

## **An Aerobic Exercise Class for College Students with Visual Impairments**

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A trial course, *Aerobics for Visually Impaired Persons*, was offered on the campus of a midwestern university by their Department of Health, Physical Education, and Recreation. The first semester the one-hour-credit physical education course was offered, only students who were totally blind enrolled in the course. The format of the course was the same as that for those in the mainstream: an instructor for the university used taped music and verbal prompts to instruct the students in both stationary and traveling aerobic movements over a 50-minute period. It began with warm-up exercises, followed with cardiovascular endurance and strength development exercises, and finished with cool-down stretches and movements. However, because all students were totally blind and therefore could not see any of the movements the instructor demonstrated, additional adaptive techniques and personnel (aides) were utilized.

At the beginning of the course all students were oriented to the building, classroom, locker rooms, drinking fountain, and surrounding area using a sight guide (aide). After the initial orientation, the instructor introduced each new movement or combination of movements by announcing its common aerobic exercise name (i.e., bicep curls), paired with literal descriptions of the movement. This first adaptive technique had been developed from a task analysis of each movement to determine the best literal descriptions (i.e., "arms straight in front of you, palms facing the ceiling, bend the elbows as though you will touch your shoulders with fingertips, then straighten again").

The second adaptive technique involved hands-on teaching, which actually took one of two forms. Either the student put her/his hands on the instructor or on the aide's body to gain information about rhythm, directions, distance, etc., or the instructor or aide physically manipulated the student's body to demonstrate how to perform the movement. The latter technique was especially useful when trying to demonstrate concepts such as arm presses. Often a student would appear to be going through the motions correctly, but was not duplicating the force/tension.

The last adaptive teaching technique utilized constant verbal feedback from the instructor or aide, which helped "shape" the student's movements. This feedback was helpful in letting each student know when he/she was approximating or reproducing the correct aerobic movement. Since many of the movements the students were asked to do were altogether new to them, and since they could not otherwise determine how closely they were approximating the model movement, the verbal feedback provided quick reinforcement of appropriate movements.

Throughout the class, the students were encouraged to make suggestions, which could help the instructor or aide best serve their needs. In this particular class the students were all braille readers and suggested that it would be helpful to have a list of the aerobic movements and their literal descriptions in braille at the beginning of the course so that they could refer to this "glossary" as needed. In addition, each student was given a cassette tape of a

complete 50-minute session so that both the music and the instructions could be heard. In summary, the aerobic exercise class for college students with visual impairments can serve as a model for integrating students with disabilities into mainstream fitness activities and general physical education courses. Students who were totally blind were taught basic aerobic exercise movements and terminology by (a) pairing the popular name with the literal descriptions, (b) providing hands-on instruction during the initial learning stages, and (c) giving immediate verbal reinforcement to provide feedback on how closely the movements approximated the desired movement. These students were able to participate and benefit fully in a college aerobic fitness class. From their comments, we suspect that these enthusiastic students will be more likely to consider other fitness activities in the future.