Self-Pacing for the Flipped Classroom – Summary

Two Kinds of Self-Pacing

- **The course is paced to a standard level for our students (baseline)**
  - For an average student, requires some out of class work
- **Students can customize pacing:**
  - **Within a single unit:**
    - *Students can front-load or back-load their work to adjust for outside demands*
    - *Still take the test at the scheduled time*
  - **Within the course as a whole:**
    - *Students that progress faster can access more advanced topics (choice!)*
    - *Students that struggle early can slow down (or stop), remediate, then progress*
      - *(works in conjunction with reassessment strategy)*

What Does It Look Like?

- **Variant of flipped classroom model**
  - Students get foundation material outside of class
  - Time in class is focused on more difficult work
- **Also variant of studio thinking model (Lois Hetland)**
  - Classroom = workshop for developing skills and applying knowledge
  - Demonstrations → individual practice
  - Feedback is immediate, from teacher and small group
- **Elements of PBL and standards-based grading**
  - Assignments approached as a sequence rather than a fixed schedule.
  - Checkpoints along the way allow evaluation of mastery.

Dividing the Work

- **Out of Class**
- Direct Instruction
  - Notes
  - Videos
- Practice & repetition
  - Material already practiced.
- Quizzes (online)
  - Checkpoints for mastery

- **In Class: "Work Days"**
- Direct Instruction
  - Brief lecture
  - Demonstration
- Students work
  - Apply content from D.I.
  - Practice skills
  - Problem solving
  - Ask questions
  - Get immediate feedback

Sample Unit Structure:

Week 5:	
Mon 9/11:	**LAB:** Pressure, Volume, & Temperature
	HW: Pressure notes
Tue 9/12:	**LAB:** Pressure, Volume, & Temperature
	HW: Gas Laws notes
Thu 9/14:	Demonstrations: pressure and temperature
	WORK: pressure units
Fri 9/15:	**WORK:** combined gas law
	HW: combined gas law practice (in packet)
	QUIZ 1: Pressure & KMT (by Sunday at midnight)

Week 6:	
Mon 9/18:	**WORK:** combined gas law
	HW: Dalton's Law notes
Tue 9/19:	**WORK:** Dalton's Law
	QUIZ 2: Combined Gas Law
Thu 9/21:	Lab Report Due
	WORK: mixed gas laws problems
Fri 9/22:	Packet Due
	UNIT 3 TEST

Benefits of Self-Pacing

- EQUITY: everyone can find a pace that works
- Identify students who are struggling early and intervene
- Challenge students who are bored with standard material and pacing.
- Develops time management and planning skills.
- Focuses class time on most challenging work.
- Focuses my attention on students that need it the most.
- Seems to be working well (grades, student feedback, & summative exam)

Challenges of Self-Pacing

- Requires a tolerance for minor chaos – kids at different points.
- Requires advance planning (also a benefit!).
- Depends on self-motivation to challenge faster students.
- Places individual responsibility on students.

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