**Title and Focus of Activity:** Learning and Teaching *Linking foundational and clinical sciences*

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**Course Information:** Introduction to Neurological Physical Therapy; 3 credits; students have already taken neuroanatomy, neurophysiology, and pathology courses.

**Learning Activity Description:** The purpose of the activity is for students to utilize feedback and teaching strategies as well as assess stage of learning in a classmate performing a novel task.

Students divide into groups of 3. They are given 3 tasks: juggling, hula hoop, and bridge making with card shuffling. For each task, one person is the “instructor” and the other two are learners. The instructor determines the phase of learning for each learner, and adjusts their teaching as appropriate. If they are in the autonomous stage, the instructor must select tasks that are more challenging. There are 30 minutes of class time per task. Classmates are provided with a “home program”, and are reassessed in one week.

Time for student to complete the activity: 1. preparation for activity before class: 1 hr 2. class time completion of the activity: 2 hours + take home

Readings/other preparatory materials:

Shumway-Cook A & Woollacott., Motor Control:Translating Research into Clinical Practice, 4th ed. Lippincott, Willliams & Willliams, 2012. Ch4

O’ Sullivan, Susan B., Physical Rehabilitation: Assessment and Treatment, 6th ed. F.A Davis, 2014 Ch10

Learning Objectives: 1. determine a classmate’s phase of learning (cognitive, associative, autonomous) for a given task. 2. develop a teaching strategy to address the learning needs of their classmates. 3. implement appropriate feedback based on the task and phase of learning

Methods of evaluation of student learning:

Students write a 2-4 paper from the “instructor’s” perspective. This should discuss the initial phase of learning, interventions used to teach and progress the task including type of feedback given, practice sessions used/successes or failures, phase of learning at the end of the practice session and at the reassessment, and a description of the home program. Students are graded using the following rubric, 25 points total.

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| Points/categories | Score and Comments |
| Learning phase of each student (1pt) |  |
| How utilized Practice session/teaching strategies (5pt):  Discussed practice session used(massed/distributed)  Discussed teaching strategy(demo, hands on, backward chaining, whole vs part, etc)  Type of feedback utilized  Appropriately discussed the session/strategy with relating back to level of learning  Success and failures of style/strategies used |  |
| Changes used to facilitate learning (1pt) |  |
| Learning phase of each student at end of session (1pt) |  |
| HEP (2pt)  Appropriate for learning phase  Include exercise prescription principles |  |
| 1 Week later checkup (5pt)  Learning phase at this time  Success/failure of HEP  Changes to HEP  Evaluation of student adherence and why  Changes for future |  |
| Overall writing (5pt)  Proper referencing  Grammar  Spelling  Technical writing style  Patient first language |  |