

# Productive Failure Protocol

*Students who struggle with a concept before receiving instruction outperform students who get instruction first. The struggle creates cognitive hooks that make the lesson stick.*

## THE TEACHING DECISION

### Whether to prioritize accuracy or embrace productive failure

#### CONVENTIONAL APPROACH

- First-attempt scores go straight in the gradebook
- Getting it right on the first try is the goal
- Mistakes get red ink — wrong answers are threats
- Intelligence praise: "You're so smart" (Dweck: 40% of praised students lied about scores)
- Students avoid risk, hide errors, and choose easy problems

#### FRAMEWORK APPROACH

- Structured struggle before instruction creates cognitive hooks
- Attempts are collected ungraded — failure is data, not a verdict
- Effort praise tied to strategy and outcomes, not consolation
- "Not yet" honesty: Elizabeth's father said she hadn't earned it — she won the championship
- Wooden over Knight: full effort and preparation, not fear and compliance

## MONDAY MORNING ACTION

**Run the Productive Failure Protocol on one lesson: give a challenging problem BEFORE teaching the concept, let students struggle, collect attempts ungraded, teach the concept, then return attempts for self-correction.**

## THE BOOK

***Mindset: The New Psychology of Success* by Carol Dweck**

# The Productive Failure Protocol

*Struggle before instruction creates cognitive hooks.*

## 1 Give a challenging problem BEFORE teaching the concept

Topic / problem used:

## 2 Let students struggle for 10 minutes – no hints

Observations during struggle:

## 3 Collect attempts – UNGRADED

Common approaches students tried:

## 4 Teach the concept

Key connections to student attempts:

## 5 Return attempts – students self-correct

Student reactions / breakthroughs:

### REFLECTION

What did students discover through struggle?

### REMEMBER

Speed and perfection are the enemy of difficult learning. The goal isn't to set students up to fail – it's to set them up to learn. The struggle before instruction is what makes the lesson stick.