noted, all workshops will be held from 5:00 – 7:00 on the University of Arkansas campus at the Center for Math and Science Education. Light refreshments will be provided

346 N. West Avenue, #202, Fayetteville, AR 72701

Thursday, November 1: Introduction to Argument Driven Inquiry – Middle and High School

Fee: \$10; 2 hour PD; 5:00 – 7:00pm

Register: <http://bit.ly/2Rtqb1Q>

This workshop is an introduction to the Argument-Driven Inquiry (ADI) instructional model. Participants will first learn about the limitations of typical laboratory instruction and why ADI can help all students develop the knowledge and skills they need to be proficient in science. Next, the participants will have an opportunity to learn about the ADI instructional model by talking through all eight stages of an actual ADI lab investigation from start to finish and reviewing sample student work. Finally, the participants will learn about scientific arguments and how ADI is aligned with state standards for Science and English-Language Arts.

*Additional 6 or 12 hour ADI Professional Development is available along with follow-up classroom support

Thursday, November 29: Graphing and Analyzing Data– Middle and High School

Fee: \$10; 2 hour PD; 5:00 – 7:00pm

Register: <http://bit.ly/2QvE1zt>

Students learn graphing and equations in math class, but transferring and applying that knowledge into science class can be troublesome, since science uses variables, equations, and graphical analysis somewhat differently than students see in math class. In this workshop, graphing techniques and analysis will be demonstrated and discussed, along with common errors and misconceptions that students have. Classroom and lab activities will be provided. Note: this is a “low-tech” workshop focusing mainly on teaching graphing techniques, analysis, and students’ areas of difficulty.

*If there is interest, there can be a future follow-up workshop on using technology in graphing, as well as more advanced graphing concepts.

Thursday, December 6: 3D Printing in Education – All Grades

Fee: \$25; 3 hour PD; 5:00 – 8:00pm, Presented with Drew Wallis from NWA3D

Register <http://bit.ly/2PeDz8V>

This session will be an introduction to 3D printing in the classroom. We’ll learn the 3D printing process and workflow through practice by 3D printing on the NWA3D A5! If you have a 3D printer in your school, feel free to bring it, and we can help you operate and troubleshoot your printer, no matter where you purchased it from!

As we go through the 3D printing workflow, we’ll cover the rewards and challenges of 3D printing in the classroom by highlighting projects from students across the country. We’ll cover 3D printer and project troubleshooting, CAD design, and free educational resources. Participants will also be encouraged to share experiences and advice from 3D printing in their class.

*Additional, more advanced 3D Printing/CAD design workshops will be held in the Spring