Incorporating the MAA IP Guide Design Practices into Instructional Planning: Principles to Know and Questions to Ask

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What are design practices?

Design practices are the plans and choices instructors make before they teach and what they do after they teach to modify and revise for the future. Design practices inform the construction of the learning environment and curriculum and support instructors in implementing pedagogies that maximize student learning.
Think, pair, share

• Imagine you are planning for a new class you have just been assigned to teach or would like to sometime (think of one specifically)
• Share with your neighbor and/or write down what things you consider as you plan
Questions for Design (1-4)

1. Who are the students in this course? What knowledge and skills will students bring to this course?

2. What are the course learning goals?

3. What does learning look like in the context of this course?

4. What promotes student participation in the course?
Questions 5-7

5. How is this course inclusive?

6. How will I provide my students with feedback in this course?

7. How will I gather information to improve the course?
Considerations for Design

- Equity
- Learning goals for students
- Research on supporting learning for all
- Situational factors
- Learning environments
- Tasks and activities
- Homework
- Formative and summative assessment
- Reflective instruction
Examples from math instructors

- Intermediate Algebra
- Precalculus
- Calculus
- Differential Equations
- Linear Algebra
Questions?

THANK YOU!