

“STEER” 2019 STEM Laboratory TA Workshop

Table of Contents

- a) Photo Release
- b) Reflection: Beginning with the end in mind
- c) Table of Contents
- d) Campus Outreach and Consultation
- e) Florida Flowers Index

Day 1

1. Contacts
2. Flower Conceptualization Map
3. Thoughts on STEM Learning Experience & Memorable Teacher
4. Qualities of Effective STEM lab instructor
5. Motivating Students to Learn - ARCS
6. ARCS Table of Motivators
7. Extrinsic and Intrinsic Motivators
8. The Learning Pyramid
9. A Time for Reflection

Day 2

1. Nature of Science Activity
2. Theory and Research-based Principles of Learning (Homework)
3. A Time to Reflect – Metacognition

Day 3

1. The five Es learning cycle
2. Inquiry, the Learning Cycle, & the 5E Instructional Model
3. Famous STEM professionals
4. Diversity data
5. Pew Research Center Article: *Diversity in the STEM workforce*
6. Culturally Inclusive classroom
7. Bias Defined
8. Strategies to address implicit bias
9. “FLEX” to Address Bias
10. Professionalism
11. Classroom Management Scenarios → *Insert Handout*
12. HRASE - Effective Use of Qs for Scientific Inquiry without examples
13. HRASE - Effective Use of Qs for Scientific Inquiry with examples → *Insert Handout*
14. HRASE Article: Questions are the Answer
15. Bloom’s Taxonomy graphic
16. Bloom’s Taxonomy paper: A Model of Learning Objectives
17. Final Reflection

