

Wright College Athletic Department Assessment Project Fall 2015-16

WHAT?

Describe the purpose of this assessment project.

One component of the PE 118 Weight Training course involves designing an individualized workout program which will be implemented by the student during the remainder of the course or upon completion of the program. The purpose for this project is to encourage critical thinking in the realm of physical fitness activity.

WHY?

Describe your department/program's reasons for taking on this project and the areas of your department/program that are involved.

The Athletic department employed this assessment tool as a way to encourage, evaluate and enhance students' ability for critical thinking, reflection, and judgement in creating and executing a personalized workout regimen that will enhance their fitness levels. The development of this training routine not only requires critical thinking skills but places emphasis on the learners ability to interpret, organize and communicate the resistance and fitness training principles conveyed in the curriculum into a logical method that is relevant to their health objectives.

HOW?

Describe the participants, methods, and the timeline for this project.

Timeline

This project was designed throughout the fall 2015 semester and implemented in the spring of 2016.

Participants

PE-118 Weight Training is open to all students as an elective although certain majors such as nursing and education are required to take one PE course to graduate. Enrollment maxes out at 35 students per section. Demographically more men (55% -85%) than women sign up for the course. Typically the age range is from 17yrs to 40yrs with the class average being from 20 - 24. Frequently the experience level of students registered in resistance training varies greatly. Certain participants may previously never attended a fitness center while others could be bodybuilders, football players, or personal trainers. Wright has an ethnically diverse student population and these classes reflect that multiplicity as well.

Methods

Settings and Conditions. This course meets in the fitness center E023 located in the lower level of the events building. The facility was remodeled and updated in January of 2013 and now possesses new state of the art fitness equipment. The space encompasses about 3 thousand square feet and is equipped with free weights including barbells, dumbbells, straight and curl bars, power racks, adjustable benches and plates. The fitness center also contains a variety of workout machines that allows students to exercise every major muscle group. Furthermore there is an open cardio area for aerobics training providing 3 treadmills, 2 stair climbers a stationary bike an elliptical machine, jump ropes and an area to perform exercise videos. Each section meets twice a week for 1 hour and 20 minutes. Participants receive 2 credits upon completion of the course.

Procedure. After completion of instructor explanation and clarification of the assignment. Learners are given a written outline to follow which provides the framework for what is required in their project along with a short list of college-level research paper writing reminders in reference to margins, spacing etc. Commencement of the assignment involves students performing a self-evaluation and analysis identifying weaknesses or areas in need of physical fitness improvement. The participants' strengths are also part of the self-evaluation. Upon conclusion of the assessment and analysis phases the learners will determine reasonable goals for improvement and the development of a plan to attain those goals utilizing concepts presented in this course thereby further reinforcing those concepts via active learning. Below is a brief description of what is required for each of the four components.

Part 1: Student performs a personal fitness evaluation, identifies areas in need of improvement, determines reasonable goals, and develops an approach to attain his or her own personal fitness objectives. The learner discusses how their selection of exercises, equipment, repetitions, types of sets and other fitness principles support their program.

Part 2: Exercises are listed in the order they are to be performed. The primary movers or agonist muscles associated with each exercise is also listed with the movement. This reinforces the student's knowledge of exercises and their relationship to basic anatomical muscular structures. Development of unique routines for specific days is emphasized.

Part 3: Warm-up, pre-workout stretching and cool down activities are to be included as part of the regimen.

Part 4: Students design workout record sheets(s) to document their progress. Most participants have multiple workout record sheets which are used for specific routines on particular days. For example, legs on Monday, chest and back on Tuesday, arms and shoulders on Wednesday, and abs on Friday. Excel sheets are provided on "Blackboard". The learner simply needs to download and enter the exercises in the order they are to be performed and leave room for the appropriate number of sets.

WHAT WE FOUND

1. Describe the way in which your department/program will collect results. 2. Provide the results. 3. Describe how these results will be used for improvements.

Data Collection

Formative Assessments

Observations and Interviews. The implementation of interviews can be a potent tool for gathering qualitative data (Kalekin-Fishman, 2002). Throughout the semester during participant exercise time instructors' collected longitudinal information via interviews as a

means for employing authentic assessment techniques such as posing questions which facilitate students' critical thinking in problem solving.

Student documented fitness journals. To gather quantitative figures longitudinally the students were given instructions how to format and record daily physical activity in their fitness journals. (*See section 4 above*) Self-reporting in physical fitness has been noted as a valid assessment method by United States Army (Jones, Knapik, 2007). The names of the exercises, their order, corresponding muscle groups, and numbers of sets, reps and amount of weight used were charted. Students logged their body weight and documented realized fitness objectives. (Example – gained 20 pounds on my maximum bench press). Participants seemed to value and utilize the “Excel” template that was provided on “BlackBoard” for their project. During the semester the instructor randomly sampled a portion of the journals daily and all of the journals during the midpoint and conclusion of the course to assess learner progress.

Summative Assessment

Final Evaluation. Approaching completion of the semester students submitted the final version of their regimen. Point values consisted in the following: 7 points for each of the four components noted in the previous section and an additional 2 points for a proper cover page for a total of 30.

Results

The spring 2016 semester reported that projects ranged from very good to excellent. Most participants received a grad of “B” or higher and over half received a grade of “A”. This may be attributed to their perceived relevance of the assignment. Students promptly comprehended that this project was applicable to their personal betterment which assumingly was the intention for enrollment in the course. Learners appeared to possess a significant level of motivation to perform well on this project. This could be ascribed to “SDT” Self-Determination Theory (Ryan & Deci, 2000). This task contained two of the three major constituents of SDT, autonomy, and relatedness. While the third competency, if not possessed already would naturally be acquired via active learning throughout class activity time. It appears that SDT could be an effective pedagogical tool for raising motivational

levels and advancing assessment for learning in physical fitness courses. Additionally success may also be accredited to a very detailed written explanation of what was required and expected. In conclusion these students now have the tools that will enable them to further revise and fine tune their physical fitness regimens which will likely lead to better health.

Improvements

A pedagogical tool for future classes will be placing exemplary projects on “Blackboard” as a reference. This visual aid of a final draft may improve learner comprehension of what is expected. Parenthetically the goals of each student are unique rendering a paucity of concern for academic dishonesty by plagiarizing regimens. Additionally extra time will be apportioned during the advancement of the semester for providing recommendation and demonstration with regard to the placement of specific weight training movements. Apparently the learning objective of performing compound exercises initially, attributable to their high metabolic demand was not retained by some participants. Furthermore extra intervals will be allotted to the importance of executing alternating sets of agonist muscle groups. It was determined this concept needs supplementary examples than were previously provided. A possible authentic assessment tool could be to award learners bonus class participation points for incorporating and demonstrating this fitness principle in their routine.

References

Jones, S. B., Knapik, J. J., Sharp, M. A., Darakjy, S., & Jones, B. H. (2007). The validity of self-reported physical fitness test scores. *Military medicine*, 172(2), 115-120.

Kalekin-Fishman, D. (2002, November). Review Essay: Looking at Interviewing: From "Just Talk" to Meticulous Method. In *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research* (Vol. 3, No. 4).

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist*, 55(1), 68.

