

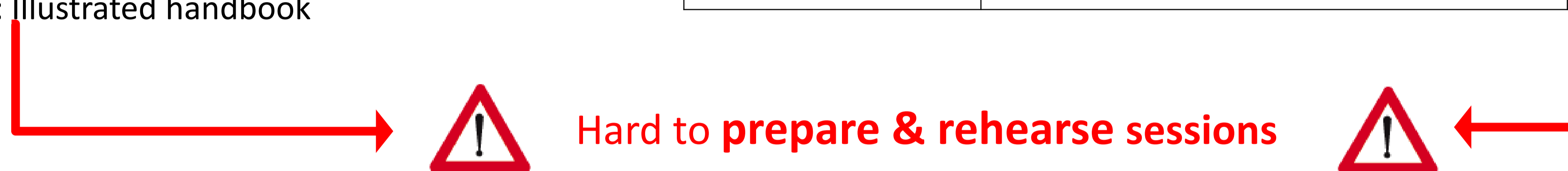
## Context

### Physical therapist education program

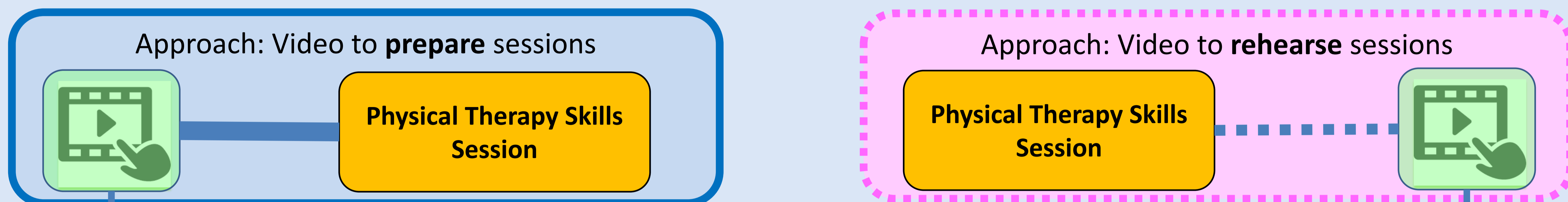
- Course Musculoskeletal Revalidation (spinal column)
  - 13 Lectures: theoretical & clinical reasoning
  - 13 physical therapy skills training sessions
- Traditional in-class approach**
- Goal: Academic skill mastery, i.e. integration of
    - skill mastery
    - theory
    - clinical reasoning
  - Study material: Illustrated handbook

Physical Therapy Skills Session		
	Demonstration	Interaction
Clinical Instructor	Demonstrates skill (repeatedly) Small number of skills covered	Limited Interaction Limited feedback
Student	Passive observer	Limited time to practice Limited peer-Interaction

## Problem



## Solution



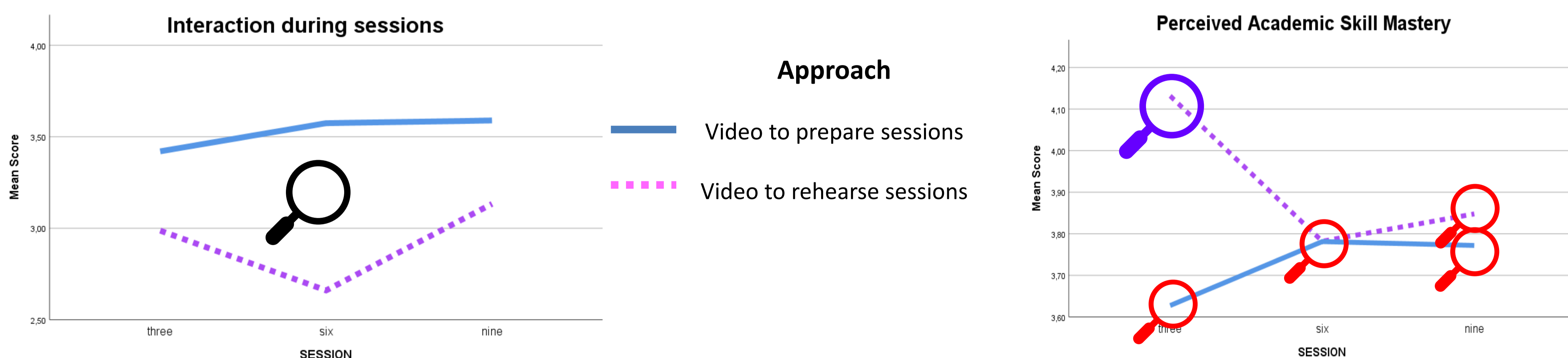
## Hypothesis

- Hy1: **Interaction** with both instructors & peers **during session**
- Hy2: **Academic Skill Mastery**  
integration of skill mastery, theory & clinical reasoning

## Data-collection

Student Questionnaire at the start of sessions 3, 6 & 9  
 2 (six-point) scales : Interaction during session & Academic skill mastery

## Results



## Discussion

- 🔍 \* Not that much interaction during sessions (mid-point of scale = 3.5).
- ⚠️ \* Confirmation of initial problem: **Physical Therapy Skills Sessions without preparation** block interaction.
- 🔍 Hy1 \* **Preparation** facilitates 'interaction' with both peers and instructors [= Hy 1].
- 🔍 Hy1 \* Students do *not* agree that preparation & rehearsal lead to Academic Skill Mastery (scale means = 3,5) [≠ Hy 2]
- 🔍 Initially however, students enrolled in the 'rehearsal'-approach clearly indicate to integrate skills, theory and clinical reasoning. The bonus though quickly fades...

In sum, providing students with (video) material to prepare physical therapy skills sessions has a small impact on interaction during sessions and no impact at all on integrating the skills in theory and in clinical reasoning. Also, flipping video's after (rather than before) traditional sessions is quite unsatisfactory in terms of integrating manual skills in theory and clinical reasoning. Therefore, future research could concentrate on a further and subtle tuning of learning environment and student preparation & rehearsal.

Still, the remarkable observation is that students initially are prone to integrate (when not restricted to skill preparation). Moreover, timing and pattern of data suggest that this initial impetus is student-bound, rather than instructionally driven. Should we flip impetus?