

TARGETED INSTRUCTIONAL CHANGE

ALICE OLMSTEAD & NATASHA HOLMES

SESSION GOALS

By the end of this session, you will be able to:

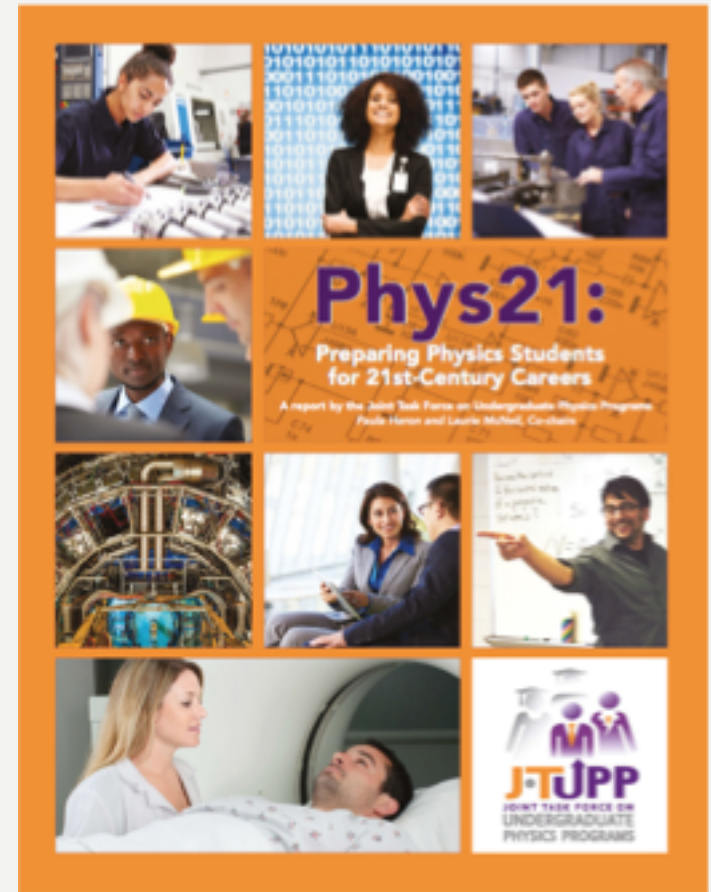
- Describe high-level goals for your physics students.
- Explain how strategies from your past teaching connect to those high-level goals.
- Describe ways strategies from the workshop could be integrated into your teaching to better advance those high-level goals.
- Provide support to other instructors who are thinking about changing their instruction.

PART 1: IDENTIFYING GOALS

Find your
worksheets!

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- What are employers looking for from physics graduates?
- What departments already doing to address those needs?



PART 1 – ON YOUR OWN

1. Write down ONE goal that is central to your instructional approach, either from the Phys 2I list or a goal of your own design.
2. Describe several ways you have targeted this goal in your past instruction.
3. What has worked well for you or your students? How do you know (e.g. evidence from your classroom)?
4. What has worked less well for you or your students? How do you know?

PART 1 – FORMING GROUPS

What kind of high-level goal did you focus on?

- A.** Physics-Specific Knowledge
- B.** Scientific and Technical Skills
- C.** Communication Skills
- D.** Professional/Workplace Skills

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Go to a table matching your high-level goal

- Task: share with two neighbors (i.e., groups of 3 - see #5).
Be prepared to share what you learned.

DEBRIEF

- What awesome thing did you learn about your neighbor's goals and instruction? What are they doing and why are they doing it?

PART 2 – ON YOUR OWN

1. Which new strategies from this workshop could you use to target the goal you identified in Part I in your future teaching?
2. What challenges do you anticipate encountering when integrating these strategies into your instruction?
3. What supports or resources could help you to address those challenges?

PART 2 – SAME GROUPS

- Task: share with the same neighbors (see #4)

DEBRIEF

- What strategies and resources related to this workshop can support you or your colleagues in pursuing specific goals?

RINSE AND REPEAT

- Pick a new goal and complete Parts 1 & 2 of the worksheet on your own.

RINSE AND REPEAT

What kind of high-level goal did you focus on?

- A. Physics-Specific Knowledge
- B. Scientific and Technical Skills
- C. Communication Skills
- D. Professional/Workplace Skills

Go to a table matching your high-level goal.

- Form a group of 3. Complete the rest of Part I AND all of Part II for your second goal.

DEBRIEF

- Did anything else come up in your conversations that you want to share?

WHAT'S NEXT?

Literally next:

- PhysPort/ComPADRE, Resources and Assessment – Bruce Mason

Tomorrow:

- Discovering the Resources for Solving Problems – Ted Hodapp & Andy Rundquist
- What Will I Do When I Get Back to the Office? – Robert Hilborn

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Thanks!!!