

Physical Education Department

P,R, I statements related to Gen Ed 1 (2014-15's report) for the systems portfolio's table.

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Assessment for Learning and Peer Assisted Learning

In PE-118 weight training classes at Wright Junior College AFL (Assessment for learning) is employed while students are performing their fitness routines. AFL is the most significant method of assessment. Throughout the semester instructors are engaging daily in AFL with students to help them achieve their fitness goals. Professors observe their psychomotor skills, the exercises they choose, how much weight they use, how many sets and reps they do, etc. and give formative feedback and make suggestions when it is necessary. For instance, "Do you think if you raised the seat on the leg-press you may feel a little more comfortable?" Why? The class is 95% active learning with attendance and class participation accounting for 80% of their final grade. Additionally, instructors employ peer assisted learning (PAL) to enhance the learning opportunities for their students. Peer Assisted Learning is a tutoring program that uses peer mediated instruction to improve students' proficiency and its purpose is to supplement existing curriculum (U.S. Department of Education, 2010). Part of PAL is having students assessed by their peer partner. This is a central classroom practice that is practical and formative. Studies on PAL have noted that it is easier for a student to be assessed by their PAL than by the class instructor. Also it has been found that a student is more comfortable performing a psychomotor skill for their PAL than for the course instructor (Carr, Vardiman, Volberding, 2011).

A second form of assessment is workout logbooks. The workout journal is a central assessment tool that students are required to have with them every class and fill out. The instructor or PAL can look at the journal and make an assessment. For instance if upon looking at someone's journal I notice that this student hasn't done any leg exercises and only works upper body, the professor can help the student make more balanced choices concerning their fitness regimen. Additionally, by having students do this they will learn the names of the different machines, exercises and muscle groups in order to fill out their logbook

correctly to get a good score. It is worth 10% of their grade. This is formative because it is a semester long assignment and they can ask questions during the semester such as, “What do you call this machine? Or, “What is the primary muscle that the seated cable row works?” This will allow students to learn formatively.

For subject design the students need to learn weight training and cardio psychomotor skills. For the problem centered design students are allowed to set (With instructor approval) their fitness objectives. They self-assess to determine what their weaknesses and problems are. This is the doorway to learner center design as it determines which particular psychomotor skills the student will need to acquire and focus on. For example a 38 year old African American female who wants to lose 25 lbs. won't need to learn how to preform deadlifts as this is not relevant to her fitness objective. But she will however need to learn other psychomotor skills such as learning how to use the elliptical and Stairmaster machines. On the contrary, based on the objectives of an 18 year 115 pound Hispanic male, he may have a workout that would include deadlifts but no elliptical and Stairmaster machines. Consequently the three components are, 1. Defining a problem and setting objective. 2. Learning which psychomotor skills will enable the student to reach their objective. 3. Acquiring these skills and putting them into use during the semester. Below is a summary of assessment techniques used in the athletic department at Wilbur Wright Junior College.

1. **Instructor Observations** - During active learning time the instructor will constantly observe and offer distinct formative input where necessary. The instructor may perform a “field test” on a student at any time to determine if he can explain and demonstrate the learning objectives.
2. **Workout Journal** - The students will document the exercises performed, the number of sets and reps accomplished, the rest time between sets, and amount of weight lifted in their journals in-between sets. The instructor will review these journals daily to provide relevant formative individualized feedback during the course of the semester.

3. **PAL assessment** - A peer partner who already possesses this knowledge and skill set will be matched up with the student and will formatively assess during each training session.
4. **Self-Assessment** – Students during active learning will be asked to self-assess in order to determine if in their perception they feel the need for more one-on-one instructor assistance time.
5. **Multiple choice exam** – An online multiple choice take home open notebook exam(s) will be given to ascertain if students can answer hypothetical questions regarding these exercise fitness principles. This type of assessment by nature is not formative. However, it still may be a valuable tool to triangulate data and analyze students' command of the subject as it measures learning from a different cognitive perspective than the previous stated assessments.

Results

Based on instructor observations, interviews and student workout journals, four major themes appeared: (1) Student Athletes were able to learn psychomotor skills using instructor assisted AFL- PAL. (2) Students were getting more actual workout time which translated into better fitness levels. While using AFL-PAL physical activity during the class was increased by 38%. Workout time was expanded from 50 minutes to 1 hour and 20 minutes (3) Students (Both Tutors and Tutees) preferred PAL over more traditional methods of teaching and both benefitted from the practice of using PAL confirming what previous studies have found (Ensergueix, Lafont, 2010). (4) Athletes displayed a higher level of class participation and energy output.

According to interviews, 82% of students felt that class participation and energy output was increased due to the implementation of AFL-PAL. During field observations it was noticed that there was an increase of class unity as interpersonal relationships were created during the teaching/learning process. A more nurturing environment was observed confirming what was found in a previous PAL study, (Daggett, Pedinotti, 2011). It was noted that when using PAL students were more likely to know the names of their fellow classmates. The relationships caused by AFL-PAL enhanced the involvement and energy levels of the participants in the following ways. (1) After friendships were developed by

PAL, it was observed that students were more likely to push each other to workout harder and not accept a classmate of theirs being lazy. (2) Students knew each other's fitness goals and worked together to achieve them pushing one another to workout harder. An example was a tutee who was a Wright College basketball player. His tutor (A muscular highly experienced weight lifter) wanted to help him put on some muscle for the season so he could be a more physical player. (3) Male students were more likely to enter into a "friendly competition" with their friend than they would with a stranger as a way to increase intensity in their workouts.

References

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