Having more than 1 clinical student in your facility at the same time can present some challenges, but it is also a wonderful opportunity to use collaborative learning activities! Collaborative learning is particularly valuable in clinical education because PTA students as adult learners (see page 2 article) respond well to peer teaching/learning. Consider using some of these ideas with your SPTA/SPTA, SPTA/SOTA, or SPT/SPTA student pairs:

**Think-Pair-Share**

The clinical instructor poses a question or presents a case study/initial examination to the pair. Students come up with a response and then share it with each other. Students clarify their positions and discuss points of agreement and disagreement.

**Search-Pair-Share**

Students research a topic identified either by the clinical instructor or by the students related to a clinical case. They compare research findings and provide a summary (informal/verbal or more formally/written/inservice) to clinical instructor or staff.

**Jigsaw (Reciprocal Teaching)**

The learning activity involves students teaching one another. Students jointly read a text/eval or work on a task. Clinical instructor assigns each student to be the “expert” on a component of the reading or task. Students take turns teaching their assigned content area to each other. In their teaching role students lead the discussion, summarize material, ask questions, and clarify material.

**Think-Aloud Pair Problem Solving (TAPPS)**

The learning activity involves solving problems. Students work in pairs and alternate roles. For each problem one is the solver while the other is the listener. The solver thinks aloud—narrating his/her reasoning process—while solving the problem. The listener prompts the solver to keep talking and asks for clarification but does not intervene to help.

**Connecting the Dots**

The students are prompted to each identify rationale for given exercises/interventions, connecting all of the dots between the initial examination/re-examination findings, diagnosis, stage of injury, goals and plan of care to the use of the given intervention and then compare rationales.

**Nightmare Scenarios**

One student is prompted to identify a realistic “worse-case scenario” for a particular clinical situation. Student 2 then works to describe the issues to be considered/addressed in handling the scenario and appropriate actions to take.

**Experience Sharing**

The clinical instructor poses a question or problem. Students are prompted to share previous experiences (clinical or other life experiences) with related challenges and compare/contrast those stories.

**Key Word Flash Cards**

Student 1 is assigned to identify 20 key words/phrases encountered during the day (in PT evals, progress notes, communications with patients, etc.) and create “flash cards” defining the meaning and implication(s) of those key phrases. Examples: “empty endfeel”, “numbness in my foot”, “positive Spurling’s test”. Student 1 then quizzes student 2 using those flashcards.

**Follow a Process**

Clinical instructor identifies a particular task/technique. Students work together to describe (1) the end-result of the technique (2) the necessary steps required/components of the task and (3) the steps that may not be necessary but may be helpful.

**Change it 5 ways**

Students are prompted by clinical instructor to brainstorm 5 alternate ways of working toward the same goal different than the intervention currently being used and different from each other’s ideas. They should then discuss the feasibility, pros/cons and implications of using those alternative interventions.

*Article based in part on information from “Cooperative Learning Group Activities for College Courses” by A. McPhearson*
Part of being an effective clinical educator involves understanding how adult students learn best. Andragogy (adult learning) is a theory that holds a set of assumptions about how adults learn. Andragogy emphasizes the value of the process of learning. It uses approaches to learning that are problem-based and collaborative rather than didactic, and also emphasizes more equality between the teacher and learner.

What do you mean by 'adult learning principles'?
• Adults are internally motivated and self-directed
• Adults bring life experiences and knowledge to learning experiences
• Adults are goal oriented
• Adults are relevancy oriented
• Adults are practical
• Adult learners like to be respected

How can I use adult learning principles to facilitate student learning during clinical experiences?
1. Adults are internally motivated and self-directed
Your role is to facilitate a students' movement toward more self-directed and responsible learning as well as to foster the student's internal motivation to learn.

As clinical educator you can:
• Set up a graded learning program that moves from more to less structure, from less to more responsibility and from more to less direct supervision, at an appropriate pace that is challenging yet not overloading for the student.
• Develop rapport with the student to optimize your approachability and encourage asking of questions and exploration of concepts.
• Show interest in the student's thoughts and opinions. Actively and carefully listen to any questions asked.
• Lead the student toward inquiry before supplying them with too many facts.
• Provide regular constructive and specific feedback (both positive and negative)
• Review goals and acknowledge goal completion
• Encourage use of resources such as library, journals, internet and other department resources.
• Set projects or tasks for the student that reflect their interests and which they must complete and "tick off" over the course of the placement. For example: to provide an in-service on topic of choice; to present a case-study based on one of their patients or to design a patient educational handout.
• Acknowledge the preferred learning style of the student. Adult learners can give you feedback when prompted on how they learn best (by observing, by reading, by doing)

2. Adults bring life experiences and knowledge to learning experiences
A adult’s experience is who he/she is. So if an adult’s experience is not respected and valued, it cannot be used as a resource for learning. Adults experience this omission as a rejection of their experience and as a rejection of them as persons which negatively affects learning.

- Find out about your student - their interests and past experiences (personal, work and study related)
- Assist them to draw on those experiences when problem-solving, reflecting and applying clinical reasoning processes.

3. Adults are goal/relevancy oriented and practical
Your role is to help the student identify the need for the knowledge or skill presented. As educator, you can:
• Provide meaningful learning experiences that are clearly linked to patient and clinical rotation goals.
• Use real patient examples as a basis from which to learn about specific content or skill
• Ask questions that motivate reflection, inquiry and further research.
• Clearly explain your clinical reasoning when making choices about assessments, interventions and when prioritizing patient’s clinical needs.

4. Adult learners like to be respected
Respect can be demonstrated to your student by:
• Taking interest
• Acknowledging the wealth of experiences that the student brings to the placement;
• Regarding them as a colleague who is equal in life experience
• Encouraging expression of ideas, reasoning and feedback at every opportunity.

It is important to keep in mind that the student is still developing clinical practice skills. However, with the theory and principles of adult learning in mind, you can facilitate the learning approach of the student to move from novice to more sophisticated learning methods. The ultimate educator knows that experience is a rich resource for adult learning and therefore actively involves adults in the learning process.
Hey Clinical Instructors!! Try this crossword just for fun but also to get an idea of what didactic content BPCC PTA students are covering during the fall semester of the PTA Program. Challenge your PT & PTA co-workers to brush the brain cobwebs off of some of this information to help you finish the puzzle! Then feel free to quiz your fall PTA students about these subjects too!!

**Fall Crossword Puzzle**

**Across**
1. Tommy-John surgery used to repair this ligament
4. appropriate classification for patient with systolic BP of 120-139 and diastolic of 80-89
10. infection control precautions that includes negative air pressure room and use of N95 mask
11. integrity of the C5 spinal nerve could be assessed by testing the strength in this muscle
14. massage technique involving percussion with the hands at a fairly rapid rate
15. term describing light pink, watery wound exudate
16. position of stretch for the anterior longitudinal ligament
17. hip alignment condition generally associated with appearing "knock-knee'd"
18. most common estim waveform used to stimulate intact peripheral nerves
19. MMT of ankle plantarflexion with the knees in a flexed position tests this muscle
21. a value of <0.5 on this "index" indicates severe arterial disease
22. location of goniometer axis when measuring wrist radial/ulnar deviation ROM

**Down**
2. muscle commonly found to be short-tight in patient with excessively lordotic posture
3. special test used to identify Achille's tendon rupture
5. arthrokinematic movement of the humeral head associated with shoulder abduction
6. measuring for wheelchair seat height should use this landmark as a reference
7. long bones, like the femur, develop through ____ ossification
8. one of the ligaments making up the coracoclavicular group
9. type of estim that uses two channels to produce the required waveform
12. hypersensitivity to cold
13. PT is commonly considered contraindicated when this lab value falls below 8 g/dL
16. position of stretch for the anterior longitudinal ligament
17. hip alignment condition generally associated with appearing "knock-knee'd"
18. most common estim waveform used to stimulate intact peripheral nerves
19. MMT of ankle plantarflexion with the knees in a flexed position tests this muscle
BPCC PTA students, alumni and faculty as part of Team Leah participate in the “Ice Bucket Challenge” for ALS research and awareness.

BPCC PTA and OTA students volunteer as part of “Sign up Saturday” a local health and wellness fair for children at the Bossier Civic Center—August 2014.

The BPCC PTA Program is very fortunate to have a large community of skilled and dedicated clinical instructors who not only model excellent technical skills but who also devote time to teaching. PTA students are asked to give feedback to the question “What did your CI do well to facilitate learning?” at the end of each rotation — See just some of the great things our CI’s are out there doing!!

“He provided verbal, visual and hands on explanations/experiences. He never made me feel stupid for asking a question nor did he ever make me feel as though I was a burden. He provided constructive criticism and complements”

Re: Leslie Winkler, PTA & Ellie Chase, PTA
Redmond Therapy Services

“She was awesome. I really can’t say enough good things. She was very skilled at giving constructive feedback on my areas of weakness without being threatening. I liked that if she saw me doing something incorrectly she would tell me directly.”

Re: Donna Rockett, PTA
Lifecare Specialty Hospital

“He provided verbal, visual and hands on explanations/experiences. He never made me feel stupid for asking a question nor did he ever make me feel as though I was a burden. He provided constructive criticism and complements”

Re: James Rhodes, PTA
TriState Physical Therapy

“She would ask questions during treatment, that required me to critically think. She didn’t just tell me what to do, she allowed me to come up with the answers myself. Great teacher!”

Re: Anna Moore, PT
The Edge Physical Therapy

“He allowed me to review the eval/POC and problem solve on my own to come up with exercises/interventions that were appropriate.”

Re: Adam Brewer, PT
Brewer Physical Therapy

“She used every opportunity to talk to me about the current research on the diagnoses we were treating and interventions we were using. Really helped me to appreciate the importance of evidence-based practice.”

Re: Jeremy Dye, PT
Willis-Knighton Health System

“I had the opportunity to work with several PTA’s/PTs. They each would talk with me after each patient treatment about the things I did well and the things that they might have done differently. I really liked the immediate feedback.”

Re: Leslie Winkler, PTA & Ellie Chase, PTA
Redmond Therapy Services

“She was great about taking time to explain the interventions she was using and the rationale for using them. I learned so much about neuro skills (tone assessment, facilitation, etc). She always wanted to be sure I understood 100%. I also admire the way she creates strong personal bonds between herself and her students. It is obvious that she really cares and that makes you motivated to learn from her.”

Re: Melody Cook, PT
Willis-Knighton Health System

Way to Go!!

It’s About You!