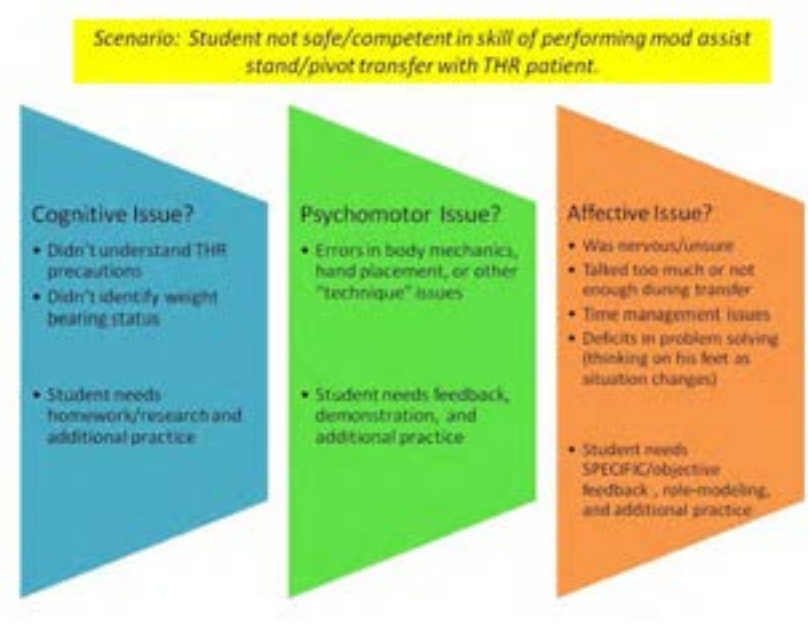
"Diagnosing and Treating" Student Skill Deficits

For a student to be successful during clinical experiences and as a practicing PTA they must develop and achieve skill in all three "domains of learning". They must (1) have the appropriate/required "textbook" knowledge—***cognitive level*** (2) be able to physically execute assessment and intervention skills—***psychomotor level*** and (3) demonstrate the attitude, communication skill, and behaviors expected of professionals and patient care-givers—***affective level***.

Being able to accurately identify (diagnose) where student skill performance deficits originate and then designing appropriate teaching interventions (treatments) to help facilitate improvement are characteristics of an expert clinical instructor. Consider the following examples of diagnosing and treating common student skill deficits.



Cognitive Domain

Examples:

Problem: Student selecting inappropriate exercises for shoulder impingement syndrome patient.

Diagnosis: Student weak in knowledge of the pathology of impingement and of rotator cuff exercises in general

Treatment: Student to research (homework) and bring new ideas (along with rationale) for exercises tomorrow.

Problem: Student not proficient with standing pre-gait activities with high tone hemiplegic patient.

Diagnosis: Student weak in knowledge of sequencing of pre-gait activities and basic NDT principles (closed chain before open chain, controlled mobility before skill, etc..)

Treatment: Student review of notes on these subjects + brief "mini lecture" review from CI on the topic followed by student practice and demonstration with the skill. Prompting of the student for rationale for selection and sequencing of pre-gait activities for other patients to reinforce learning.

Psychomotor Domain Examples:

Problem: Student not proficient with monitoring patient vital signs during tilt table intervention.

Diagnosis: Student can accurately describe how to use BP cuff and what to "listen for" but clumsy with handling of devices and inconsistent with determining accurate BP

Treatment: provide multiple opportunities for student to practice skill; demonstrate components of skill for student; have student practice skill at home as well

Problem: Student not proficient with gait training mod assist CVA patient .

Diagnosis: Student has difficulty physically coordinating how to provide trunk support while also assisting in LE advancement and tactile cuing for knee control.

Treatment: Find opportunities to both **demonstrate** handling techniques during gait for student and for student to practice. Think about part -task to whole task by having student demonstrate some of the handling techniques during standing or pre-gait activities progressing to student using those techniques during gait.

Affective Domain Examples:

Problem: Student not proficient with taking knee goniometric measurements on post op TKR patient

Diagnosis: Student flustered by patient's vocalization of pain and reluctance to let knee be moved.

Treatment: Give specific , objective feedback on the behavior /skill needing improvement—"I noticed that you stopped making eye contact with the patient and that your verbal instructions became very soft" is better feedback than "you seemed flustered and shy". Discuss /reinforce (1) why that component of the skill is an issue (consequences) and (2) how **you handle** those situations. Provide opportunities for student to see you role-modeling working with "difficult" patient scenarios and for student to practice in those circumstances.

Problem: Student not proficient with modifying exercises/interventions when appropriate.

Diagnosis: While student seems to have knowledge of what exercise modifications are appropriate and how to implement those, he is hesitant to make suggestions or changes. He needs to "jump in there" more/have more confidence with identifying when changes are needed and discussing those changes with CI.

Treatment: More explicitly outline your expectations for how student should note and address needed or suggested changes in interventions. Give examples to student for what does/does not need CI approval. Discuss why the skill/behavior is important. Provide multiple opportunities for student to practice the skill (for example: today I want to you suggest at least 3 changes in patient interventions/exercises and bring those to my attention).

Other suggestions and techniques:

Have brief conversations with students *prior to* a treatment session and *post* treatment session. In the "pre" treatment briefing you can glean information on the student's "**cognitive**" domain by asking what the patient knows about the diagnosis, items found in the PT eval or POC, interventions the student would expect to use, anticipated decision making needs. In the post treatment debriefing you can ask the student to **self-assess** the effectiveness of the session and their own identified areas of weakness.

Give regular feedback on skills that are weak, but be cautious about getting "tunnel vision" or harping on only that weak behavior/skill. Students learn best when critique is paired/ combined with positive reinforcement.

Encourage **reflection and self-assessment**. For skills that students are not yet competent in performing, ask the student to reflect on whether they (1) felt *lacking in knowledge* on the skill (2) felt challenged in the *physical performance* of the skill or (3) felt uncomfortable, anxious, etc with aspects of the skill. Comparing the student's perception with your observations is a great way to help "diagnose" the problem and plan interventions to help the student achieve success!

Written by Kim Cox, ACCE at Bossier Parish Community College Spring 2013 and used with permission